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New York State Department of Environmental Conservation

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SITE CLOSEOUT REPORT – PETER WINKELMAN COMPANY OU-1/OU-1A

Syracuse, Onondaga County, New York

NYSDEC Site Number: 734047

August 2016

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SITE CLOSEOUT REPORT

Peter Winkelman Company OU-1/OU-1A, Syracuse, Onondaga County, New York

NYSDEC Site # 734047

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ACRONYMS AND ABBREVIATIONS

ACM	Asbestos Containing Material
IRM	Interim Remedial Measure
NYSDEC	New York State Department of Environmental Conservation
OU	Operable Unit
PCB	Polychlorinated biphenyl
RAO	Remedial action objective
ROD	Record of decision
SCG	Screening, criteria, and guidance
SVOC	Semi-volatile organic compound
USEPA	U.S. Environmental Protection Agency
VOC	Volatile organic compound

1 INTRODUCTION

On behalf of the New York State Department of Environmental Conservation (NYSDEC), Arcadis CE, Inc. (Arcadis) has prepared this Site Closeout Report to summarize previous investigation and cleanup activities and document remedial system decommissioning activities performed at the Peter Winkelman Company, Inc. site Operable Unit – 1 (OU-1) and OU-1A, in the City of Syracuse, Onondaga County, New York (site) (Figure 1).

2 SITE DESCRIPTION AND HISTORY.

The site is located in the County of Onondaga, New York and is identified as a portion of the Onondaga County Tax Map # 32.01, Parcel 26. The Peter Winkelman site property is an approximately four acre area bounded by Interstate 690 to the north, Erie Boulevard to the south, the City of Syracuse composting operation and Greenway Avenue to the east, and the Post Office and Teal Avenue to the west (Figure 2). An abandoned 55,000 square foot former industrial building is the primary feature at the site.

The site formerly consisted of industrial businesses including the Globe Malleable Iron and Steel Company in 1910, a machine shop in 1951 through at least 1953, and a sheet metal and machine shop from 1964 through at least 1971. Until 1991, Peter Winkelman Company, Inc., a construction company, owned the site and other businesses existed at buildings on site not being used by the construction company (ARCADIS, 2015).

A power outage caused an electrical surge and one or more of the three transformer at the site malfunctioned. An unknown quantity of transformer oil containing PCBs was subsequently released from the transformer(s). In 1998, remedial measures were taken to remove PCB contamination from groundwater within OU-1 area of the site. Concurrently, an Interim Remedial Measure (IRM) (OU-1A) was initiated to clean up the site. The entire area was cleared of vegetation. Transformers, fencing, and a concrete pad were removed, and contaminated soil was removed and backfilled with clean soil (NYSDEC, 2013). A skimmer-type oil recovery remediation system was installed for recovery of transformer oil from groundwater. A summary of the site history is presented below.

- In 1999, a remedial investigation was conducted. This investigation involved the installation of piezometers and the sampling of groundwater. Groundwater analytical results showed low-level localized polychlorinated biphenyl (PCB) contamination.
- On March 31, 2000 a no further action Record of Decision (ROD) was signed.
- In 2004, a fire occurred at the Peter Winkelman Company facility and damaged the building and OU-1 remediation system.
- In 2006, groundwater samples were collected from the OU-1 piezometers and collection sumps by NYSDEC. PCBs were detected in the samples from piezometer P-1 and collection sump S-1 at concentrations greater than the applicable ambient water quality standards.
- In June 2012, Work Assignment D007618-5 was issued to Arcadis for site management of OU-1.
- In January 2013, Arcadis cleared trees, debris, and fencing from OU-1 to evaluate the existing remedy. Piezometers P-1 and P-5 and skimmer sumps S-1 and S-2 were located, surveyed, and water levels gauged to assess local groundwater flow direction. The collection skimmers were inoperative and not feasible to repair.
- In April 2013, building material samples were collected from the 55,000 ft^2 Peter Winkelman building as part of a pre-demolition survey to identify asbestos containing materials (ACM). ACM were identified in several building materials, including roofing materials, pipe insulation, window glazing, and paint (Watts, 2013).

- In October 2013, Work Assignment D007618-26 was issued to Arcadis for Site Characterization (SC) of the Peter Winkelman Company property. The SC focused on the areas of the site outside of the OU-1 footprint.
- Site Characterization activities were initiated by Arcadis in May 2014, including soil debris pile sampling, drilling, sub-surface soil sample collection, temporary monitoring well installation and groundwater sampling.
- In June and August 2014, groundwater samples were collected by Arcadis from OU-1 piezometers P-1 and P-2 and collection sumps S-1 and S-2. No PCBs were detected in any of the samples.
- The results of the Peter Winkelman Company property SC were submitted by Arcadis to NYSDEC in January 2015. The SC concluded that soil containing semi-volatile organic compounds (SVOCs), pesticides, and metals at concentrations exceeding NYSDEC soil cleanup objectives (SCOs) is present throughout the area of the site, and soil impacted with volatile organic compounds (VOCs) and PCBs is present in small isolated sections within the vicinity of the site. Groundwater containing metals at concentrations greater than NYSDEC Class GA standards is present throughout the site, but are generally not believed to be from site related activities. VOC impacts to groundwater are isolated to one compound (1,1-dichloroethane) at one sample location on the western side of the site building. None of the groundwater samples collected contained detectable concentrations of SVOCs, pesticides or PCBs (Arcadis, 2015).
- Between June and July 2015, the treatment system collection sumps were sampled for PCB contamination, removed, and properly disposed in accordance with U.S. Environmental Protection Agency (USEPA) guidance for disposal of PCB-impacted materials (USEPA 2014). Piezometers PZ-1 and PZ-2 were removed abandoned in accordance with NYSDEC CP-43: Groundwater Monitoring Well Decommissioning Policy (NYSDEC 2009).

3 SUMMARY OF REMEDIAL ACTIVITIES

3.1 Remedial Action Objectives

The following Remedial Action Objectives (RAOs) were identified in the March 31, 2000 ROD.

3.1.1 Groundwater RAOs

RAOs for Public Health Protection

- Prevent ingestion of groundwater containing contaminant levels exceeding drinking water standards.
- Prevent contact with contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer, to the extent practicable, to pre-disposal/pre-release conditions.
- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

3.1.2 Soil RAOs

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.
- Prevent impacts to biota due to ingestion/direct contact with contaminated soil that would cause toxicity or bioaccumulation through the terrestrial food chain.

3.2 Description of the Selected Remedy

The site was remediated in accordance with the remedy selected by the NYSDEC in the ROD dated March 31, 2000. The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8. Between the summer of 1998 and March of 2000, IRMs were initiated (by others) to remove the PCB contamination from the groundwater and soil (see next section for details) at OU-1/OU-1A. Following the implementation of the IRMs and subsequent monitoring for PCBs, a ROD was signed in 2000 with the decision for no further remedial action. The ROD concluded that the potential for human exposure to site related contaminants of concern has been eliminated (NYSDEC 2012).

