

RCRA CLOSURE REPORT FOR  
KIMBERLY-CLARK MILL  
Everett, Washington

Prepared for: Kimberly-Clark Worldwide, Inc.

Project No. 110207-004-04 • November 12, 2013 Final

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Aspect Consulting, LLC



**J. Scott Kindred, PE**  
Associate Water Resource Engineer  
[skindred@aspectconsulting.com](mailto:skindred@aspectconsulting.com)

**Steve Germiat, LHG**  
Sr. Associate Hydrogeologist  
[sgermiat@aspectconsulting.com](mailto:sgermiat@aspectconsulting.com)

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# Table of Contents

<b>Acronyms .....</b>	<b>iii</b>
<b>1    Introduction and Background .....</b>	<b>1</b>
1.1    Applicable Regulations for Closure.....	1
1.2    Approach for Closure.....	2
<b>2    Investigations to Support Closure of HWAU .....</b>	<b>3</b>
2.1    Visual Inspection .....	4
2.2    Concrete Sampling .....	4
2.3    Water Sampling .....	5
2.4    Sub-Slab Soil Sampling .....	6
<b>3    Analytical Results from HWAU .....</b>	<b>7</b>
3.1    Concrete Sample Results .....	7
3.2    Water Sample Results.....	7
3.3    Soil Sample Results .....	7
3.4    Data Validation .....	8
<b>4    Final Disposition of Demolition Debris and Media from HWAU .....</b>	<b>8</b>
4.1    Structural Materials.....	8
4.2    Water.....	8
4.3    Soil .....	8
<b>5    Ecology's Dangerous Waste Inspection during Mill Closure.....</b>	<b>9</b>
<b>6    Conclusion: Clean Closure.....</b>	<b>10</b>
<b>7    References .....</b>	<b>11</b>
<b>Limitations.....</b>	<b>11</b>

## **List of Tables**

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- 3-1 Analytical Results for Concrete Samples
- 3-2 Analytical Results for Water Sample
- 3-3 Analytical Results for Soil Samples

## **List of Figures**

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- 1-1 Vicinity Map
- 1-2 Sample Locations for Hazardous Waste Accumulation Unit

## **Appendices**

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- A Summary of Historical Hazardous Waste Management, K-C Mill
- B Photographs of Hazardous Waste Accumulation Unit
- C Data Validation Reports and Analytical Data Reports (on CD)

## Acronyms

Aspect	Aspect Consulting, LLC
CLP	Contract Laboratory Program
cPAH	carcinogenic polycyclic aromatic hydrocarbon
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
HWAU	hazardous waste accumulation unit
K-C	Kimberly-Clark
mg/kg	milligrams/kilograms
mg/L	milligrams per liter
µg/L	micrograms per liter
Order	Agreed Order No. DE 9476
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
Site	K-C Worldwide Site
SVOC	semi-volatile organic carbon
TCLP	toxicity characteristic leaching procedure
TPH	total petroleum hydrocarbons
VOC	volatile organic compound
WAC	Washington Administrative Code

# 1 Introduction and Background

This closure report documents the Resource Conservation and Recovery Act (RCRA) clean closure of Kimberly Clark's (K-C) former Everett pulp and paper mill, including its Hazardous Waste Accumulation Unit (HWAU), which are within the Kimberly-Clark Worldwide Site (Site) located at 2600 Federal Avenue in Everett, Washington (Figure 1-1). The Site and the Upland Area of the Site are defined in Section IV of the Agreed Order No. DE 9476 (Order) between K-C and the Washington State Department of Ecology (Ecology), which was executed on December 20, 2012.

Up until the time of mill closure in April 2012, K-C was a large quantity generator (LQG) under RCRA (ID number WAD009250820). The facility was not an RCRA Storage, Treatment, Disposal Facility. Appendix A summarizes the mill's historical hazardous waste management activities. Attachment A-2 to Appendix A includes available maps depicting historical locations of hazardous substance storage and use at the mill; for legibility, two maps<sup>1</sup> in Attachment A-2 are produced as oversized plots in the hardcopy version of this report. The HWAU (commonly referred to in prior documents as the "haz waste cage") was a 90-day hazardous waste accumulation unit in which hazardous and non-hazardous waste materials generated at the mill were temporarily stored prior to proper off-site disposal. The HWAU was constructed in the mid-1990s just south of the Tissue Mill, on the northern edge of the former Log Pond. During mill operations, K-C accumulated waste materials within the accumulation unit for periods less than 90 days, and handled and disposed of the wastes in accordance with applicable requirements of Chapter 173-303 WAC. The HWAU structure was approximately 25 feet by 25 feet in dimension, and included a metal roof supported by metal posts and beams, a chain link fence and locked gate restricting access, a concrete pad, a concrete spill-containment trench surrounding the concrete pad, and labeling signage.

