Niagara Transformer Corporation

ERIE, NEW YORK

Periodic Review Report

NYSDEC Site Number: C915234

Prepared for:
Niagara Transformer Corporation
1747 Dale Road
Cheektowaga, New York 14225

Prepared by:
Golder Associates Inc.
2430 North Forest Road, Suite 100
Getzville, New York 14068
(716) 204-5880

JULY 2014

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

1.0 SITE OVERVIEW

1.1 Site Location & Description

The site is located at 1755 Dale Road in the Town of Cheektowaga County of Erie, New York and is identified as Block 3 and Lot 6.1 on the Town of Cheektowaga Tax Map. The site is an approximately 3-acre area bounded by Dale Road to the north, CSX rail corridor to the south, a vacant parcel (owned by NTC) to the east, and NTC's manufacturing facility located at 1747 Dale Road to the west (see Figure 1-1). The site was remediated in accordance with Brownfield Cleanup Agreement (BCA) Index# C915234-10-09, Site C915234, which was executed on November 19, 2009.

1.2 Nature and Extent of Contamination Prior to Remediation

Prior to site remediation under the Brownfields Cleanup Program (BCP), PCB contamination ranged from non-detectable to concentrations of 1060 ppm in the shallow soil/fill. The BCP RI sampling program included analysis for a broad range of potential contaminants (VOCs, SVOCs, metals and pesticides) and focused on potential PCB impacts at depths greater than 1 foot and in shallow surface soils at the northernmost end of the Site that were not addressed during an earlier (December 2007) investigation. The BCP RI detected PCBs in the soil/fill borings at concentrations up to 22 parts per million (ppm).

1.3 Site Remedial Program

An IRM was implemented under the Brownfield Cleanup Agreement at the Niagara Transformer 1755 Dale Road Site in February 2010. Details of the IRM approach are described in the August 2009 RI/IRM Work Plan (Ref. 1). Based on the nature and extent of contamination as indicated by prior investigations (primarily based on the PCB impacts identified as a result of the 2007 NTC Soil Investigation) and the planned redevelopment of the subject property, the IRM Work Plan called for source removal via excavation, with off-site disposal of impacted soil.

Impacted soil that exceeded the NYSDEC Part 375 restricted industrial SCOs for total poly-chlorinated biphenyls (PCBs) was identified in thirteen (13) excavation grids that were approximately 50 ft. by 50 ft. in area. These soils were further characterized as hazardous (i.e., greater than 50 ppm for total PCBs) or non-hazardous (i.e., less than 50 ppm for total PBCs) in each of the grids.

The following is a summary of the Remedial Actions performed at the site:

- Excavation and on-site staging of non-hazardous soil grids. Approximately 1,097 tons of non-hazardous soil was temporarily relocated to an onsite spoils lay down area for further testing and characterization prior to disposal off site. Grids identified as numbers 3, 4, 5 and 7 were characterized as non-hazardous based on the 2007 surface soil investigation performed by NTC. Grid 3, 4 and 7 sample results from the 2007 investigation indicated that the surficial soils were technically below the Part 375 Restricted Industrial SCO. However, it was determined that based on their location between other grids that exceeded the SCO that it was impractical to leave the soil/fill from these grids in place. Therefore they were included in the non-hazardous excavation plan.

- Excavation of PCBs hazardous (i.e.> 50 ppm) soil/fill. Approximately 2,075 tons of soil/fill was removed as hazardous waste for off-site disposal. Grids identified as numbers 1, 2, 6, 8, 9, 10, 11, 12 and 13 were characterized as hazardous based on the 2007 surface soil investigation performed by NTC.
- Characterization and off-site disposal of approximately 6 partially crushed and deteriorated drums containing non-hazardous roofing tar residuals;
- Excavation and on-site relocation of large pieces of concrete rubble from several designated grid areas;
- Verification sampling of the sidewalls and floor areas of the excavated. Golder personnel collected 11 sidewall, 20 floor and 4 sidewall verification samples within the excavation limits and from stockpiled soil from the non-hazardous grids;
- Off-site transportation and disposal of hazardous and non-hazardous soil/fill to the CWM Chemical Services TSD Facility, Model City, New York;
- Community dust monitoring program implemented during excavation activities;
- Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional Controls, (2) monitoring, (3) operation and maintenance and (4) reporting;
- Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the site.

The Site was remediated to meet the restricted industrial SCO for PCBs of 25 ppm. The materials that were removed were primarily non-native fill and small quantities of native soils, and natural vegetation in the contaminated areas. The total amount of material that was disposed of off-site was 3,172 tons.

No long-term treatment systems were required or installed as part of the site remedy based on the results of the RI and subsequent soil/fill removals performed under the IRM.

After completion of the remedial work, some contamination was left in the subsurface at this site, which is hereafter referred to as “remaining contamination.” The contamination remaining on the site consists of low levels of PCBs within the upper soil/fill layer that remains after completion of the remedial excavation across the majority of the site. In general, based on extensive geotechnical and environmental borings, this layer of soil/fill decreases in thickness at the north and west portions of the Site and increases to a thickness of 3 to 4 feet in the southern and western portions of the Site. The remaining concentrations of PCBs in the shallow soil/fill that exceed the Track 1 (unrestricted) SCO for PCBs (0.1 ppm) are were summarized in Table 1 of the Site Management Plan (SMP) [Ref. 2]. The residual concentrations range from 0.15 to 11.2 ppm with an average concentration across the 49 samples of 1.9 ppm. This data consists of samples collected during the December 2007 Investigation from areas of the Site that were not remediated as part of the IRM as well as supplemental BCP RI data and post-IRM remediation verification sample results collected from the IRM excavation areas.

A SMP was prepared to manage remaining contamination at the site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. The SMP addresses the means for implementing the Institutional Controls (ICs) that are required by the Environmental Easement for the site.

1.4 Purpose of Periodic Review Report

This Periodic Review Report (PRR) presents information on the maintenance, monitoring and compliance activities for the Niagara Transformer Site No. C915234 for the period from June 16, 2013 to June 15, 2014.

During the reporting period of this PRR, a limited amount of site work was performed on the small strip of property along the east property line on the BCP parcel and on the adjacent property to the east, to address erosion of surface soil resulting from building storm water downspout outlets located along the east side of the building. Building downspouts were routed to the storm water pond by means of subsurface conveyance piping, eliminating the potential for erosion caused by overland surface flow. Excavation, drainage piping installation, backfilling re-grading, and seeding of topsoil was performed in the spring of 2014. All materials excavated from the BCP parcel were returned to the excavation and no excess soil was generated for management. The excavation activities were observed by Golder Associates. The excavated soil was not observed to have any obvious signs of contamination, visual or olfactory and temporary staging of excavated soils was allowed adjacent to the pipe installation trenches in accordance with the approved Excavation Work Plan prior to its placement back in the completed pie trench.

2.0 REMEDIAL SYSTEMS COMPLIANCE

There are no active remedial treatment or engineering control systems operating at the 1755 Dale Road BCP Site because the Interim Remedial Measure (IRM) conducted as part of the overall BCP achieved the Remedial Action Objectives for the Site of:

- Removal of PCB -impacted soil/fill within the Site to levels protective of human health for the intended future use of the Site (industrial Soil Cleanup Objectives [SCOs])
- Mitigate and minimize loadings to storm water from residual PCB-impacted soil/fill.

6NYCRR Part 375 Restricted Industrial SCOs were employed as soil cleanup goals to provide a measure of performance against these RAOs. The SCOs are soil concentration limits protective of human health and groundwater quality. Achievement of the SCOs was confirmed through verification sampling.

The approved SMP requires the implementation of a long term monitoring plan that incorporates semi-annual storm water and sediment analysis and annual inspections of the site to identify evidence of excessive soil erosion to the Site soils or deterioration of asphalt or concrete structures on the Site that might indicate that off-site transport of soil/fill is more likely to occur or is occurring. In particular, the annual inspections are to focus on the condition and integrity of the soil berms created as part of the BCP approved remedial program.

The results of the required monitoring activities and annual inspection are presented in Section 4 “Monitoring Plan Compliance Report”.