4 INTERIM REMEDIAL MEASURES AND OPERABLE UNITS

4.1 Interim Remedial Measures

The following tasks were performed (by others) as part of the 1998 through 2000 OU-1/OU-1A remedial activities:

- OU-1A (summer 1998): An IRM was implemented which involved clearing of vegetation, removal of transformers and fence, pulling up the large concrete transformer pad, and proper disposal of all materials removed. Contaminated soil was excavated, up to the adjacent building, to approximately four feet below grade and backfilled with clean material.
- OU-1 (spring/summer 1998): Piezometers were installed along with a groundwater treatment system (See Figure 3). The groundwater treatment consisted of a skimmer to extract the PCB contamination from groundwater. No records for operation and maintenance (O&M) or monitoring of the remediation system were available for review. However, based on discussion with NYSDEC and observations during a 2013 site inspection, the system used a belt-style skimmer to remove light non-aqueous phase liquid (LNAPL) from two 24" diameter sumps (S-1 and S-2). The sumps were slotted to allow infiltration of groundwater and installed approximately two feet below the water table.
- The groundwater treatment system was functioning until a fire at the site in 2004 disabled the operation. In June 2015, the sumps that were damaged in the fire were sampled for PCB contamination, removed, and properly disposed in accordance with USEPA guidance (USEPA 2014).

4.2 Operable Units

OU-1/OU-1A is the area that was known to have the PCB oil leak as a result of a malfunctioning transformer while the property was owned by Peter Winkelman. OU-1A represents the surficial impacted area, including the soil. OU-1 encompasses the limited groundwater impacts from the PCB oil beneath the surface.

The NYSDEC concluded that the OU-1/OU-1A area was remediated through the soil IRM and the operation of the groundwater treatment system. As a result, the 2000 ROD indicated no further remedial action was required for this area on the property.

4.3 Contaminated Materials Removal

4.3.1 Historical Activities

The soil at OU-1/OU-1A were found to contain PCBs resulting from the transformer leak that took place. An IRM was conducted (by others) to remove PCB-impacted soil in this 0.05-acre area to a depth of four feet below grade, after which the excavation was backfilled with clean material and regraded. The excavated soils were disposed at an approved disposal facility (by others).

The groundwater contamination was addressed using a groundwater treatment system with a skimmer to extract the PCB oil from the water (constructed and operated by others). In 2004, a fire at the facility disabled the groundwater treatment system. PCBs were not detected in groundwater samples collected in August 2014 (See Tables 1 through 5 for 2014 groundwater sampling results). Accordingly, the sumps and wells associated with this treatment system were removed by Arcadis in 2015. Wipe samples (Table 6) were collected from the removed materials to assess disposal options and to properly manage the waste removed as part of this task.

4.4 Remedial Performance/Documentation Sampling

The final groundwater end-point sampling results are included in Tables 1 through 5. Table 6 presents the laboratory results from the wipe sampling performed during the removal of the sump wells for the groundwater treatment system.

The groundwater results showed no detections of PCBs in groundwater in 2014. The wipe sample results showed low concentrations of the PCB Aroclor-1260. However, in accordance with USEPA guidance, specialized disposal of the well and sump materials was not required since the concentrations were less than 100 µg/100 cm^2. Wipe sample analytical data are provided in Appendix A.

Figure 3 shows the OU-1/OU-1A area and the sampling points, including the two sumps that were removed in 2015.

4.5 Contamination Remaining at the Site

The 2014 groundwater sampling results showed that PCBs are not present in the groundwater.

4.6 Soil Cover System

There is no soil cover system at the site.

4.7 Other Engineering Controls

The remedy for the site did not require the use of engineering control systems.

4.8 Institutional Controls

No environmental easements, notices, or deed restrictions were filed as part of the site remedy.

5 REFERENCES

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Malcolm Pirnie, Inc. (Malcolm Pirnie). 2011. Generic Quality Assurance Project Plan for Work Assignments, Standby Contract for Engineering Services (No. D007618).

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New York State Department of Environmental Conservation (NYSDEC). 2012. Site Record for Peter Winkelman Company, Inc. Site Code: 734047. Environmental Site Remediation Database.

U.S. Environmental Protection Agency (USEPA). 2014. Revisions to the PCB Q and A Manual. June 2014 Version. Available online at www.epa.gov/pcb.

Watts Architecture and Engineering (Watts). 2013. Pre-demolition Survey for Asbestos Containing Materials for the Peter Winkelman Building, 101 Greenway Avenue, Syracuse, New York.

TABLES

TABLE 1
SUMMARY OF GROUNDWATER ELEVATIONS
SITE CLOSEOUT REPORT
PETER WINKELMAN COMPANY, INC. OU-1/OU-1A
SYRACUSE, NY

Well	Measuring Point Elevation (ft. AMSL)	Ground Elevation (ft. AMSL)	6/4/2014		6/6/2014		8/19/2014	
			DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)
P-1	415.37	--	--	--	3.89	411.48	3.74	411.63
P-5	415.35	--	4.82	410.53	4.80	410.55	5.38	409.97
S-1	417.50	--	5.80	411.6977	5.97	411.53	5.86	411.6377
S-2	417.40	--	5.93	411.4693	5.85	411.55	5.72	411.6793

Elevations based on NAVD 88 datum.
-- Parameter Unknown

TABLE 2
SUMMARY OF GROUNDWATER SAMPLING RESULTS-DETECTED VOCs
SITE CLOSEOUT REPORT
PETER WINKELMAN COMPANY, INC. OU-1/OU-1A
SYRACUSE, NEW YORK

Sample ID	NYSDEC Class GA Standard or Guidance Value	P-1	P-1	P-5	P-5	S-1	S-1	DUPLICATE 8/19/14 (S-1)	S-2	S-2
Sampling Date		6/5/2014	8/19/2014	6/6/2014	8/19/2014	6/6/2014	8/19/2014	8/19/2014	6/6/2014	8/19/2014
Matrix		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
VOCs										
1,1,1-Trichloroethane	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	5	5.0 U	5.0 U	**1.0 J**	**1.0 J**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	5	5.0 U	5.0 U	**1.3 J**	**1.4 J**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	5	5.0 U	5.0 U	5.0 U	**0.79 J**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl chloride	2	5.0 U	5.0 U	**1.1 J**	**0.91 J**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Notes:
 - Concentration exceeds corresponding NYSDEC Class GA Standard.