Figure 1-2 provides a close-up view of the HWAU and its relationship with surrounding facilities, as well as sample locations described in this report. Photographs of the HWAU before closure are provided in Appendix B.

Closure and demolition of the mill facilities was recently completed, and clean closure of the HWAU has been conducted as a final step in the mill closure process.

## 1.1 Applicable Regulations for Closure

The K-C mill and its HWAU have been closed in accordance with the state Dangerous Waste Regulations (WAC 173-303-610) and Ecology (2005) implementation guidance for clean closure. The HWAU structure served as a 90-day hazardous waste accumulation unit at a generator site and is not an RCRA-permitted Treatment, Storage, and Disposal

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<sup>1</sup> Provided as oversize plots are: The map of PCB transformer locations presented in the Phase 1 Environmental Site Assessment (AECOM, 2011), and the map of historical features including hazardous substance storage/use locations (Figure 2-2 of draft RI/FS Work Plan in preparation) developed from the various other facility maps presented in Attachment A-2.

Facility. The HWAU is therefore exempt from requirements in WAC 173-303-610 (closure and post-closure) and 173-303-620 (financial assurances), except for WAC 173-303-610(2) and 173-303-610(5).

WAC 173-303-610(2) states that the owner/operator must close the area in a manner that meets the following closure performance standards:

- Minimizes the need for further maintenance;
- Controls, minimizes or eliminates the potential for impact from the waste activities conducted in the area;
- Returns the land to the appearance and use of the surrounding land areas; and
- Removes any impacted areas to levels found in the unrestricted use land use levels found in the Model Toxics Control Act (MTCA).

WAC 173-303-610(5) addresses the disposal or decontamination of equipment, structures, and soils, and states the following:

During the partial and final closure periods, all contaminated equipment, structures and soils must be properly disposed of or decontaminated unless otherwise specified in WAC 173-303-640(8), 173-303-650(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), or under the authority of WAC 173-303-680 (2) and (4). By removing any dangerous wastes or dangerous constituents during partial and final closure, the owner or operator may become a generator of dangerous waste and must handle that waste in accordance with all applicable requirements of WAC 173-303-170 through 173-303-230.

## 1.2 Approach for Closure

During closure of the mill facility, K-C removed the remaining chemical inventory from each portion of the mill prior to its demolition, and managed waste materials in accordance with the state Dangerous Waste Regulations (Chapter 173-303 WAC). Ecology conducted a dangerous waste inspection of the mill during its closure and concluded that waste management activities were being conducted in conformance with Chapter 173-303 WAC (inspection described in Section 5). K-C retains records from off-site disposition of waste materials generated during mill closure.

Closure of the HWAU was conducted in accordance with the protocols described in the draft RI/FS Work Plan (Aspect, 2013b), as follows:

- Once all waste material was removed from the HWAU, Aspect conducted a visual inspection of the unit to document presence of cracks in the structure and observed for evidence of a release. The visual inspection was documented with a field report and photographs.
- Following the visual inspection, Aspect collected four fully penetrating core samples of the concrete floor slab. Locations with concrete staining were targeted for sampling. The concrete samples were analyzed for gasoline-, diesel-, and oil-range total petroleum hydrocarbons (TPH), RCRA 8 metals, semivolatile organic

compounds (SVOCs), volatile organic compounds (VOCs), and polychlorinated biphenyls (PCBs).