3.0 INSTITUTIONAL CONTROL COMPLIANCE

3.1 Introduction

3.1.1 General

Since remaining contaminated soil exists beneath the site, Institutional Controls (ICs) are required to protect human health and the environment. The Institutional Control Plan is a component of the SMP and describes the procedures for the implementation and management of all ICs at the site. The goals of the ICs are to: (1) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (2) limit the use and development of the site to industrial uses only.

3.2 Description of Institutional Controls

The Institutional Controls are:

- Compliance with the Environmental Easement and the SMP by the Grantor and the Grantor's successors and assigns;
- Performance of semi-annual storm water and sediment (when present) monitoring for PCBs as defined in the SMP;
- Implementation and documentation of the soil/fill management procedures provided in the Excavation Work Plan (EWP); and
- Reporting of the data and information pertinent to Site Management of the Controlled Property.

The site has a series of Institutional Controls in the form of site restrictions. Site restrictions that apply to the Controlled Property are:

- The property may only be used for restricted industrial use provided that the long-term Institutional Controls included in this SMP are employed.
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use.
- The property may not be used for a higher level of use, such as restricted commercial use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP and EWP;
- Vegetable gardens and farming on the property are prohibited;
- The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

The environmental easement summarizing the site use restrictions and requirements for the site was executed by the Department on June 22, 2010, and filed with the Erie County Clerk on July 15, 2010. The Easement A copy of the easement and proof of filing is provided in Appendix F of the SMP for this site.

3.2.1 Status of ICs

During the reporting period covered by this PRR, all ICs were in place and effective in meeting their objectives. A limited amount of intrusive site work was performed on the small strip of property along the east property line on the BCP parcel and on the adjacent property to the east, to address erosion of surface soil resulting from building storm water downspout outlets located along the east side of the building. Building downspouts were routed to the storm water pond by means of subsurface conveyance piping, eliminating the potential for erosion caused by overland surface flow. Excavation, drainage piping installation, backfilling re-grading, and seeding of topsoil was performed in the spring of 2014. All materials excavated from the BCP parcel were returned to the excavation and no excess soil was generated for management. The excavation activities were observed by Golder Associates. The excavated soil was not observed to have any obvious signs of contamination, visual or olfactory and temporary staging of excavated soils was allowed adjacent to the pipe installation trenches in accordance with the approved Excavation Work Plan prior to its placement back in the completed pie trench.

There are no corrective measures required to address deficiencies in the ICs at this time based on the results of the monitoring and annual inspection performed.

During the reporting period covered by this PRR storm water and sediment samples were collected on November 14, 2013 and June 11, 2014 when the storm water retention pond water level reached the overflow structure and storm water effluent was present in sufficient quantity for sampling at the outfall structure subsequent to the end of the previous PRR reporting period on June 15, 2013. The next sampling event will be tentatively scheduled for mid to late October 2014.

4.0 MONITORING PLAN COMPLIANCE REPORT

4.1 3.1 Introduction

4.1.1 General

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate residual contamination at the site, and all affected site media identified below. This Monitoring Plan may only be revised with the approval of NYSDEC.

4.1.2 Schedule

Semi-annual monitoring of the Site storm water and associated sediment is proposed to assess the effectiveness of the remedy and overall reduction in contamination on-site. Semi-annual monitoring will be conducted for the first 5 years. A reduction in frequency may be requested from the Department if after the initial 5 year monitoring period if the data demonstrates that PCBs are not being detected in the stormwater and sediment runoff from the BCP Site. Trends in PCB contaminant levels in storm water and sediment discharged from the Site will be evaluated to determine if the remedy continues to be effective in achieving remedial goals. The Monitoring program is summarized in Table 4-1 and results of the monitoring performed are discussed further in Section 4.2 below.

Table 4-1: Monitoring/Inspection Schedule

Monitoring Program	Frequency*	Matrix	Analysis
Stormwater: Upstream, Outfall, Downstream	Semi-annually (first five years)	Stormwater runoff and sediment (when present)	PCBs, Method 8082
Annual Site Inspection	Annually	Visually inspect entire site (with particular focus on soil berms) for signs of deterioration/erosion	NA

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH

4.2 Monitoring Program Results

4.2.1 Surface Water and Sediment Monitoring

As previously noted the pond discharge was sampled when the water level of the pond reaches the overflow structure in sufficient volume to allow for sampling. Storm water samples were collected on November 14, 2013 and June 11, 2014 by Golder. Samples were collected at three (3) locations in accordance with the NTC C915234 Site SMP. Samples were collected from the storm water retention

pond outfall structure on the East parcel (outfall sample), in the drainage swale 50 feet east and upstream of the combined 1747/1755 storm water outfall (upstream sample) and in the drainage swale approximately 10 feet downstream of the combined outfall (downstream sample). Refer to Figure 4-1 for the location where these sample were collected.

The storm water samples were analyzed for PCBs. The analytical results from the November 2013 and June 2014 sampling event are summarized and compared to NYSDEC surface water standards (NYSDEC 1998) in Table 4-2. No detections were found in the Pond Discharge, Upstream, and Downstream stormwater samples above NYSDEC surface water standards. The downstream sample includes contributions from the 1747 Dale Road site storm water discharge outfall to the drainage swale where the sample was collected.

In conjunction with the storm water sampling, 2 of the 3 sediment samples identified in the SMP Monitoring Plan were collected. The upstream and downstream sediment sample locations were sampled; however, there was not sufficient sediment present in the East Parcel pond outfall structure to allow for collection of this sample.

Arochlor 1260 was detected in the downstream sediment sample at a concentration of 4.7 and 2.1 mg/kg and in the upstream sediment sample at a concentration of 3.3 and 2.3 mg/kg during the November and June sampling events respectively. The analytical results from the November 2013 and June 2014 sediment sampling event are also summarized and presented in Table 4-2.

A copy of the laboratory Analytical Reports for all storm water and sediment analyses performed is attached in Appendix A.

4.3 Annual Site Inspection Results

An annual inspection was performed on November 2013 in accordance with the SMP Monitoring Program requirements. A Site-wide inspection form was completed (Appendix B). The form compiles sufficient information to assess the following:

- Compliance with all ICs, including site usage;
- General site conditions at the time of the inspection;
- The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection;
- Compliance with permits and schedules included in the Operation and Maintenance Plan; and
- Confirm that site records are up to date.

All areas of the Site were carefully inspected to assess the condition of surface soil integrity, asphalt (not present at time of inspection) and concrete areas to determine if evidence of erosion or related deterioration of the site soils, asphalt or concrete structures is occurring that would result in the erosion of

Site soil/fill onto surrounding properties. In particular, special attention was given to inspecting the condition and integrity of the soil berms created in 2010 as part of the initial Site redevelopment plan. These berms were covered with clean topsoil in the spring of 2011 and seeded and planted with trees and grass as part of the approved landscaping plan with the Town. No erosion or deterioration in any areas was noted, and therefore no corrective actions were noted to address or otherwise correct the problem(s) identified during the inspection. A photo log of photos taken during the inspection is also provided in Appendix B.

4.4 Summary of Off-Site Activities During Reporting Period

Niagara Transformer conducted intrusive activities off-Site, on the east adjacent parcel in April 2014, addressing concerns with erosion of surface soil impacted by the discharge of storm water from building down spouts along the east side of the building. As part of this off-Site activity storm water down spouts adjacent the storm water pond were routed directly to the pond by means of subsurface conveyance piping. Following the off-Site installation of drain piping along the western side of the storm water pond, the area was regraded and seeded.

4.5 Conclusions and Recommendations

At the time of the annual inspection, the Site was fully compliant with the Institutional controls fully described in the SMP. All monitoring results and inspection results were acceptable with no detection of PCBs in either the Site outfall discharge or downstream storm water samples and no deterioration or evidence of erosion from the soil berms and the Site. The low level positive detections of PCBs in the upstream sediment samples were consistent with detections reported for the samples collected in nearly the same locations as part of the SMP monitoring associated with the adjacent 1747 Dale Road Site (where contributions of storm water and sediment from the 1747 parcel are present).

No recommendations for changing of the monitoring and inspection program are proposed at this time.