U - The compound was not detected at the indicated concentration.
J - Estimated value.
-- Not applicable
DUPLICATE 8/19/14 collected at S-1

TABLE 3
SUMMARY OF GROUNDWATER SAMPLING RESULTS-SVOCs
SITE CLOSEOUT REPORT
PETER WINKELMAN COMPANY, INC. OU-1/OU-1A
SYRACUSE, NEW YORK

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard or Guidance Value µg/L	P-1 6/5/2014 WATER µg/L	P-5 6/6/2014 WATER µg/L	S-1 6/6/2014 WATER µg/L	S-2 6/6/2014 WATER µg/L
SVOCs					
1,2,4-Trichlorobenzene	5	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	3	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	3	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	3	10 U	10 U	10 U	10 U
2,2´-oxybis(1-Chloropropane)	--	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	1**	20 U	20 U	20 U	20 U
2,4,6-Trichlorophenol	1**	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	1**	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	1**	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	10*	20 U	20 U	20 U	20 U
2,4-Dinitrotoluene	5	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	5	10 U	10 U	10 U	10 U
2-Chloronaphthalene	10*	10 U	10 U	10 U	10 U
2-Chlorophenol	1**	10 U	10 U	10 U	10 U
2-Methylnaphthalene	--	10 U	10 U	10 U	10 U
2-Methylphenol	1	10 U	10 U	10 U	10 U
2-Nitroaniline	5	20 U	20 U	20 U	20 U
2-Nitrophenol	1**	10 U	10 U	10 U	10 U
3,3´-Dichlorobenzidine	1**	10 U	10 U	10 U	10 U
3-Nitroaniline	5	20 U	20 U	20 U	20 U
4,6-Dinitro-2-methylphenol	1**	20 U	20 U	20 U	20 U
4-Bromophenyl-phenylether	--	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	1**	10 U	10 U	10 U	10 U
4-Chloroaniline	5	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether	--	10 U	10 U	10 U	10 U
4-Methylphenol	1**	10 U	10 U	10 U	10 U
4-Nitroaniline	5	20 U	20 U	20 U	20 U
4-Nitrophenol	1**	20 U	20 U	20 U	20 U
Acenaphthene	20	10 U	10 U	10 U	10 U
Acenaphthylene	--	10 U	10 U	10 U	10 U
Anthracene	50*	10 U	10 U	10 U	10 U

Notes:
- Concentration exceeds corresponding NYSDEC Class GA Standard.

U - The compound was not detected at the indicated concentration.
B - The compund was also detected in the associated Method Blank.
J - Estimated value.
* Guidance Value
** Applies to the sum of these compounds
-- Not applicable
DUPLICATE 8/19/14 collected at S-1

TABLE 3
SUMMARY OF GROUNDWATER SAMPLING RESULTS-SVOCs
SITE CLOSEOUT REPORT
PETER WINKELMAN COMPANY, INC. OU-1/OU-1A
SYRACUSE, NEW YORK

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard or Guidance Value µg/L	P-1 6/5/2014 WATER µg/L	P-5 6/6/2014 WATER µg/L	S-1 6/6/2014 WATER µg/L	S-2 6/6/2014 WATER µg/L
SVOCs					
Benzo(a)anthracene	0.002*	10 U	10 U	10 U	10 U
Benzo(a)pyrene	ND	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	0.002*	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	--	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	0.002*	10 U	10 U	10 U	10 U
Bis(2-chloroethoxy)methane	5	10 U	10 U	10 U	10 U
Bis(2-chloroethyl)ether	1	10 U	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	5	10 U	10 U	10 U	10 U
Butylbenzylphthalate	--	10 U	10 U	10 U	10 U
Carbazole	--	10 U	10 U	10 U	10 U
Chrysene	0.002*	10 U	10 U	10 U	10 U
Di-n-butylphthalate	50	10 U	10 U	10 U	10 U
Di-n-octylphthalate	50*	10 U	10 U	10 U	10 U
Dibenzo(a,h)anthracene	--	10 U	10 U	10 U	10 U
Dibenzofuran	--	10 U	10 U	10 U	10 U
Diethylphthalate	50*	10 U	10 U	10 U	10 U
Dimethylphthalate	50*	10 U	10 U	10 U	10 U
Fluoranthene	50*	10 U	10 U	10 U	10 U
Fluorene	50*	10 U	10 U	10 U	10 U
Hexachlorobenzene	0.04	10 U	10 U	10 U	10 U
Hexachlorobutadiene	0.5	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	5	10 U	10 U	10 U	10 U
Hexachloroethane	5	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	0.002*	10 U	10 U	10 U	10 U
Isophorone	50*	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	--	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	50*	10 U	10 U	10 U	10 U
Naphthalene	10*	10 U	10 U	10 U	10 U
Nitrobenzene	0.4	10 U	10 U	10 U	10 U
Pentachlorophenol	1	20 U	20 U	20 U	20 U
Phenanthrene	50	10 U	10 U	10 U	10 U
Phenol	1	10 U	10 U	10 U	10 U
Pyrene	50	10 U	10 U	10 U	10 U

Notes:
- Concentration exceeds corresponding NYSDEC Class GA Standard.

U - The compound was not detected at the indicated concentration.
B - The compund was also detected in the associated Method Blank.
J - Estimated value.
* Guidance Value
** Applies to the sum of these compounds
-- Not applicable
DUPLICATE 8/19/14 collected at S-1

TABLE 4
SUMMARY OF GROUNDWATER SAMPLING RESULTS-DETECTED METALS
SITE CLOSEOUT REPORT
PETER WINKELMAN COMPANY, INC. OU-1/OU-1A
SYRACUSE, NEW YORK

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard or Guidance Value µg/L	P-1 6/5/2014 WATER µg/L	P-5 6/6/2014 WATER µg/L	S-1 6/6/2014 WATER µg/L	S-2 6/6/2014 WATER µg/L
TAL METALS (Total)					
Aluminum	2000	66 U	66 U	66 U	66 U
Arsenic	25	4.3 U	4.3 U	**5.0 J**	4.3 U
Barium	1,000	200 U	200 U	200 U	200 U
Cadmium	5	0.89 U	0.89 U	**2.7 J**	0.89 U
Calcium	--	**126,000**	**168,000**	**116,000**	**125,000**
Chromium	50	0.64 U	0.64 U	0.64 U	0.64 U
Cobalt		0.67 U	0.67 U	50 U	50 U
Copper	200	**9.4 J**	3.6 U	**32.4**	**4.8 J**
Iron	300	31.0 U	**6,010**	**1,200**	**12,300**
Lead	25	4.2 U	4.2 U	4.2 U	4.2 U
Magnesium	35,000*	**12,100**	**12,700**	**10,300**	**11,200**
Manganese	300	**57.1**	**269**	**183**	**279**
Nickel	100	**5.3 J**	**1.2 J**	**8.6 J**	**15.3 J**
Potassium	--	**12,000**	**13,800**	**11,500**	**11,600**
Sodium	20,000	**36,500**	**59,100**	**53,800**	**52,500**
Vanadium	--	1.1 U	1.1 U	1.1 U	1.1 U
Zinc	2,000*	**89.7**	**6.5 J**	**2,810**	**2,640**