- The spill containment trench surrounding the concrete pad inside the HWAU was filled with water when the closure process began. The estimated 2,000 gallons of water was removed, sampled, and stored in a Baker tank until the analytical results were available. The sampling results confirmed that the water met chemical criteria for discharge to City of Everett sanitary sewer under K-C's Discharge Authorization from the City, so the water was pumped to sewer. One of the concrete samples was collected from the spill containment trench to document constituent levels in concrete lining the containment trench.
- Based on the analytical results, Aspect profiled the structure's demolition debris for off-site landfilling, and oversaw the contractor's demolition and proper disposal of it.
- Once the structure was fully removed, Aspect collected sub-slab soil samples at four hand-augered locations within the footprint of the former structure. Note that prior soil and groundwater sampling was also conducted around the perimeter of the unit during the independent Phase 2 ESA (Aspect, 2013a). At each of the four locations, soil samples were collected from two depths for analysis of gasoline-, diesel-, and oil-range TPH, RCRA 8 metals, SVOCs, VOCs, and PCBs.
- Detected contaminant concentrations in soil beneath the former structure were compared with MTCA unrestricted soil cleanup levels to determine if soil removal (as a component of the opportunistic interim action) was necessary to achieve clean closure of the unit under RCRA.
- The soil analytical data from the closure, both characterization and interim action cleanup verification data (if needed), were validated and will be incorporated into the RI/FS.
- Once the inspection and analytical testing is completed, Aspect prepared this Closure Report, stamped by a registered professional engineer, that documents the operational history of the accumulation unit, the pre-demolition inspection, analytical testing of the structure and its demolition and proper disposition, analytical testing of the underlying soil, results from any follow up soil removal conducted, and, based on the work completed, achievement of compliance with WAC 173-303-610 requirements for clean closure. The report is being submitted to Ecology's Industrial Section and Toxics Cleanup Program.

## 2 Investigations to Support Closure of HWAU

This section summarizes the assessment methods, including sampling and analysis of media, conducted as part of the RCRA closure process. The following sections describe each element of the closure process.

## 2.1 Visual Inspection

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A site visit was conducted on March 26, 2013 to conduct a visual inspection of the HWAU and collect concrete samples. The photographs from the site visit are provided in Appendix B. Observations during the site visit are summarized below:

- There was no evidence of staining on the chain link fence or the posts supporting the metal roof;
- No cracks were observed in the concrete pad;
- There was localized staining of the concrete pad but there was no oily residue, powders, or other evidence of chemicals. The most prominent stain in the concrete pad was a dark stain in the southwestern quarter of the pad;
- Light rust staining of the concrete pad was observed, often in circular patterns consistent with the diameter of a 55-gallon drum;
- There were several plastic pallets with secondary containment reservoirs inside the HWAU;
- The concrete pad was surrounded by a spill containment trench that was approximately 4 feet wide, 9 inches deep, and covered with a steel grate;
- The spill containment trench was filled to within an inch of the top with relatively clear water (presumed rain water) and drains to a 2 foot deep sump in the northwest corner equipped with an electric pump; and
- There was a plastic free-standing closet in the northeast corner with spill cleanup supplies.

## 2.2 Concrete Sampling

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For the purposes of representative sampling, coring of the unit's concrete floor slab was conducted by Dakota Concrete Cutting, Inc. out of Kent, Washington. Concrete sample locations (S-1 through S-4) are shown on Figure 1-2. Samples were collected using a portable coring machine with a nominal diameter of either 1 inch or 2 inches.

Descriptions of the samples are provided below:

- S-1 was located in the southwest quadrant of the concrete pad within an area of dark staining. The sample consisted of two cores: the first with a diameter of 1 inch and the second with a diameter of 2 inches. The concrete was 23 inches thick in this location.
- S-2 was located in the northwest quadrant of the concrete pad. The sample consisted of a single 2-inch diameter core. The concrete was 24 inches thick in this location.
- S-3 was located in the northeast quadrant of the concrete pad. The sample consisted of a single 2-inch diameter core. The concrete was 26 inches thick in this location.

- S-4 was located in the north segment of the spill containment trench. The sample consisted of two 2-inch diameter cores. The concrete was 12 inches thick in this location.