5.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS

Based on the initial monitoring and inspection results described in Section 4 and conducted during the timeframe covered by this PRR, compliance with all relevant components of the SMP ICs were achieved.

The limited storm water and sediment sampling completed to date (i.e., four events) cannot conclusively assess the performance of the remedy. However, the storm water sample results over the first three years and the overall condition of the site and integrity of the final vegetated soil berms provide solid evidence that the remedy performed under the BCP is achieving its intended goals of minimizing, to the extent feasible, exposure of remaining contamination to the environment through storm water runoff and associated sediment erosion.

The construction activity along a 5-10 foot wide eastern edge of the BCP parcel and the adjacent east parcel property, initiated in April of 2014, was conducted to mitigate erosion of topsoil by downspouts draining into the stormwater pond. The minor construction activities conducted did not affect compliance of on-Site institutional controls described in the SMP.

In conjunction with this next sampling event, the Annual Inspection will be performed. The next semi-annual SMP sampling event would be performed in conjunction with the October 2014 monitoring event, contingent on storm water availability for sampling.

6.0 REFERENCES

1. Golder Associates Inc., *Remedial Investigation & Interim Remedial Measures Work Plan*, *Niagara Transformer Corporation – 1755 Dale Road Cheektowaga, New York,* prepared for New York State Department of Environmental Conservation, September 2009.

2. Golder Associates Inc., *Site Management Plan, Niagara Transformer Corporation, NYSDEC Site No. 915234*, prepared for Niagara Transformer Corporation, September 2010.

TABLE 4-2

(Table 4-1 in Text)

TABLE 4-2
SUMMARY OF ANALYTICAL RESULTS FOR STORMWATER AND SEDIMENT SAMPLING

PERIODIC REVIEW REPORT

1755 DALE RD. BCP SITE # C915234 - NIAGARA TRANSFORMER CORP
CHEEKTOWAGA, NY

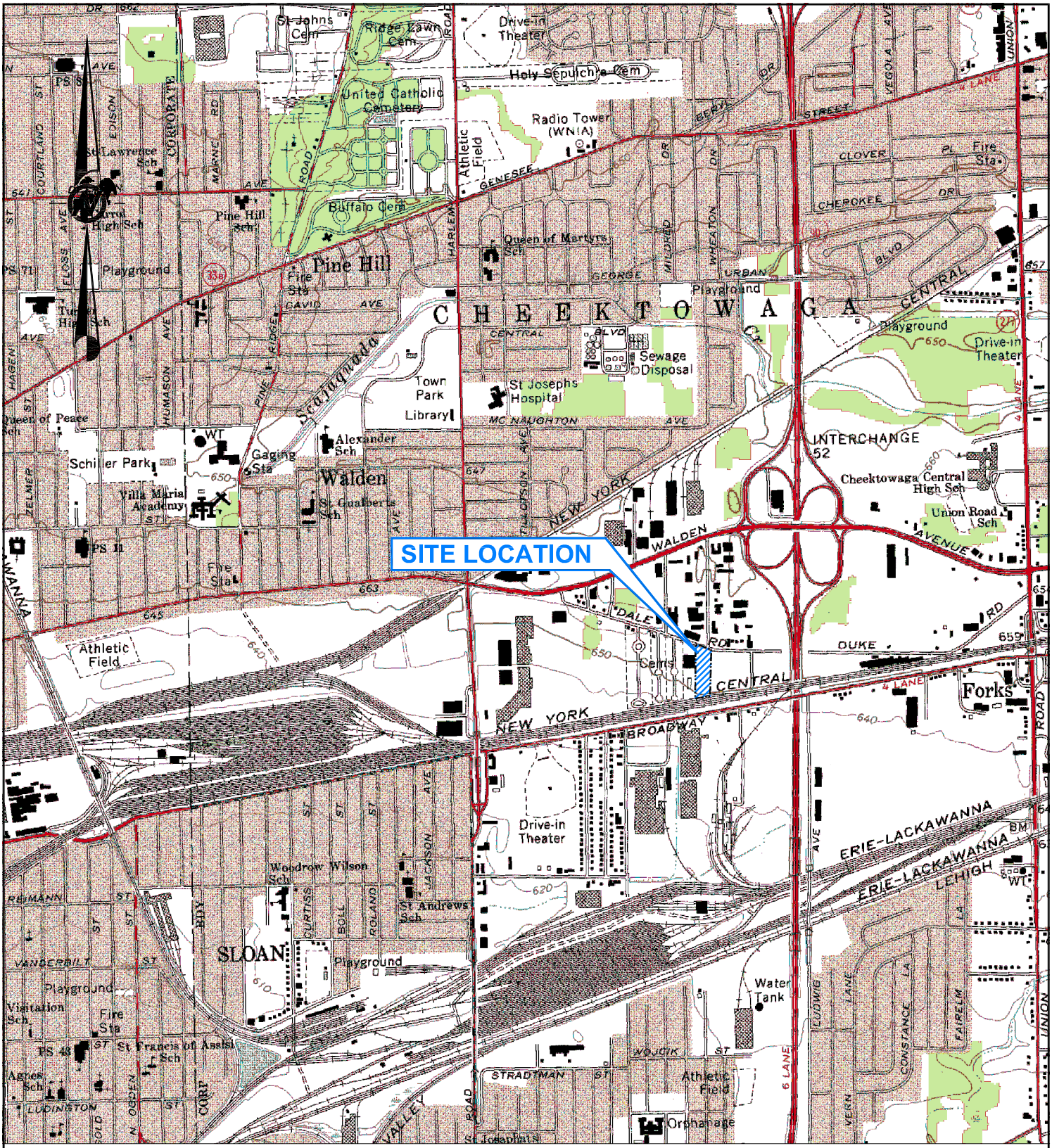
Lab ID		480-50135-1	480-50135-2	480-50135-3	480-50135-4	480-50135-5	480-61704-1	480-61704-2	480-61704-3	480-61704-4	480-50135-5
Sample ID		Pond Discharge	Upstream Surface Water	Downstream Surface Water	Upstream Sediment	Downstream Sediment	Pond Discharge	Upstream Surface Water	Downstream Surface Water	Upstream Sediment	Downstream Sediment
Sample Date		11/14/13					6/11/14				
Sample Matrix		Water	Water	Water	Sediment	Sediment	Water	Water	Water	Sediment	Sediment
Units		ug/L	ug/L	ug/L	ug/Kg	ug/Kg	ug/L	ug/L	ug/L	ug/Kg	ug/Kg
Polychlorinated Biphenyls (8082)	NYSDEC Surface Water Standards (ug/L)										
Aroclor 1016		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1221		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1232		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1242		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1254		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1260		ND	ND	ND	3300	4700	ND	ND	ND	2300	2100
TOTAL PCBs	0.09	0	0	0	3300	4700	0	0	0	2300	2100

Footnotes:

All values are in Parts per Billion (PPB).
ND = Not detected at the RL.

Table by: JGT
Checked by: PTM
Reviewed by: PTM

FIGURES



REFERENCE

1.) BASE FROM 7.5 MINUTE QUADRANGLE OF BUFFALO NORTHEAST, NEW YORK DATED 1965.