Notes:
- Concentration exceeds corresponding NYSDEC Class GA Standard.
U - The compound was not detected at the indicated concentration.
B - The comound was also detected in the associated Method Blank.
*Guidance Value.
-- Not applicable

TABLE 5
SUMMARY OF GROUNDWATER SAMPLING RESULTS-PESTICIDES and PCBs
SITE CLOSEOUT REPORT
PETER WINKELMAN COMPANY, INC. OU-1/OU-1A
SYRACUSE, NEW YORK

Sample ID	NYSDEC Class GA Standard	P-1	P-1	P-5	P-5	S-1	S-1	DUPLICATE 8/19/14 (S-1)	S-2	S-2
Sampling Date		6/5/2014	8/19/2014	6/6/2014	8/19/2014	6/6/2014	8/19/2014	8/19/2014	6/6/2014	8/19/2014
Matrix		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Pesticides										
4,4´-DDD	0.3	0.10 U	NS	0.10 U	NS	0.10 U	NS	NS	0.10 U	NS
4,4´-DDE	0.2	0.10 U	NS	0.10 U	NS	0.10 U	NS	NS	0.10 U	NS
4,4´-DDT	0.2	0.10 U	NS	0.10 U	NS	0.10 U	NS	NS	0.10 U	NS
Aldrin	ND	0.050 U	NS	0.050 U	NS	0.050 U	NS	NS	0.050 U	NS
alpha-BHC	--	0.050 U	NS	0.050 U	NS	0.050 U	NS	NS	0.050 U	NS
alpha-Chlordane	0.05	0.050 U	NS	0.050 U	NS	0.050 U	NS	NS	0.050 U	NS
beta-BHC	--	0.050 U	NS	0.050 U	NS	0.050 U	NS	NS	0.050 U	NS
delta-BHC	--	0.050 U	NS	0.050 U	NS	0.050 U	NS	NS	0.050 U	NS
Dieldrin	0.004	0.10 U	NS	0.10 U	NS	0.10 U	NS	NS	0.10 U	NS
Endosulfan I	--	0.050 U	NS	0.050 U	NS	0.050 U	NS	NS	0.050 U	NS
Endosulfan II	--	0.10 U	NS	0.10 U	NS	0.10 U	NS	NS	0.10 U	NS
Endosulfan sulfate	--	0.10 U	NS	0.10 U	NS	0.10 U	NS	NS	0.10 U	NS
Endrin	ND	0.10 U	NS	0.10 U	NS	0.10 U	NS	NS	0.10 U	NS
Endrin aldehyde	5	0.10 U	NS	0.10 U	NS	0.10 U	NS	NS	0.10 U	NS
Endrin ketone	5	0.10 U	NS	0.10 U	NS	0.10 U	NS	NS	0.10 U	NS
gamma-BHC (Lindane)	0.05	0.050 U	NS	0.050 U	NS	0.050 U	NS	NS	0.050 U	NS
gamma-Chlordane	0.05	0.050 U	NS	0.050 U	NS	0.050 U	NS	NS	0.050 U	NS
Heptachlor	0.04	0.050 U	NS	0.050 U	NS	0.050 U	NS	NS	0.050 U	NS
Heptachlor epoxide	0.03	0.050 U	NS	0.050 U	NS	0.050 U	NS	NS	0.050 U	NS
Methoxychlor	35	0.50 U	NS	0.50 U	NS	0.50 U	NS	NS	0.50 U	NS
Toxaphene	0.06	5.5 U	NS	5.8 U	NS	5.6 U	NS	NS	5.7 U	NS
PCBs										
Aroclor-1016	0.09*	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
Aroclor-1221	0.09*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1232	0.09*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1242	0.09*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1248	0.09*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1254	0.09*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1260	0.09*	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
Aroclor-1262	0.09*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor-1268	0.09*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:

- Concentration exceeds corresponding NYSDEC Class GA Standard.

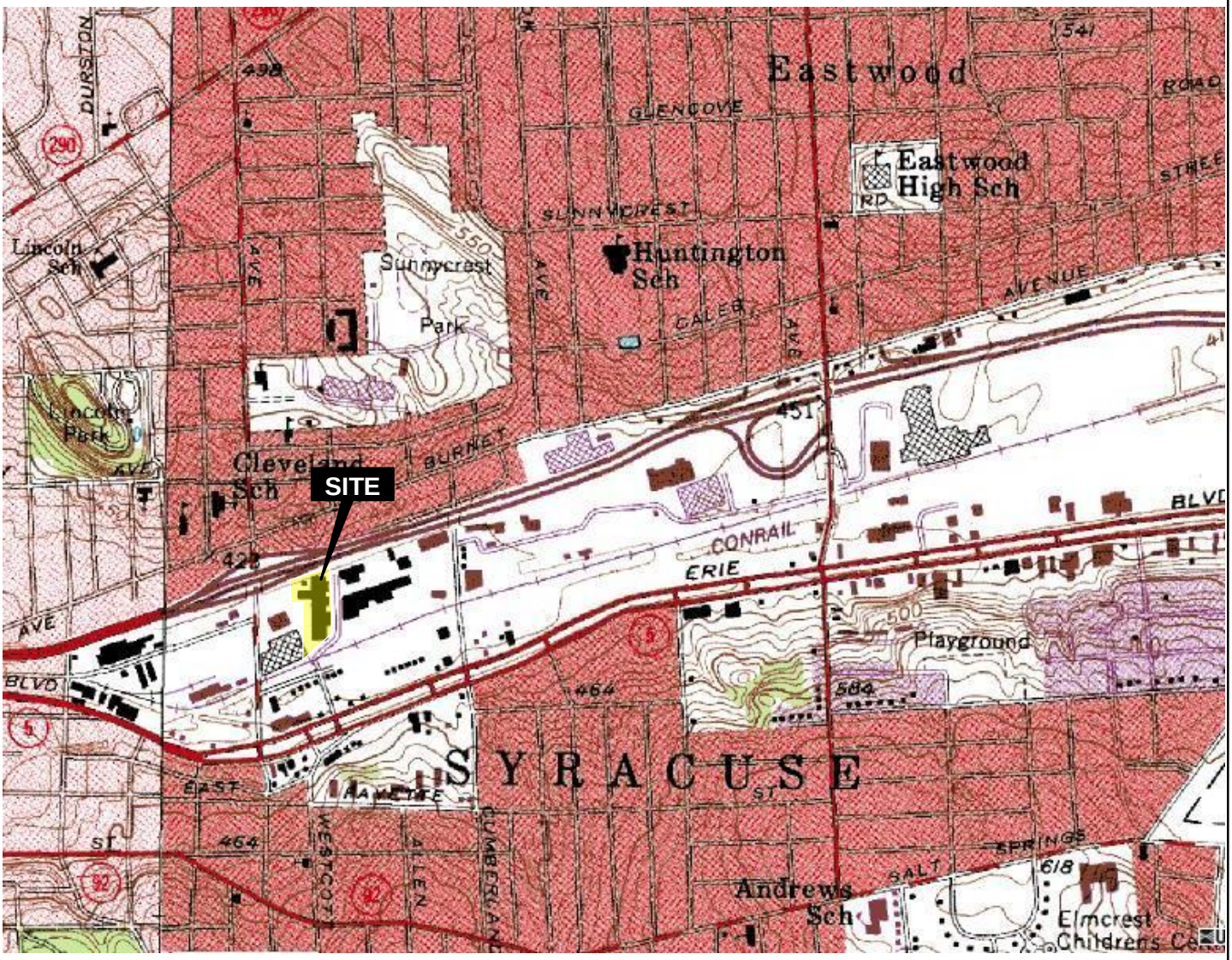
U - The compound was not detected at the indicated concentration.
UJ- The compound was analyzed for, but not detected. The sample quantitation limit is an estimate.
*Appies to the sum of these compounds.
ND - Non-detectable concentration by the approved analytical methods.
-- Not applicable
DUPLICATE 8/19/14 collected at S-1