After the concrete core was removed from the coring barrel it was broken into smaller pieces using a hammer and placed within 16-ounce glass jars. Four jars were filled for each sample. After labeling the sample containers, the concrete samples were placed in a cooler with frozen “blue ice” and delivered to Analytical Resources Incorporated analytical laboratory in Seattle, Washington<sup>2</sup>. The laboratory crushed the concrete samples to allow chemical analysis and then analyzed them in accordance with the following methods:

- **Gasoline Range TPH:** Method NWTPH-Gx;
- **Diesel & Motor Oil Range TPH:** NWTPH-Dx;
- **VOCs:** Method 8260C;
- **SVOCs including polycyclic aromatic hydrocarbons (PAHs):** Method 8270D;
- **PCBs:** Method 8082A;
- **Total Metals other than mercury:** Method 200.8; and
- **Total Mercury:** Method 1631E.

## 2.3 Water Sampling

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Approximately 2,000 gallons of accumulated water was removed from the containment trench. The water was pumped into a small water truck with a 500 gallon capacity using the pump mounted on the water truck. The water was transported and discharged into a temporary 4,000-gallon Baker tank located at the north end of the Site to allow sampling and thus verification that it met criteria for discharge to City of Everett sewer under the terms of K-C’s Discharge Authorization for the demolition project.

A water sample was collected from the Baker tank. The water sample containers were filled from the Baker tank by dipping a glass jar suspended on a rope into the tank and pouring the water into the water sample containers. The glass jar was cleaned using fresh water before sampling began.

After labeling the sample containers, the water sample was placed in a cooler with frozen “blue ice” and delivered to Analytical Resources Incorporated’s laboratory. The sample was analyzed in accordance with the following methods:

- **Gasoline Range TPH:** Method NWTPH-Gx;
- **Diesel & Motor Oil Range TPH:** NWTPH-Dx;
- **VOCs:** Method 8260C;
- **SVOCs including PAHs:** Method 8270D;

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<sup>2</sup> At the time of sampling, Friedman & Bruya, Inc. analytical laboratory lacked the crushing apparatus to allow analysis of the concrete cores.

- **PCBs:** Method 8082;
- **Total Metals other than mercury:** Method 200.8; and
- **Total Mercury:** Method 1631

## 2.4 Sub-Slab Soil Sampling

Soil samples were collected on June 12, 2013, after the concrete slab had been removed. Soil sample locations (HWC-1 through HWC-4) are shown on Figure 1-2. When Aspect's field representative arrived at the site, the concrete slab had been broken up and stockpiled nearby. The soil subgrade (below the former 2-foot slab) was below the surrounding grade, and there was a timbered wall on the northern side of the subgrade. According to Keith Trosterud, the Superintendent for the demolition contractor, the top of the timber wall had had a concrete pile cap on it and its top was the approximate subgrade level for the former pavement in this area. Materials within the subgrade footprint included sand, pea gravel (presumed capillary break for bottom of former concrete slab), and residual concrete rubble from the slab demolished/removed. Ponded water was observed in the deepest part of subgrade, from where the sump was removed.

Collection of the first soil sample was attempted using a hand auger. Due to pea gravel collapsing into the hole it was not possible to advance the auger to the planned sampling depth, and the demolition contractor was therefore asked to excavate four holes – one in each of the four quadrants of the subgrade footprint - through the pea gravel using an excavator. The excavator removed the surficial pea gravel and concrete debris and exposed underlying gray sand that appeared to be fill (the sand was brown in the southwest corner). Samples of the fill soil were collected using a hand auger. The sand fill is approximately 1 foot thick and is underlain by gray silt. The hand auger hit refusal in all the holes at a depth of about 6 inches into the gray silt; therefore, the deeper soil sample depth interval was adjusted accordingly. The depth and material type comprising each soil sample collected are tabulated below.

Sample	Quadrant	Depth below Fill Soil Grade (ft)	Material
HWC-1(0-1)	Northwest	0 - 1	gray sand
HWC-1(1-1.5)		1 - 1.5	gray sand
HWC-2(0-1)	Northeast	0 - 1	gray sand
HWC-2(1-1.5)		1 - 1.5	gray silt
HWC-3(0-1)	Southeast	0 - 1	gray sand
HWC-3(1-1.5)		1 - 1.5	gray silt
HWC-4(0-1)	Southwest	0 - 1	brown sand
HWC-4(1-1.5)		1 - 1.5	gray silt

Soil samples were placed in 4-ounce glass jars, placed in a cooler with ice, and delivered to the courier from Friedman & Bruya, Inc. analytical laboratory. The samples were analyzed in accordance with the following methods:

- **Gasoline Range TPH:** Method NWTPH-Gx;
- **Diesel & Motor Oil Range TPH:** NWTPH-Dx with silica gel cleanup;

- **VOCs: Method 8260C;**
- **SVOCs including PAHs: Method 8270D;**
- **PCBs: Method 8082;**
- **Total Metals other than mercury: Method 200.8; and**
- **Total Mercury: Method 1631E.**

## 3 Analytical Results from HWAU

The analytical results from sampling of the HWAU media are provided in Appendix C and summarized in Tables 3-1 through 3-3. The analytical results for concrete, water, and soil samples are discussed in the following sections.