2000 0 2000
SCALE FEET

Golder Associates
Mt. Laurel, New Jersey

SCALE	AS SHOWN
DATE	07/06/09
DESIGN	PTM
CADD	GLS
CHECK	
REVIEW	

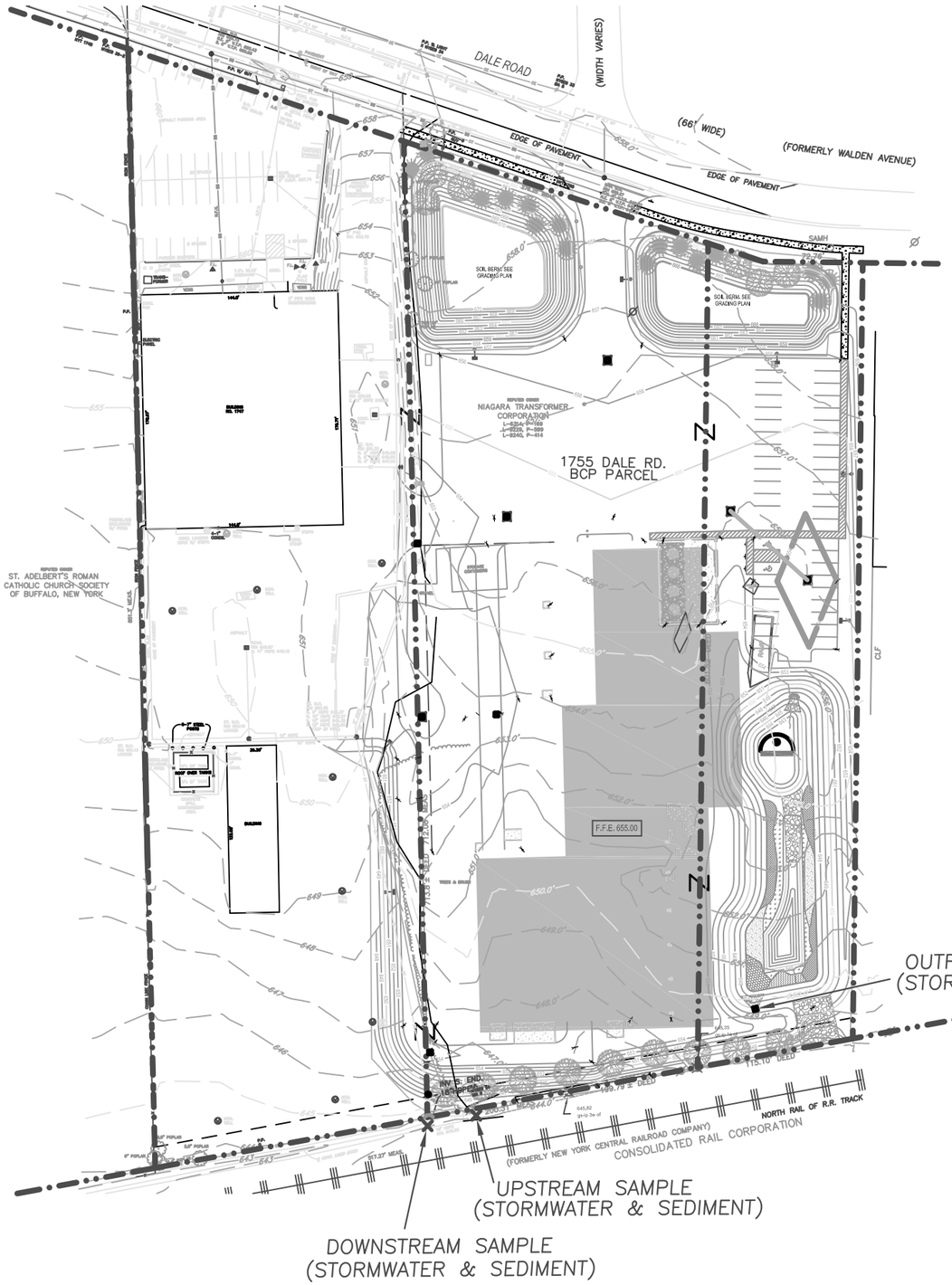
FILE No. 0938914402A001
PROJECT No. 093-89144-02 REV. 0

TITLE

SITE VICINITY MAP
1755 DALE ROAD BCP PARCEL
CHEEKTOWAGA, NEW YORK

NIAGARA TRANSFORMER CORP.

FIGURE 1-1



LEGEND

- × STORMWATER/SEDIMENT SAMPLE LOCATION (DRAINAGE DITCH)
- ■ STORMWATER OUTFALL STRUCTURE

REFERENCES

1.) BASE MAP FROM C&S DRAWING: NT-C103.DWG

100 0 100
SCALE FEET

Golder Associates
Mt. Laurel, New Jersey

PROJECT
NIAGARA TRANSFORMER CORP.
PERIODIC REVIEW REPORT
CHEEKTOWAGA, NEW YORK

TITLE
NOVEMBER 2013 / JUNE 2014 SURFACE WATER & SEDIMENT SAMPLE LOCATIONS

PROJECT No.	093-89144-02	
FILE No.	0938914402A031	
REV. 0	SCALE AS SHOWN	
DESIGN	PTM	10/5/2012
CADD	AML	8/19/2013
CHECK	PTM	8/19/2013
REVIEW	PTM	8/19/2013

FIG 4-1

APPENDIX A

ANALTICAL DATA REPORT – TESTAMERICA

NOVEMBER 14, 2013 & JUNE 11, 2014

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-61704-1
Client Project/Site: Golder - Niagara Transformer site

For:
Golder Associates Inc.
2430 North Forest Rd
Suite 100
Getzville, New York 14068

Attn: Mr. Patrick Martin

Joseph V. Giacomazza

Authorized for release by:
6/25/2014 4:15:29 PM
Joe Giacomazza, Project Management Assistant II
joe.giacomazza@testamericainc.com

Designee for

Brian Fischer, Manager of Project Management
(716)504-9835
brian.fischer@testamericainc.com

Table of Contents

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-61704-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-61704-1

Receipt
The samples were received on 6/11/2014 5:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 25.8º C.

Except:

1 out of 2 - 1L. unpreserved amber bottles was received broken.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 188375.

Method(s) 3550C: The following samples: Downstream Sediment (480-61704-5), Upstream Sediment (480-61704-4) was decanted prior to preparation.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-61704-1

Client Sample ID: 1755 Pond Discharge — Lab Sample ID: 480-61704-1

No Detections.

Client Sample ID: Upstream Surface Water — Lab Sample ID: 480-61704-2

No Detections.

Client Sample ID: Downstream Surface Water — Lab Sample ID: 480-61704-3

No Detections.

Client Sample ID: Upstream Sediment — Lab Sample ID: 480-61704-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	2300		260	120	ug/Kg	1	☼	8082A	Total/NA

Client Sample ID: Downstream Sediment — Lab Sample ID: 480-61704-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	2100		290	140	ug/Kg	1	☼	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-61704-1

Client Sample ID: 1755 Pond Discharge
Date Collected: 06/11/14 11:55
Date Received: 06/11/14 17:05

Lab Sample ID: 480-61704-1
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.48	0.17	ug/L		06/18/14 09:41	06/25/14 04:45	1
PCB-1221	ND		0.48	0.17	ug/L		06/18/14 09:41	06/25/14 04:45	1
PCB-1232	ND		0.48	0.17	ug/L		06/18/14 09:41	06/25/14 04:45	1
PCB-1242	ND		0.48	0.17	ug/L		06/18/14 09:41	06/25/14 04:45	1
PCB-1248	ND		0.48	0.17	ug/L		06/18/14 09:41	06/25/14 04:45	1
PCB-1254	ND		0.48	0.24	ug/L		06/18/14 09:41	06/25/14 04:45	1
PCB-1260	ND		0.48	0.24	ug/L		06/18/14 09:41	06/25/14 04:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*58*		*19 - 126*	*06/18/14 09:41*	*06/25/14 04:45*	*1*
Tetrachloro-m-xylene	*103*		*23 - 127*	*06/18/14 09:41*	*06/25/14 04:45*	*1*

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-61704-1

Client Sample ID: Upstream Surface Water
Date Collected: 06/11/14 12:00
Date Received: 06/11/14 17:05

Lab Sample ID: 480-61704-2
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.55	0.19	ug/L		06/18/14 09:41	06/25/14 05:01	1
PCB-1221	ND		0.55	0.19	ug/L		06/18/14 09:41	06/25/14 05:01	1
PCB-1232	ND		0.55	0.19	ug/L		06/18/14 09:41	06/25/14 05:01	1
PCB-1242	ND		0.55	0.19	ug/L		06/18/14 09:41	06/25/14 05:01	1
PCB-1248	ND		0.55	0.19	ug/L		06/18/14 09:41	06/25/14 05:01	1
PCB-1254	ND		0.55	0.27	ug/L		06/18/14 09:41	06/25/14 05:01	1
PCB-1260	ND		0.55	0.27	ug/L		06/18/14 09:41	06/25/14 05:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*57*		*19 - 126*	*06/18/14 09:41*	*06/25/14 05:01*	*1*
Tetrachloro-m-xylene	*98*		*23 - 127*	*06/18/14 09:41*	*06/25/14 05:01*	*1*