TABLE 6
SUMMARY OF WIPE SAMPLING RESULTS-PCBs
SITE CLOSEOUT REPORT
PETER WINKELMAN COMPANY, INC. OU-1/OU-1A
SYRACUSE, NEW YORK

Sample ID	Wipe-1A	Wipe-1B	Wipe-1C	Wipe-2A	Wipe-2B	Wipe-2C
Sampling Date	6/4/2015	6/4/2015	6/4/2015	6/4/2015	6/4/2015	6/4/2015
Matrix	Wipe	Wipe	Wipe	Wipe	Wipe	Wipe
Units	µg/Wipe	µg/Wipe	µg/Wipe	µg/Wipe	µg/Wipe	µg/Wipe
PCBs						
Aroclor-1016	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Aroclor-1221	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Aroclor-1232	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Aroclor-1242	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Aroclor-1248	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Aroclor-1254	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Aroclor-1260	**1.3**	**2.2**	**2.1**	**1.1**	**1.5**	**1.5**
Aroclor-1262	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Aroclor-1268	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

Notes:
U - The compound was not detected at the indicated concentration. The reporting limit is presented.
Wipe area was conducted using a 100 cm^2 area in accordance with USEPA disposal guidance.

FIGURES



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

PETER WINKELMAN SITE
SYRACUSE, NEW YORK

OU-1/OU-1A FINAL ENGINEERING REPORT

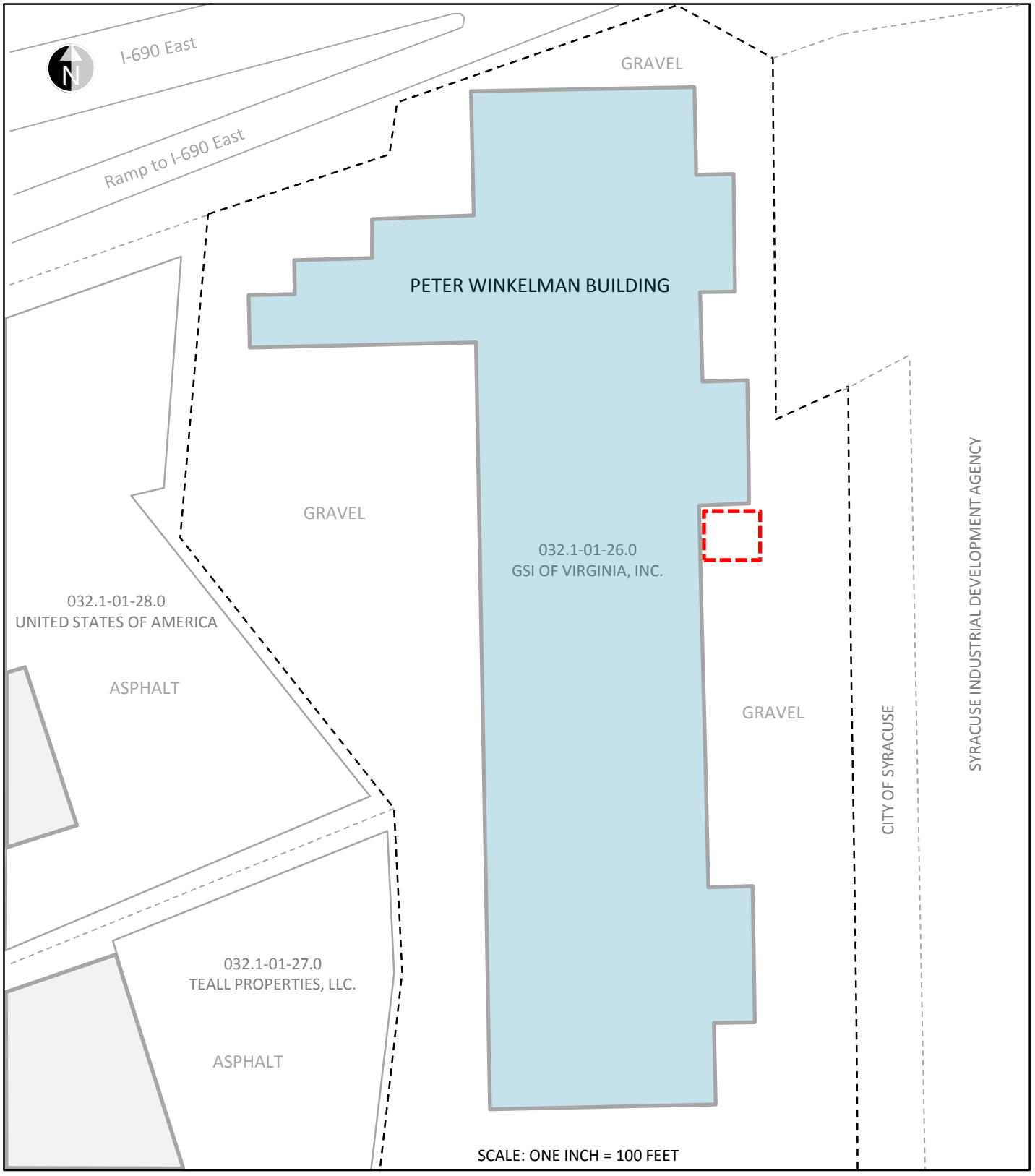
SITE LOCATION

ARCADIS

Figure
1

Document path

Source: USGS 1:24,000 Quadrangle , East Syracuse (1978)