### 3.1 Concrete Sample Results

The analytical results for the four concrete samples are presented in Table 3-1. Although the concrete is not soil and was intended for off-site landfilling, the analytical results from the concrete samples are compared against MTCA soil screening levels for unrestricted and industrial land uses for purposes of this closure report.

The constituent concentrations in each of the four concrete samples were below respective MTCA soil cleanup levels for unrestricted land use (Table 3-1). The detected concentrations were also below 20 times respective TCLP criteria, therefore supplemental TCLP analyses were not conducted. Based on the analytical data, the concrete debris designated as non-hazardous solid waste.

### 3.2 Water Sample Results

The analytical results for the water sample are summarized in Table 3-2. Since the water was stored pending confirmation of acceptability for discharge to City sewer, the analytical data were compared with the effluent criteria from the City of Everett wastewater Discharge Authorization dated June 12, 2012.

None of the chemical concentrations in the water sample exceeded City of Everett wastewater discharge criteria (Table 3-2).

### 3.3 Soil Sample Results

The analytical results for the eight soil samples are presented in Table 3-3. The analytical results from the soil samples are compared against MTCA soil screening levels for unrestricted and industrial land uses.

None of the chemical concentrations in the soil samples exceeded MTCA unrestricted soil screening levels (Table 3-3).

Concentrations of arsenic, lead, and total carcinogenic PAHs (cPAHs) in one or more soil samples collected in borings adjacent to the former HWAU exceed soil screening levels for unrestricted use, as described in Aspect (2012). Given the distribution of those soil

concentrations, and comparison of them to the concentrations in concrete and soil samples collected within the accumulation unit footprint, it is our professional opinion that the surrounding soil concentrations are attributable to the fill soil conditions and do not represent an impact from the HWAU operations.

### **3.4 Data Validation**

Pyron Environmental, under subcontract to Aspect, completed independent Level III data quality validation of the analytical data generated during the closure process, following procedures specified in U.S. Environmental Protection Agency (EPA) Contract Laboratory Program (CLP) functional guidelines. Based on the validation, the data were of acceptable quality for their intended purposes. Data qualifiers after the validation are included in the data tables referenced in this section. Appendix C provides the data validation reports and the laboratory reports (on CD).

The validated soil data represent in-place soil and will be incorporated into the Upland Area RI/FS. The concrete and water have been removed from the site (see Section 4), and those data will not be incorporated into the Upland Area RI/FS.

## **4 Final Disposition of Demolition Debris and Media from HWAU**

### **4.1 Structural Materials**

The metal components of the above-ground structural material (posts, roof, and fencing) were recycled at Skagit River Recycling in Burlington, Washington. The remaining non-metal materials (pallets, wiring, etc.) was picked up by Rubatino Refuse Removal, Inc. and disposed of as construction debris.

The demolished concrete floor slab was stockpiled on site until the analytical results were available and the material was determined to designate as non-hazardous solid waste. The concrete debris was then delivered to the CEMEX inert waste landfill in Everett, Washington for proper disposal.

### **4.2 Water**

After confirmation that the water removed from the HWAU sump met City of Everett wastewater discharge criteria it was pumped from the Baker tank to the on-site clarifiers and ultimately discharged to the City sewer system in accordance with K-C's Discharge authorization.

### **4.3 Soil**

No soil associated with closure of the HWAU was removed from the site.

## 5 Ecology's Dangerous Waste Inspection during Mill Closure

Robert Carruthers of Ecology's Industrial Section conducted a dangerous waste inspection of K-C's mill on November 7, 2012 to assess whether mill closure and demolition was being conducted in accordance with the state Dangerous Waste Regulations (Chapter 173-303 WAC). Based on the inspection, Ecology concluded that closure of the K-C mill is being done in conformance with Chapter 173-303 WAC.