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-61704-1

Client Sample ID: Downstream Surface Water
Lab Sample ID: 480-61704-3
Date Collected: 06/11/14 12:15
Matrix: Water
Date Received: 06/11/14 17:05

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.52	0.18	ug/L		06/18/14 09:41	06/25/14 05:17	1
PCB-1221	ND		0.52	0.18	ug/L		06/18/14 09:41	06/25/14 05:17	1
PCB-1232	ND		0.52	0.18	ug/L		06/18/14 09:41	06/25/14 05:17	1
PCB-1242	ND		0.52	0.18	ug/L		06/18/14 09:41	06/25/14 05:17	1
PCB-1248	ND		0.52	0.18	ug/L		06/18/14 09:41	06/25/14 05:17	1
PCB-1254	ND		0.52	0.26	ug/L		06/18/14 09:41	06/25/14 05:17	1
PCB-1260	ND		0.52	0.26	ug/L		06/18/14 09:41	06/25/14 05:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*69*		*19 - 126*	*06/18/14 09:41*	*06/25/14 05:17*	*1*
Tetrachloro-m-xylene	*101*		*23 - 127*	*06/18/14 09:41*	*06/25/14 05:17*	*1*

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-61704-1

Client Sample ID: Upstream Sediment
Date Collected: 06/11/14 12:10
Date Received: 06/11/14 17:05

Lab Sample ID: 480-61704-4
Matrix: Solid
Percent Solids: 75.1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		260	50	ug/Kg	☼	06/16/14 09:53	06/21/14 11:12	1
PCB-1221	ND		260	50	ug/Kg	☼	06/16/14 09:53	06/21/14 11:12	1
PCB-1232	ND		260	50	ug/Kg	☼	06/16/14 09:53	06/21/14 11:12	1
PCB-1242	ND		260	50	ug/Kg	☼	06/16/14 09:53	06/21/14 11:12	1
PCB-1248	ND		260	50	ug/Kg	☼	06/16/14 09:53	06/21/14 11:12	1
PCB-1254	ND		260	120	ug/Kg	☼	06/16/14 09:53	06/21/14 11:12	1
PCB-1260	**2300**		260	120	ug/Kg	☼	06/16/14 09:53	06/21/14 11:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*134*		*47 - 176*	*06/16/14 09:53*	*06/21/14 11:12*	*1*
Tetrachloro-m-xylene	*136*		*46 - 175*	*06/16/14 09:53*	*06/21/14 11:12*	*1*

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-61704-1

Client Sample ID: Downstream Sediment
Date Collected: 06/11/14 12:20
Date Received: 06/11/14 17:05

Lab Sample ID: 480-61704-5
Matrix: Solid
Percent Solids: 75.8

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		290	57	ug/Kg	☼	06/16/14 09:53	06/21/14 11:29	1
PCB-1221	ND		290	57	ug/Kg	☼	06/16/14 09:53	06/21/14 11:29	1
PCB-1232	ND		290	57	ug/Kg	☼	06/16/14 09:53	06/21/14 11:29	1
PCB-1242	ND		290	57	ug/Kg	☼	06/16/14 09:53	06/21/14 11:29	1
PCB-1248	ND		290	57	ug/Kg	☼	06/16/14 09:53	06/21/14 11:29	1
PCB-1254	ND		290	140	ug/Kg	☼	06/16/14 09:53	06/21/14 11:29	1
PCB-1260	**2100**		290	140	ug/Kg	☼	06/16/14 09:53	06/21/14 11:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*120*		*47 - 176*	*06/16/14 09:53*	*06/21/14 11:29*	*1*
Tetrachloro-m-xylene	*120*		*46 - 175*	*06/16/14 09:53*	*06/21/14 11:29*	*1*

Surrogate Summary

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-61704-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCB1	TCX1								
Lab Sample ID	Client Sample ID	(47-176)	(46-175)								
480-61704-4	Upstream Sediment	134	136								
480-61704-5	Downstream Sediment	120	120								
LCS 480-187900/2-A	Lab Control Sample	145	147								
MB 480-187900/1-A	Method Blank	127	130								

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCB1	TCX1								
Lab Sample ID	Client Sample ID	(19-126)	(23-127)								
480-61704-1	1755 Pond Discharge	58	103								
480-61704-2	Upstream Surface Water	57	98								
480-61704-3	Downstream Surface Water	69	101								
LCS 480-188375/2-A	Lab Control Sample	45	107								
LCSD 480-188375/3-A	Lab Control Sample Dup	48	107								
MB 480-188375/1-A	Method Blank	58	102								

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-187900/1-A
Matrix: Solid
Analysis Batch: 189037

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 187900

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		210	41	ug/Kg		06/16/14 09:53	06/21/14 09:53	1
PCB-1221	ND		210	41	ug/Kg		06/16/14 09:53	06/21/14 09:53	1
PCB-1232	ND		210	41	ug/Kg		06/16/14 09:53	06/21/14 09:53	1
PCB-1242	ND		210	41	ug/Kg		06/16/14 09:53	06/21/14 09:53	1
PCB-1248	ND		210	41	ug/Kg		06/16/14 09:53	06/21/14 09:53	1
PCB-1254	ND		210	99	ug/Kg		06/16/14 09:53	06/21/14 09:53	1
PCB-1260	ND		210	99	ug/Kg		06/16/14 09:53	06/21/14 09:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*127*		*47 - 176*	*06/16/14 09:53*	*06/21/14 09:53*	*1*
Tetrachloro-m-xylene	*130*		*46 - 175*	*06/16/14 09:53*	*06/21/14 09:53*	*1*

Lab Sample ID: LCS 480-187900/2-A
Matrix: Solid
Analysis Batch: 189037

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 187900

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	2240	2930		ug/Kg		130	51 - 185
PCB-1260	2240	3430		ug/Kg		153	61 - 184

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*145*		*47 - 176*
Tetrachloro-m-xylene	*147*		*46 - 175*

Lab Sample ID: MB 480-188375/1-A
Matrix: Water
Analysis Batch: 189563

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 188375

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.18	ug/L		06/18/14 09:41	06/25/14 03:57	1
PCB-1221	ND		0.50	0.18	ug/L		06/18/14 09:41	06/25/14 03:57	1
PCB-1232	ND		0.50	0.18	ug/L		06/18/14 09:41	06/25/14 03:57	1
PCB-1242	ND		0.50	0.18	ug/L		06/18/14 09:41	06/25/14 03:57	1
PCB-1248	ND		0.50	0.18	ug/L		06/18/14 09:41	06/25/14 03:57	1
PCB-1254	ND		0.50	0.25	ug/L		06/18/14 09:41	06/25/14 03:57	1
PCB-1260	ND		0.50	0.25	ug/L		06/18/14 09:41	06/25/14 03:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*58*		*19 - 126*	*06/18/14 09:41*	*06/25/14 03:57*	*1*
Tetrachloro-m-xylene	*102*		*23 - 127*	*06/18/14 09:41*	*06/25/14 03:57*	*1*

Lab Sample ID: LCS 480-188375/2-A
Matrix: Water
Analysis Batch: 189563

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 188375

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	5.00	5.12		ug/L		102	51 - 137

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 480-188375/2-A
Matrix: Water
Analysis Batch: 189563

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 188375

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1260			5.00	5.09		ug/L		102	45 - 139		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*45*		*19 - 126*
Tetrachloro-m-xylene	*107*		*23 - 127*

Lab Sample ID: LCSD 480-188375/3-A
Matrix: Water
Analysis Batch: 189563

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 188375

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			5.00	5.19		ug/L		104	51 - 137	1	50
PCB-1260			5.00	4.95		ug/L		99	45 - 139	3	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*48*		*19 - 126*
Tetrachloro-m-xylene	*107*		*23 - 127*

GC Semi VOA

Prep Batch: 187900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-61704-4	Upstream Sediment	Total/NA	Solid	3550C	
480-61704-5	Downstream Sediment	Total/NA	Solid	3550C	
LCS 480-187900/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 480-187900/1-A	Method Blank	Total/NA	Solid	3550C	