LEGEND

- APPROXIMATE PROPERTY LINE
- BUILDING
- APPROXIMATE PCB RELEASE AREA (OU-1/OU-1A)
- 032.1-01-26.0 GSI OF VIRGINIA, INC. — TAX PARCEL ID/OWNER NAME

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

PETER WINKELMAN SITE
SYRACUSE, NEW YORK

OU-1/OU-1A FINAL ENGINEERING REPORT

SITE MAP

ARCADIS

Figure
2

LEGEND

- S — PRE-EXISTING 24" CMP SUMP SAMPLE
- P — PRE-EXISTING GROUNDWATER MONITORING WELL
- APPROXIMATE PROPERTY LINE
- APPROXIMATE BOUNDARY OF OU-1 AREA

40 0 40 80

SCALE: 1" = 80'

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
PETER WINKELMAN SITE
SYRACUSE, NY

OU-1/OU-1A FINAL ENGINEERING REPORT

SITE FEATURES AND SAMPLING LOCATIONS

ARCADIS

FIGURE 3

APPENDIX A

Analytical Data

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

June 16, 2015

Jeremy Wyckoff
Arcadis US, Inc. - Clifton Park-NY
855 Route 146, Suite 210
Clifton Park, NY 12065

Project Location: Syracuse (Peter Winkleman Co.)
Client Job Number:
Project Number: 00266399.0000
Laboratory Work Order Number: 15F0302

Enclosed are results of analyses for samples received by the laboratory on June 5, 2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Aaron L. Benoit
Project Manager

Table of Contents

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Arcadis US, Inc. - Clifton Park-NY
855 Route 146, Suite 210
Clifton Park, NY 12065
ATTN: Jeremy Wyckoff

REPORT DATE: 6/16/2015

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 00266399.0000

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 15F0302

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Syracuse (Peter Winkleman Co.)

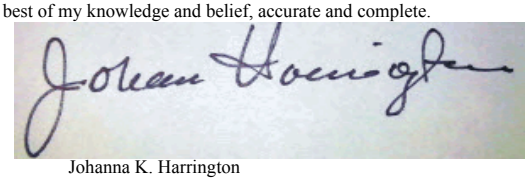
FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Wipe-1A	15F0302-01	Wipe		SW-846 8082A	
Wipe-1B	15F0302-02	Wipe		SW-846 8082A	
Wipe-1C	15F0302-03	Wipe		SW-846 8082A	
Wipe-2A	15F0302-04	Wipe		SW-846 8082A	
Wipe-2B	15F0302-05	Wipe		SW-846 8082A	
Wipe-2C	15F0302-06	Wipe		SW-846 8082A	

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Johanna K. Harrington
Manager, Laboratory Reporting

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Syracuse (Peter Winkleman Co.) Sample Description: Work Order: 15F0302

Date Received: 6/5/2015

Field Sample #: Wipe-1A

Sample ID: 15F0302-01 Start Date/Time: 6/4/2015 2:30:00PM

Sample Matrix: Wipe Stop Date/Time: 6/4/2015 2:35:00PM

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 11:46	PJG
Aroclor-1221 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 11:46	PJG
Aroclor-1232 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 11:46	PJG
Aroclor-1242 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 11:46	PJG
Aroclor-1248 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 11:46	PJG
Aroclor-1254 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 11:46	PJG
Aroclor-1260 [1]	1.3	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 11:46	PJG
Aroclor-1262 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 11:46	PJG
Aroclor-1268 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 11:46	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	92.6	30-150		6/15/15 11:46
Decachlorobiphenyl [2]	85.1	30-150		6/15/15 11:46
Tetrachloro-m-xylene [1]	86.5	30-150		6/15/15 11:46
Tetrachloro-m-xylene [2]	74.8	30-150		6/15/15 11:46

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Syracuse (Peter Winkleman Co.) Sample Description: Work Order: 15F0302

Date Received: 6/5/2015

Field Sample #: Wipe-1B

Sample ID: 15F0302-02 Start Date/Time: 6/4/2015 2:35:00PM

Sample Matrix: Wipe Stop Date/Time: 6/4/2015 2:40:00PM

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 11:59	PJG
Aroclor-1221 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 11:59	PJG
Aroclor-1232 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 11:59	PJG
Aroclor-1242 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 11:59	PJG
Aroclor-1248 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 11:59	PJG
Aroclor-1254 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 11:59	PJG
Aroclor-1260 [1]	2.2	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 11:59	PJG
Aroclor-1262 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 11:59	PJG
Aroclor-1268 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 11:59	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	82.6	30-150		6/15/15 11:59
Decachlorobiphenyl [2]	75.9	30-150		6/15/15 11:59
Tetrachloro-m-xylene [1]	79.1	30-150		6/15/15 11:59
Tetrachloro-m-xylene [2]	69.1	30-150		6/15/15 11:59

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Syracuse (Peter Winkleman Co.) Sample Description: Work Order: 15F0302

Date Received: 6/5/2015

Field Sample #: Wipe-1C

Sample ID: 15F0302-03 Start Date/Time: 6/4/2015 2:40:00PM

Sample Matrix: Wipe Stop Date/Time: 6/4/2015 2:45:00PM

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:12	PJG
Aroclor-1221 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:12	PJG
Aroclor-1232 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:12	PJG
Aroclor-1242 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:12	PJG
Aroclor-1248 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:12	PJG
Aroclor-1254 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:12	PJG
Aroclor-1260 [1]	2.1	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:12	PJG
Aroclor-1262 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:12	PJG
Aroclor-1268 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:12	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	90.9	30-150		6/15/15 12:12
Decachlorobiphenyl [2]	83.0	30-150		6/15/15 12:12
Tetrachloro-m-xylene [1]	83.4	30-150		6/15/15 12:12
Tetrachloro-m-xylene [2]	72.0	30-150		6/15/15 12:12

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Syracuse (Peter Winkleman Co.) Sample Description: Work Order: 15F0302

Date Received: 6/5/2015

Field Sample #: Wipe-2A

Sample ID: 15F0302-04 Start Date/Time: 6/4/2015 2:45:00PM

Sample Matrix: Wipe Stop Date/Time: 6/4/2015 2:50:00PM

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:25	PJG
Aroclor-1221 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:25	PJG
Aroclor-1232 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:25	PJG
Aroclor-1242 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:25	PJG
Aroclor-1248 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:25	PJG
Aroclor-1254 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:25	PJG
Aroclor-1260 [1]	1.1	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:25	PJG
Aroclor-1262 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:25	PJG
Aroclor-1268 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:25	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	92.4	30-150		6/15/15 12:25
Decachlorobiphenyl [2]	84.2	30-150		6/15/15 12:25
Tetrachloro-m-xylene [1]	87.3	30-150		6/15/15 12:25
Tetrachloro-m-xylene [2]	75.4	30-150		6/15/15 12:25