A copy of Ecology's inspection report (dated November 13, 2012) is included as Attachment A-1 to Appendix A. Below is a summary of Ecology's observations and conclusions from the inspection, relative to Chapter 173-303 WAC closure requirements, and organized into seven criteria:

- 1. Dangerous Waste Accumulation Areas:** The Ecology inspector noted continued use of the designated 90-day HWAU, with dangerous wastes found during closure brought there prior to final disposal. No dangerous waste was present during the inspection. The area was covered, labeled, and secured with a cyclone fence. Ecology concluded that the area appeared to be in compliance with WAC 173-303-200 (Accumulating Dangerous Waste On Site).
- 2. Process Areas:** The Ecology inspector toured the mill, including several process areas, tank farms, and two laboratories. Ecology noted that the tanks inspected were empty and there was no evidence of chemical residue. Tank containment areas showed no indication of chemical residue and there was no indication of ground releases. Ecology reported that the demolition activities in general appeared well run and the recycling effort of the waste material appeared orderly.
- 3. Wash Water:** The Ecology inspector noted that stormwater generated on most of the mill site is collected and routed to the mill's secondary clarifiers, which served as collection tanks prior to discharge to the City of Everett's wastewater treatment system. It was noted that the clarifiers had been cleaned of sludge prior to current usage, and the stormwater present showed no visual indication of contamination. Additional measures have been taken to contain and prevent runoff from the site during demolition – namely, a barrier wall lines the bay side of the facility with an absorption sock placed along the interior base of the barrier wall.
- 4. Product Chemicals/Hazardous Materials:** The Ecology inspector reviewed manifests of surplus hazardous materials being managed as dangerous waste as part of the mill closure. Veolia ES Technical Solutions conducted general waste characterization and the inspector reviewed documentation of preliminary characterization efforts to properly manage substances after initial characterization. Most process chemicals were stored and used in tanks, and included ammonium bisulfite, sulfuric acid, anhydrous ammonia, molten sulfur, chlorine dioxide, sodium hydroxide, hypochlorite, and sodium bisulfate. Ecology noted that the manifests corresponding to these chemicals appeared complete and dates corresponded to the timeframe of the closure activities. Ecology also noted that general recycling of any and all demolition material was evident in the

segregation efforts - metals were being separated and prepared for recycling as were building materials such as brick and concrete.

5. **Inspection and Documentation:** The Ecology inspector reviewed K-C's "sweep" technique where buildings undergo a preliminary inspection for presence of hazardous substances with further efforts dependent on the inspection findings. The inspector specifically performed inspections of the wastewater treatment lab and the paper mill lab, which indicated that the labs had been inspected and chemicals removed. At the time of Ecology's inspection, the converting building and the paper mill building were in the early stages of preparation for demolition, and Ecology noted that the buildings are free of obvious miscellaneous materials prior to demolition.
6. **Releases to the environment:** The Ecology inspector noted K-C's anticipated remediation (opportunistic soil cleanup), and stated that this topic is more appropriately addressed by Ecology's Toxics Cleanup Program under the Order.
7. **Final Dangerous Waste Annual Report:** Ecology outlined reporting requirements once closure is complete including:
  - a. Copies of manifests for dangerous wastes managed off site during closure;
  - b. Inspection results (photographs and written documentation) demonstration that HWAU and process areas have been properly closed; and
  - c. A copy of the final Dangerous Waste Annual Report.

## 6 Conclusion: Clean Closure

Based on Ecology's inspection of K-C's waste management activities during mill closure, and our subsequent inspection, sampling and analysis, and documentation of materials disposition for the 90-Day HWAU, Aspect Consulting concludes that the former K-C Everett Mill, including its HWAU, has achieved clean closure in accordance with the applicable requirements of Chapter 173-303 WAC. Wastes have been disposed of in accordance with WAC 173-303-610(5), and the closure performance standards of WAC 173-303-610(2) have been achieved for the HWAU. Following mill closure, the Upland Area will proceed through the formal MTCA RI/FS and cleanup process in accordance with the requirements of the Order.