Prep Batch: 188375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-61704-1	1755 Pond Discharge	Total/NA	Water	3510C	
480-61704-2	Upstream Surface Water	Total/NA	Water	3510C	
480-61704-3	Downstream Surface Water	Total/NA	Water	3510C	
LCS 480-188375/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-188375/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-188375/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 189037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-61704-4	Upstream Sediment	Total/NA	Solid	8082A	187900
480-61704-5	Downstream Sediment	Total/NA	Solid	8082A	187900
LCS 480-187900/2-A	Lab Control Sample	Total/NA	Solid	8082A	187900
MB 480-187900/1-A	Method Blank	Total/NA	Solid	8082A	187900

Analysis Batch: 189563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-61704-1	1755 Pond Discharge	Total/NA	Water	8082A	188375
480-61704-2	Upstream Surface Water	Total/NA	Water	8082A	188375
480-61704-3	Downstream Surface Water	Total/NA	Water	8082A	188375
LCS 480-188375/2-A	Lab Control Sample	Total/NA	Water	8082A	188375
LCSD 480-188375/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	188375
MB 480-188375/1-A	Method Blank	Total/NA	Water	8082A	188375

General Chemistry

Analysis Batch: 187169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-61704-4	Upstream Sediment	Total/NA	Solid	Moisture	
480-61704-5	Downstream Sediment	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-61704-1

Client Sample ID: 1755 Pond Discharge

Lab Sample ID: 480-61704-1
Matrix: Water
Date Collected: 06/11/14 11:55
Date Received: 06/11/14 17:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			188375	06/18/14 09:41	MRB	TAL BUF
Total/NA	Analysis	8082A		1	189563	06/25/14 04:45	DGB	TAL BUF

Client Sample ID: Upstream Surface Water

Lab Sample ID: 480-61704-2
Matrix: Water
Date Collected: 06/11/14 12:00
Date Received: 06/11/14 17:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			188375	06/18/14 09:41	MRB	TAL BUF
Total/NA	Analysis	8082A		1	189563	06/25/14 05:01	DGB	TAL BUF

Client Sample ID: Downstream Surface Water

Lab Sample ID: 480-61704-3
Matrix: Water
Date Collected: 06/11/14 12:15
Date Received: 06/11/14 17:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			188375	06/18/14 09:41	MRB	TAL BUF
Total/NA	Analysis	8082A		1	189563	06/25/14 05:17	DGB	TAL BUF

Client Sample ID: Upstream Sediment

Lab Sample ID: 480-61704-4
Matrix: Solid
Date Collected: 06/11/14 12:10
Date Received: 06/11/14 17:05
Percent Solids: 75.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			187900	06/16/14 09:53	CPH	TAL BUF
Total/NA	Analysis	8082A		1	189037	06/21/14 11:12	DGB	TAL BUF
Total/NA	Analysis	Moisture		1	187169	06/11/14 22:11	CW	TAL BUF

Client Sample ID: Downstream Sediment

Lab Sample ID: 480-61704-5
Matrix: Solid
Date Collected: 06/11/14 12:20
Date Received: 06/11/14 17:05
Percent Solids: 75.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			187900	06/16/14 09:53	CPH	TAL BUF
Total/NA	Analysis	8082A		1	189037	06/21/14 11:29	DGB	TAL BUF
Total/NA	Analysis	Moisture		1	187169	06/11/14 22:11	CW	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-61704-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-15

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-61704-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-61704-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-61704-1	1755 Pond Discharge	Water	06/11/14 11:55	06/11/14 17:05
480-61704-2	Upstream Surface Water	Water	06/11/14 12:00	06/11/14 17:05
480-61704-3	Downstream Surface Water	Water	06/11/14 12:15	06/11/14 17:05
480-61704-4	Upstream Sediment	Solid	06/11/14 12:10	06/11/14 17:05
480-61704-5	Downstream Sediment	Solid	06/11/14 12:20	06/11/14 17:05

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
GOLDER ASSOCIATES	PATRICK MARTIN		235423
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
2430 NORTH FOREST, SUITE 100	(716) 204-5880		
City / State / Zip Code	**Site Contact**	**Lab Contact**	
GETZVILLE / NY / 14068			
Project Name and Location (State)	**Carrier/Waybill Number**		
NIAGARA TRANSFORMER SMP / CHEEKTOWAGA, NY			
Contract/Purchase Order/Quote No.			
093-89#4402			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: PCBs - 8082
1755 POND DISCHARGE	6/11/14	11:55		X			2						X
UPSTREAM SURFACE WATER		12:00		X			2						X
DOWNSTREAM SURFACE WATER		12:15		X			2						X
UPSTREAM SEDIMENT		12:10			X		1						X
DOWNSTREAM SEDIMENT		12:20			X		1						X

Special Instructions/ Conditions of Receipt

480-61704 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Patrick T. Martin	6/11/14	17:05	1. Received By: TA	6/11/14	1705
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: 25.8 NO ICE #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 480-61704-1

Login Number: 61704

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	golder assoc.
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	Yes: Samples checked, no residual chlorine detected

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-50135-1
Client Project/Site: Golder - Niagara Transformer site

For:
Golder Associates Inc.
2430 North Forest Rd
Suite 100
Getzville, New York 14068

Attn: Mr. Patrick Martin

Joseph V. Giacomazza

Authorized for release by:
11/18/2013 5:16:12 PM
Joe Giacomazza, Project Management Assistant II
joe.giacomazza@testamericainc.com

Designee for

Brian Fischer, Manager of Project Management
(716)504-9835
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Table of Contents

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-50135-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-50135-1

Receipt
The samples were received on 11/14/2013 1:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.9º C.

GC Semi VOA
Method(s) 8082A: The surrogate percent difference in the associated continuing calibration verifications (CCV) for Decachlorobiphenyl was decreased and slightly exceeded 15% on the ZB-35 column, indicating a low bias. (CCV 480-152500/18), (CCV 480-152500/23), (CCV 480-152500/40), (CCV 480-152500/6)
.

No other analytical or quality issues were noted.

Organic Prep
Method(s) 3550C: A significant amount of liquid was present in the following samples: DOWNSTREAM SEDIMENT (480-50135-5), UPSTREAM SEDIMENT (480-50135-4). These samples were decanted prior to preparation.

No other analytical or quality issues were noted.

Detection Summary

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-50135-1

Client Sample ID: 1755 POND DISCHARGE — Lab Sample ID: 480-50135-1

No Detections.

Client Sample ID: UPSTREAM SURFACE WATER — Lab Sample ID: 480-50135-2

No Detections.

Client Sample ID: DOWNSTREAM SURFACE WATER — Lab Sample ID: 480-50135-3

No Detections.

Client Sample ID: UPSTREAM SEDIMENT — Lab Sample ID: 480-50135-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	3300		430	200	ug/Kg	1	☼	8082A	Total/NA

Client Sample ID: DOWNSTREAM SEDIMENT — Lab Sample ID: 480-50135-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	4700		620	290	ug/Kg	1	☼	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-50135-1

Client Sample ID: 1755 POND DISCHARGE
Date Collected: 11/14/13 12:05
Date Received: 11/14/13 13:10

Lab Sample ID: 480-50135-1
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.18	ug/L		11/15/13 07:39	11/16/13 16:35	1
PCB-1221	ND		0.50	0.18	ug/L		11/15/13 07:39	11/16/13 16:35	1
PCB-1232	ND		0.50	0.18	ug/L		11/15/13 07:39	11/16/13 16:35	1
PCB-1242	ND		0.50	0.18	ug/L		11/15/13 07:39	11/16/13 16:35	1
PCB-1248	ND		0.50	0.18	ug/L		11/15/13 07:39	11/16/13 16:35	1
PCB-1254	ND		0.50	0.25	ug/L		11/15/13 07:39	11/16/13 16:35	1
PCB-1260	ND		0.50	0.25	ug/L		11/15/13 07:39	11/16/13 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*75*		*19 - 126*	*11/15/13 07:39*	*11/16/13 16:35*	*1*
Tetrachloro-m-xylene	*100*		*23 - 127*	*11/15/13 07:39*	*11/16/13 16:35*	*1*