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Syracuse (Peter Winkleman Co.) Sample Description: Work Order: 15F0302

Date Received: 6/5/2015

Field Sample #: Wipe-2B

Sample ID: 15F0302-05 Start Date/Time: 6/4/2015 2:50:00PM

Sample Matrix: Wipe Stop Date/Time: 6/4/2015 2:55:00PM

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:37	PJG
Aroclor-1221 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:37	PJG
Aroclor-1232 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:37	PJG
Aroclor-1242 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:37	PJG
Aroclor-1248 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:37	PJG
Aroclor-1254 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:37	PJG
Aroclor-1260 [1]	1.5	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:37	PJG
Aroclor-1262 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:37	PJG
Aroclor-1268 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:37	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	93.4	30-150		6/15/15 12:37
Decachlorobiphenyl [2]	85.0	30-150		6/15/15 12:37
Tetrachloro-m-xylene [1]	85.5	30-150		6/15/15 12:37
Tetrachloro-m-xylene [2]	73.7	30-150		6/15/15 12:37

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Syracuse (Peter Winkleman Co.) Sample Description: Work Order: 15F0302

Date Received: 6/5/2015

Field Sample #: Wipe-2C

Sample ID: 15F0302-06 Start Date/Time: 6/4/2015 2:55:00PM

Sample Matrix: Wipe Stop Date/Time: 6/4/2015 3:00:00PM

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:50	PJG
Aroclor-1221 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:50	PJG
Aroclor-1232 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:50	PJG
Aroclor-1242 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:50	PJG
Aroclor-1248 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:50	PJG
Aroclor-1254 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:50	PJG
Aroclor-1260 [1]	1.5	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:50	PJG
Aroclor-1262 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:50	PJG
Aroclor-1268 [1]	ND	0.20	µg/Wipe	1		SW-846 8082A	6/9/15	6/15/15 12:50	PJG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	87.8	30-150		6/15/15 12:50
Decachlorobiphenyl [2]	80.3	30-150		6/15/15 12:50
Tetrachloro-m-xylene [1]	82.3	30-150		6/15/15 12:50
Tetrachloro-m-xylene [2]	71.3	30-150		6/15/15 12:50

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: SW-846 3546-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [Wipe]	Final [mL]	Date
15F0302-01 [Wipe-1A]	B123651	1.00	10.0	06/09/15
15F0302-02 [Wipe-1B]	B123651	1.00	10.0	06/09/15
15F0302-03 [Wipe-1C]	B123651	1.00	10.0	06/09/15
15F0302-04 [Wipe-2A]	B123651	1.00	10.0	06/09/15
15F0302-05 [Wipe-2B]	B123651	1.00	10.0	06/09/15
15F0302-06 [Wipe-2C]	B123651	1.00	10.0	06/09/15

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B123651 - SW-846 3546										
Blank (B123651-BLK1)				Prepared: 06/09/15 Analyzed: 06/15/15						
Aroclor-1016	ND	0.20	µg/Wipe							
Aroclor-1016 [2C]	ND	0.20	µg/Wipe							
Aroclor-1221	ND	0.20	µg/Wipe							
Aroclor-1221 [2C]	ND	0.20	µg/Wipe							
Aroclor-1232	ND	0.20	µg/Wipe							
Aroclor-1232 [2C]	ND	0.20	µg/Wipe							
Aroclor-1242	ND	0.20	µg/Wipe							
Aroclor-1242 [2C]	ND	0.20	µg/Wipe							
Aroclor-1248	ND	0.20	µg/Wipe							
Aroclor-1248 [2C]	ND	0.20	µg/Wipe							
Aroclor-1254	ND	0.20	µg/Wipe							
Aroclor-1254 [2C]	ND	0.20	µg/Wipe							
Aroclor-1260	ND	0.20	µg/Wipe							
Aroclor-1260 [2C]	ND	0.20	µg/Wipe							
Aroclor-1262	ND	0.20	µg/Wipe							
Aroclor-1262 [2C]	ND	0.20	µg/Wipe							
Aroclor-1268	ND	0.20	µg/Wipe							
Aroclor-1268 [2C]	ND	0.20	µg/Wipe							
Surrogate: Decachlorobiphenyl	*1.81*		µg/Wipe	2.00		90.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	*1.71*		µg/Wipe	2.00		85.5	30-150			
Surrogate: Tetrachloro-m-xylene	*2.00*		µg/Wipe	2.00		99.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*1.79*		µg/Wipe	2.00		89.7	30-150			
LCS (B123651-BS1)				Prepared: 06/09/15 Analyzed: 06/15/15						
Aroclor-1016	0.59	0.20	µg/Wipe	0.500		118	40-140			
Aroclor-1016 [2C]	0.59	0.20	µg/Wipe	0.500		118	40-140			
Aroclor-1260	0.56	0.20	µg/Wipe	0.500		112	40-140			
Aroclor-1260 [2C]	0.51	0.20	µg/Wipe	0.500		102	40-140			
Surrogate: Decachlorobiphenyl	*1.80*		µg/Wipe	2.00		90.0	30-150			
Surrogate: Decachlorobiphenyl [2C]	*1.65*		µg/Wipe	2.00		82.3	30-150			
Surrogate: Tetrachloro-m-xylene	*1.99*		µg/Wipe	2.00		99.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*1.78*		µg/Wipe	2.00		89.2	30-150			
LCS Dup (B123651-BSD1)				Prepared: 06/09/15 Analyzed: 06/15/15						
Aroclor-1016	0.64	0.20	µg/Wipe	0.500		127	40-140	7.43	30	
Aroclor-1016 [2C]	0.57	0.20	µg/Wipe	0.500		114	40-140	3.56	30	
Aroclor-1260	0.54	0.20	µg/Wipe	0.500		108	40-140	3.59	30	
Aroclor-1260 [2C]	0.51	0.20	µg/Wipe	0.500		102	40-140	0.0177	30	
Surrogate: Decachlorobiphenyl	*1.71*		µg/Wipe	2.00		85.3	30-150			
Surrogate: Decachlorobiphenyl [2C]	*1.55*		µg/Wipe	2.00		77.7	30-150			
Surrogate: Tetrachloro-m-xylene	*1.94*		µg/Wipe	2.00		97.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*1.75*		µg/Wipe	2.00		87.3	30-150			

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Wipe-1A

Lab Sample ID: 15F0302-01 Date(s) Analyzed: 06/15/2015 06/15/2015

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1260	1	0.00	0.00	0.00	1.3	
	2	0.00	0.00	0.00	1.2	8.0

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Wipe-1B

Lab Sample ID: 15F0302-02 Date(s) Analyzed: 06/15/2015 06/15/2015

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1260	1	0.00	0.00	0.00	2.2	
	2	0.00	0.00	0.00	1.9	12.8