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-50135-1

Client Sample ID: UPSTREAM SURFACE WATER
Lab Sample ID: 480-50135-2
Date Collected: 11/14/13 12:15
Matrix: Water
Date Received: 11/14/13 13:10

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.18	ug/L		11/15/13 07:39	11/16/13 16:50	1
PCB-1221	ND		0.50	0.18	ug/L		11/15/13 07:39	11/16/13 16:50	1
PCB-1232	ND		0.50	0.18	ug/L		11/15/13 07:39	11/16/13 16:50	1
PCB-1242	ND		0.50	0.18	ug/L		11/15/13 07:39	11/16/13 16:50	1
PCB-1248	ND		0.50	0.18	ug/L		11/15/13 07:39	11/16/13 16:50	1
PCB-1254	ND		0.50	0.25	ug/L		11/15/13 07:39	11/16/13 16:50	1
PCB-1260	ND		0.50	0.25	ug/L		11/15/13 07:39	11/16/13 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*77*		*19 - 126*	*11/15/13 07:39*	*11/16/13 16:50*	*1*
Tetrachloro-m-xylene	*104*		*23 - 127*	*11/15/13 07:39*	*11/16/13 16:50*	*1*

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-50135-1

Client Sample ID: DOWNSTREAM SURFACE WATER
Lab Sample ID: 480-50135-3
Date Collected: 11/14/13 12:21
Matrix: Water
Date Received: 11/14/13 13:10

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.18	ug/L		11/15/13 07:39	11/16/13 17:05	1
PCB-1221	ND		0.50	0.18	ug/L		11/15/13 07:39	11/16/13 17:05	1
PCB-1232	ND		0.50	0.18	ug/L		11/15/13 07:39	11/16/13 17:05	1
PCB-1242	ND		0.50	0.18	ug/L		11/15/13 07:39	11/16/13 17:05	1
PCB-1248	ND		0.50	0.18	ug/L		11/15/13 07:39	11/16/13 17:05	1
PCB-1254	ND		0.50	0.25	ug/L		11/15/13 07:39	11/16/13 17:05	1
PCB-1260	ND		0.50	0.25	ug/L		11/15/13 07:39	11/16/13 17:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*71*		*19 - 126*	*11/15/13 07:39*	*11/16/13 17:05*	*1*
Tetrachloro-m-xylene	*97*		*23 - 127*	*11/15/13 07:39*	*11/16/13 17:05*	*1*

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-50135-1

Client Sample ID: UPSTREAM SEDIMENT
Date Collected: 11/14/13 12:18
Date Received: 11/14/13 13:10

Lab Sample ID: 480-50135-4
Matrix: Solid
Percent Solids: 54.7

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		430	84	ug/Kg	☼	11/15/13 10:21	11/16/13 12:10	1
PCB-1221	ND		430	84	ug/Kg	☼	11/15/13 10:21	11/16/13 12:10	1
PCB-1232	ND		430	84	ug/Kg	☼	11/15/13 10:21	11/16/13 12:10	1
PCB-1242	ND		430	84	ug/Kg	☼	11/15/13 10:21	11/16/13 12:10	1
PCB-1248	ND		430	84	ug/Kg	☼	11/15/13 10:21	11/16/13 12:10	1
PCB-1254	ND		430	200	ug/Kg	☼	11/15/13 10:21	11/16/13 12:10	1
PCB-1260	**3300**		430	200	ug/Kg	☼	11/15/13 10:21	11/16/13 12:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*87*		*47 - 176*	*11/15/13 10:21*	*11/16/13 12:10*	*1*
Tetrachloro-m-xylene	*121*		*46 - 175*	*11/15/13 10:21*	*11/16/13 12:10*	*1*

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-50135-1

Client Sample ID: DOWNSTREAM SEDIMENT
Date Collected: 11/14/13 12:25
Date Received: 11/14/13 13:10

Lab Sample ID: 480-50135-5
Matrix: Solid
Percent Solids: 35.8

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		620	120	ug/Kg	☼	11/15/13 10:21	11/16/13 12:25	1
PCB-1221	ND		620	120	ug/Kg	☼	11/15/13 10:21	11/16/13 12:25	1
PCB-1232	ND		620	120	ug/Kg	☼	11/15/13 10:21	11/16/13 12:25	1
PCB-1242	ND		620	120	ug/Kg	☼	11/15/13 10:21	11/16/13 12:25	1
PCB-1248	ND		620	120	ug/Kg	☼	11/15/13 10:21	11/16/13 12:25	1
PCB-1254	ND		620	290	ug/Kg	☼	11/15/13 10:21	11/16/13 12:25	1
PCB-1260	**4700**		620	290	ug/Kg	☼	11/15/13 10:21	11/16/13 12:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*108*		*47 - 176*	*11/15/13 10:21*	*11/16/13 12:25*	*1*
Tetrachloro-m-xylene	*140*		*46 - 175*	*11/15/13 10:21*	*11/16/13 12:25*	*1*

Surrogate Summary

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-50135-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCB2	TCX2								
Lab Sample ID	Client Sample ID	(47-176)	(46-175)								
480-50135-4	UPSTREAM SEDIMENT	87	121								
480-50135-5	DOWNSTREAM SEDIMENT	108	140								
LCS 480-152335/2-A	Lab Control Sample	101	131								
MB 480-152335/1-A	Method Blank	88	127								

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCB2	TCX2								
Lab Sample ID	Client Sample ID	(19-126)	(23-127)								
480-50135-1	1755 POND DISCHARGE	75	100								
480-50135-2	UPSTREAM SURFACE WATER	77	104								
480-50135-3	DOWNSTREAM SURFACE WATEF	71	97								
LCS 480-152245/2-A	Lab Control Sample	38	90								
MB 480-152245/1-A	Method Blank	55	96								

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-152245/1-A
Matrix: Water
Analysis Batch: 152500

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 152245

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.18	ug/L		11/15/13 07:39	11/16/13 13:09	1
PCB-1221	ND		0.50	0.18	ug/L		11/15/13 07:39	11/16/13 13:09	1
PCB-1232	ND		0.50	0.18	ug/L		11/15/13 07:39	11/16/13 13:09	1
PCB-1242	ND		0.50	0.18	ug/L		11/15/13 07:39	11/16/13 13:09	1
PCB-1248	ND		0.50	0.18	ug/L		11/15/13 07:39	11/16/13 13:09	1
PCB-1254	ND		0.50	0.25	ug/L		11/15/13 07:39	11/16/13 13:09	1
PCB-1260	ND		0.50	0.25	ug/L		11/15/13 07:39	11/16/13 13:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*55*		*19 - 126*	*11/15/13 07:39*	*11/16/13 13:09*	*1*
Tetrachloro-m-xylene	*96*		*23 - 127*	*11/15/13 07:39*	*11/16/13 13:09*	*1*

Lab Sample ID: LCS 480-152245/2-A
Matrix: Water
Analysis Batch: 152500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 152245

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	8.00	6.81		ug/L		85	51 - 137
PCB-1260	8.00	4.70		ug/L		59	45 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*38*		*19 - 126*
Tetrachloro-m-xylene	*90*		*23 - 127*

Lab Sample ID: MB 480-152335/1-A
Matrix: Solid
Analysis Batch: 152500

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 152335

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		220	43	ug/Kg		11/15/13 10:21	11/16/13 08:58	1
PCB-1221	ND		220	43	ug/Kg		11/15/13 10:21	11/16/13 08:58	1
PCB-1232	ND		220	43	ug/Kg		11/15/13 10:21	11/16/13 08:58	1
PCB-1242	ND		220	43	ug/Kg		11/15/13 10:21	11/16/13 08:58	1
PCB-1248	ND		220	43	ug/Kg		11/15/13 10:21	11/16/13 08:58	1
PCB-1254	ND		220	100	ug/Kg		11/15/13 10:21	11/16/13 08:58	1
PCB-1260	ND		220	100	ug/Kg		11/15/13 10:21	11/16/13 08:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*88*		*47 - 176*	*11/15/13 10:21*	*11/16/13 08:58*	*1*
Tetrachloro-m-xylene	*127*		*46 - 175*	*11/15/13 10:21*	*11/16/13 08:58*	*1*