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Wipe-1C

Lab Sample ID: 15F0302-03 Date(s) Analyzed: 06/15/2015 06/15/2015

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1260	1	0.00	0.00	0.00	2.1	
	2	0.00	0.00	0.00	1.9	9.5

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Wipe-2A

Lab Sample ID: 15F0302-04 Date(s) Analyzed: 06/15/2015 06/15/2015

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1260	1	0.00	0.00	0.00	1.1	
	2	0.00	0.00	0.00	1.0	12.2

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Wipe-2B

Lab Sample ID: 15F0302-05 Date(s) Analyzed: 06/15/2015 06/15/2015

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1260	1	0.00	0.00	0.00	1.5	
	2	0.00	0.00	0.00	1.3	11.6

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Wipe-2C

Lab Sample ID: 15F0302-06 Date(s) Analyzed: 06/15/2015 06/15/2015

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1260	1	0.00	0.00	0.00	1.5	
	2	0.00	0.00	0.00	1.3	14.9

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS

Lab Sample ID: B123651-BS1 Date(s) Analyzed: 06/15/2015 06/15/2015

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.59	
	2	0.00	0.00	0.00	0.59	0
Aroclor-1260	1	0.00	0.00	0.00	0.56	
	2	0.00	0.00	0.00	0.51	9

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS Dup

Lab Sample ID: B123651-BSD1 Date(s) Analyzed: 06/15/2015 06/15/2015

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.64	
	2	0.00	0.00	0.00	0.57	11
Aroclor-1260	1	0.00	0.00	0.00	0.54	
	2	0.00	0.00	0.00	0.51	6

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications

No certified Analyses included in this Report

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2015
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2016
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2016
RI	Rhode Island Department of Health	LAO00112	12/30/2015
NC	North Carolina Div. of Water Quality	652	12/31/2015
NJ	New Jersey DEP	MA007 NELAP	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2016
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2015
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2015

CHAIN OF CUSTODY RECORD

con-test ANALYTICAL LABORATORY
Phone: 413-525-2332
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www.contestlabs.com
39 Spruce Street
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15F0302
Rev 04.05.12

Company Name: ARCADIS - Danielle Giroux
Address: 6723 Towpath Rd
Syracuse, NY 13214
Attention: Danielle Giroux / Jeremy Wyckoff
Project Location: Syracuse (Peter Winkelman Co.)
Sampled By: N. Stephens

Telephone: 518-250-7327 / 607-321-5386
Project #: 00266394.0000
Client PO#:

DATA DELIVERY (check all that apply)
○ FAX ○ EMAIL ○ WEBSITE
Fax #:
Email: danielle.giroux@arcadis.com
Format: ○ PDF ○ EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	# of Containers	** Preservation	***Container Code
01	WIPE-1A	6/4/15 1430	6/4/15 1435		X	O		X		
02	WIPE-1B	6/4/15 1435	1440					X		
03	WIPE-1C	6/4/15 1440	1445					X		
04	WIPE-2A	6/4/15 1445	1450					X		
05	WIPE-2B	6/4/15 1450	1455					X		
06	WIPE-2C	6/4/15 1455	1500					X		

ANALYSIS REQUESTED: PCBs 8082

Dissolved Metals
○ Field Filtered
○ Lab to Filter

***Cont. Code:**
A=amber glass
G=glass
P=plastic
ST=sterile
V=vial
S=summa can
T=tedlar bag
O=Other

****Preservation**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other Hexane

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL= sludge
O = other Wipe

Comments:
Standard TAT, Contact Danielle Giroux regarding data delivery

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown (All)

Relinquished by: (signature)	Date/Time:
Will Gill	6/4/15 1530
Received by: (signature)	Date/Time:
[signature] 4.0 9:40	6.5.15
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Turnaround ††
☐ 7-Day
☒ 10-Day
☐ Other _____
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts:
Connecticut:
Other:

Is your project MCP or RCP ?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

Table of Contents

FedEx ® Tracking

864651828634

Ship (P/U) date :
Thur 6/04/2015 5:08 pm

SYRACUSE, NY US

Delivered

Signed for by: M.JONES

Actual delivery :
Fri 6/05/2015 9:40 am

MA US

Travel History

Date/Time	Activity	Location
6/05/2015 - Friday		
9:40 am	Delivered	MA
7:37 am	On FedEx vehicle for delivery	WINDSOR LOCKS, CT
7:30 am	At local FedEx facility	WINDSOR LOCKS, CT
3:30 am	Departed FedEx location	NEWARK, NJ
6/04/2015 - Thursday		
11:47 pm	Arrived at FedEx location	NEWARK, NJ
8:38 pm	Left FedEx origin facility	NORTH SYRACUSE, NY
5:08 pm	Picked up Tendered at FedEx Office	SYRACUSE, NY

Shipment Facts

Tracking number	864651828634	**Service**	FedEx Priority Overnight
Weight	4 lbs / 1.81 kgs	**Dimensions**	13x9x9 in.
Delivered To	Shipping/Receiving	**Total pieces**	1
Total shipment weight	4 lbs / 1.81 kgs	**Shipper reference**	00266399 0000 WINKELMAN
Packaging	Your Packaging	**Special handling section**	Deliver Weekday

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com

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Sample Receipt Checklist

CLIENT NAME: Arcadis RECEIVED BY: PB DATE: 6.5.15

1) **Was the chain(s) of custody relinquished and signed?** (Yes) No No CoC Included

2) **Does the chain agree with the samples?** (Yes) No

If not, explain:

3) **Are all the samples in good condition?** (Yes) No

If not, explain:

4) **How were the samples received:**

On Ice [X] Direct from Sampling [ ] Ambient [ ] In Cooler(s) [X]

Were the samples received in Temperature Compliance of (2-6°C)? (Yes) No N/A

Temperature °C by Temp blank 4.0 Temperature °C by Temp gun _____

5) **Are there Dissolved samples for the lab to filter?** Yes (No)

Who was notified _____ Date _____ Time _____

6) **Are there any RUSH or SHORT HOLDING TIME samples?** Yes (No)

Who was notified _____ Date _____ Time _____

7) **Location where samples are stored:** Login

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

8) **Do all samples have the proper Acid pH:** Yes No (N/A) _____

9) **Do all samples have the proper Base pH:** Yes No (N/A) _____

10) **Was the PC notified of any discrepancies with the CoC vs the samples:** Yes No (N/A)

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	
500 mL Amber		4 oz amber/clear jar	6
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below		Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol _____
Bisulfate _____ # DI Water _____
Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	NA	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	NA	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

Who notified of False statements? **Date/Time:**

Doc #277 Rev. 4 August 2013 **Log-In Technician Initials:** PB **Date/Time:** 6.5.15 9.40

Arcadis CE, Inc.

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