Lab Sample ID: LCS 480-152335/2-A
Matrix: Solid
Analysis Batch: 152500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 152335

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	1820	2560		ug/Kg		141	51 - 185

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 480-152335/2-A
Matrix: Solid
Analysis Batch: 152500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 152335

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1260			1820	2240		ug/Kg		123	61 - 184		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*101*		*47 - 176*
Tetrachloro-m-xylene	*131*		*46 - 175*

QC Association Summary

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-50135-1

GC Semi VOA

Prep Batch: 152245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50135-1	1755 POND DISCHARGE	Total/NA	Water	3510C	
480-50135-2	UPSTREAM SURFACE WATER	Total/NA	Water	3510C	
480-50135-3	DOWNSTREAM SURFACE WATER	Total/NA	Water	3510C	
LCS 480-152245/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-152245/1-A	Method Blank	Total/NA	Water	3510C	

Prep Batch: 152335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50135-4	UPSTREAM SEDIMENT	Total/NA	Solid	3550C	
480-50135-5	DOWNSTREAM SEDIMENT	Total/NA	Solid	3550C	
LCS 480-152335/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 480-152335/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 152500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50135-1	1755 POND DISCHARGE	Total/NA	Water	8082A	152245
480-50135-2	UPSTREAM SURFACE WATER	Total/NA	Water	8082A	152245
480-50135-3	DOWNSTREAM SURFACE WATER	Total/NA	Water	8082A	152245
480-50135-4	UPSTREAM SEDIMENT	Total/NA	Solid	8082A	152335
480-50135-5	DOWNSTREAM SEDIMENT	Total/NA	Solid	8082A	152335
LCS 480-152245/2-A	Lab Control Sample	Total/NA	Water	8082A	152245
LCS 480-152335/2-A	Lab Control Sample	Total/NA	Solid	8082A	152335
MB 480-152245/1-A	Method Blank	Total/NA	Water	8082A	152245
MB 480-152335/1-A	Method Blank	Total/NA	Solid	8082A	152335

General Chemistry

Analysis Batch: 152189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50135-4	UPSTREAM SEDIMENT	Total/NA	Solid	Moisture	
480-50135-5	DOWNSTREAM SEDIMENT	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-50135-1

Client Sample ID: 1755 POND DISCHARGE

Lab Sample ID: 480-50135-1
Matrix: Water
Date Collected: 11/14/13 12:05
Date Received: 11/14/13 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			152245	11/15/13 07:39	DLE	TAL BUF
Total/NA	Analysis	8082A		1	152500	11/16/13 16:35	JMM	TAL BUF

Client Sample ID: UPSTREAM SURFACE WATER

Lab Sample ID: 480-50135-2
Matrix: Water
Date Collected: 11/14/13 12:15
Date Received: 11/14/13 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			152245	11/15/13 07:39	DLE	TAL BUF
Total/NA	Analysis	8082A		1	152500	11/16/13 16:50	JMM	TAL BUF

Client Sample ID: DOWNSTREAM SURFACE WATER

Lab Sample ID: 480-50135-3
Matrix: Water
Date Collected: 11/14/13 12:21
Date Received: 11/14/13 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			152245	11/15/13 07:39	DLE	TAL BUF
Total/NA	Analysis	8082A		1	152500	11/16/13 17:05	JMM	TAL BUF

Client Sample ID: UPSTREAM SEDIMENT

Lab Sample ID: 480-50135-4
Matrix: Solid
Date Collected: 11/14/13 12:18
Percent Solids: 54.7
Date Received: 11/14/13 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			152335	11/15/13 10:21	DLE	TAL BUF
Total/NA	Analysis	8082A		1	152500	11/16/13 12:10	JMM	TAL BUF
Total/NA	Analysis	Moisture		1	152189	11/14/13 21:23	GTG	TAL BUF

Client Sample ID: DOWNSTREAM SEDIMENT

Lab Sample ID: 480-50135-5
Matrix: Solid
Date Collected: 11/14/13 12:25
Percent Solids: 35.8
Date Received: 11/14/13 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			152335	11/15/13 10:21	DLE	TAL BUF
Total/NA	Analysis	8082A		1	152500	11/16/13 12:25	JMM	TAL BUF
Total/NA	Analysis	Moisture		1	152189	11/14/13 21:38	GTG	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-50135-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-14
California	NELAP	9	1169CA	09-30-14
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	09-30-14
Iowa	State Program	7	374	03-01-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13 *
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13 *
New Hampshire	NELAP	1	2973	09-11-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	12-31-13
Wisconsin	State Program	5	998310390	08-31-14

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-50135-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Golder Associates Inc.
Project/Site: Golder - Niagara Transformer site

TestAmerica Job ID: 480-50135-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-50135-1	1755 POND DISCHARGE	Water	11/14/13 12:05	11/14/13 13:10
480-50135-2	UPSTREAM SURFACE WATER	Water	11/14/13 12:15	11/14/13 13:10
480-50135-3	DOWNSTREAM SURFACE WATER	Water	11/14/13 12:21	11/14/13 13:10
480-50135-4	UPSTREAM SEDIMENT	Solid	11/14/13 12:18	11/14/13 13:10
480-50135-5	DOWNSTREAM SEDIMENT	Solid	11/14/13 12:25	11/14/13 13:10

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: GOLDER ASSOCIATES	Project Manager: PATRICK MANTIN	Date: 11/14/13	Chain of Custody Number: 248805
Address: 2430 N. FOREST RD STE. 100	Telephone Number (Area Code)/Fax Number: (716) 204-5880	Lab Number:	Page 1 of 1
City: CLARENCE / State: NY / Zip Code: 14068	Site Contact:	Lab Contact: B. FISCHER	
Project Name and Location (State): ~~093~~ NIAGARA TRANSFORMER	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 093-8914402			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: PCBs (8082)	Special Instructions/ Conditions of Receipt
1755 POND DISCHARGE	11/14/13	12:05		X			1						X	
UPSTREAM SURFACE WATER	11/14/13	12:15		X			2						X	
DOWNSTREAM SURFACE WATER	11/14/13	12:21		X			2						X	
UPSTREAM SEDIMENT	11/14/13	12:18			X		1						X	
DOWNSTREAM SEDIMENT	11/14/13	12:25			X		1						X	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Patrick T. Mantin	11/14/13	1:10PM	1. Received By: [signature]	11/14/13	1310
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: 4.9°C #1 NO ICE

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

11/18/2013

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 480-50135-1

Login Number: 50135

List Source: TestAmerica Buffalo

List Number: 1

Creator: Stau, Brandon M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GOLDER ASSOCIATES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

APPENDIX B

ANNUAL SITE INSPECTION FORM & PHOTO LOG DOCUMENTATION

Niagara Transformer Corporation
ERIE, NEW YORK

Site Management Plan

NYSDEC Site Number: C915234

SITE-WIDE INSPECTION FORM

Inspection Item Description	Frequency	Comments	Corrective Action (If Required)
BCP Site General Conditions	Annually	GOOD CONDITION	NONE
Excavation Work Locations – General Conditions	Per Occurrence	NOT APPLICABLE AT TIME OF INSPECTION	
Stormwater Retention Pond-Outfall Sampling Location General Condition	Annually	GOOD CONDITION NO SEDIMENT BUILD UP IN OUTFALL STRUCTURE	NONE
SOIL BERMS	ANNUALLY	OBSERVED ALL BERMS TO BE VEGETATED OR RECENTLY SEEDED - NO EROSION	NONE

11/14/13

PATRICK T. MARTIN

Patrick T. Martin

Project Title: Site Management Plan: Niagara Transformer Corp. – PRR Site Inspection

PHOTO 1

Looking South: West Property line vegetation adjacent to 1747 Dale Rd parcel

PHOTO 2

Looking East: North Side of West Soil Berm

PHOTO 3 Looking West: Newly paved Access Road on South side of BCP property and topsoil/seeding restoration	
PHOTO 4 Looking East: Vegetation on top of West Berm and East Berm adjacent to entrance road	

PHOTO 5 Looking North: Vegatation along west property line and south side of West Berm	
PHOTO 6 Looking East: South property line area and slope adjacent to rail corridor