## 7 References

- AECOM, 2011, Phase I Environmental Site Assessment, Everett Pulp and Paper Mill, Everett Washington, April 2011.
- Aspect, 2012, Interim Action Plan, Kimberly-Clark Worldwide Site Upland Area, Everett, Washington, September 20, 2012, Exhibit C to Agreed Order No. DE 9476.
- Aspect, 2013a, Data Report for Phase 2 Environmental Site Assessment, Kimberly-Clark Worldwide Site Uplands Area, Everett, Washington, March 15, 2013.
- Aspect, 2013b, Work Plan for Remedial Investigation/Feasibility Study, Kimberly-Clark Worldwide Site Uplands Area, Everett, Washington, June 14, 2013 Ecology Review Draft.
- Washington State Department of Ecology (Ecology), 2005, Guidance for Clean Closure of Dangerous Waste Facilities, Ecology Publication #94-111, Revised May 2005.

## Limitations

Work for this project was performed for the Kimberly-Clark Worldwide, Inc. (Client), and this report was prepared in accordance with generally accepted professional practices for the nature and conditions of work completed in the same or similar localities, at the time the work was performed. This report does not represent a legal opinion. No other warranty, expressed or implied, is made.

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# Table 3-1 - Analytical Results for Concrete Samples

CLOSURE REPORT FOR THE HAZARDOUS WASTE ACCUMULATION UNIT

K-C Worldwide Site Upland Area 110207

Chemical Name	Industrial Soil Screening Level	Unrestricted Soil Screening Level	S-1 3/26/13	S-2 3/26/13	S-3 3/26/13	S-4 3/26/13
<b>Total Petroleum Hydrocarbons (TPH)</b>						
Gasoline Range Hydrocarbons in mg/kg	30	100	5.4 U	5.3 U	5.3 U	5.4 U
Diesel Range Hydrocarbons in mg/kg	2,000	2,000	13	5.2 U	5.2 U	5.2 U
Motor Oil in mg/kg	2,000	2,000	15	10 U	10 U	10 U
<b>Metals</b>						
Total Arsenic in mg/kg	20	20	10 U	10 U	10 U	10 U
Total Barium in mg/kg	700,000	16,000	79.5	66.0	73.5	57.5
Total Cadmium in mg/kg	2	2	0.7	0.5 U	0.5	1.2
Total Chromium (Total) in mg/kg	2,000	2,000	31	33	32	35
Total Lead in mg/kg	1,000	250	5 U	5 U	5 U	5 U
Total Mercury in mg/kg	2	2	0.02 U	0.02 U	0.02 U	0.02 U
Total Selenium in mg/kg	18,000	400	10 U	10 U	10 U	10 U
Total Silver in mg/kg	18,000	400	0.8 U	0.7 U	0.8 U	0.8 U
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>						
Acenaphthene in mg/kg	210,000	4,800	0.26 U	0.26 U	0.26 U	0.26 U
Acenaphthylene in mg/kg			0.26 U	0.26 U	0.26 U	0.26 U
Anthracene in mg/kg	1,100,000	24,000	0.26 U	0.26 U	0.26 U	0.26 U
Benz(a,h,i)perylene in mg/kg			0.26 U	0.26 U	0.26 U	0.26 U
Dibenzofuran in mg/kg	3,500	80	0.26 U	0.26 U	0.26 U	0.26 U
Fluoranthene in mg/kg	140,000	3,200	0.26 U	0.26 U	0.26 U	0.26 U
Fluorene in mg/kg	140,000	3,200	0.26 U	0.26 U	0.26 U	0.26 U
Phenanthrene in mg/kg			0.26 U	0.26 U	0.26 U	0.26 U
Pyrene in mg/kg	110,000	2,400	0.26 U	0.26 U	0.26 U	0.26 U
1-Methylnaphthalene in mg/kg	4,500	35	0.26 U	0.26 U	0.26 U	0.26 U
2-Methylnaphthalene in mg/kg	14,000	320	0.26 U	0.26 U	0.26 U	0.26 U
Naphthalene in mg/kg	5	5	0.26 U	0.26 U	0.26 U	0.26 U
Benz(a)anthracene in mg/kg	180	1.4	0.26 U	0.26 U	0.26 U	0.26 U
Benzo(a)pyrene in mg/kg	2	0.14	0.26 U	0.26 U	0.26 U	0.26 U
Chrysene in mg/kg	18,000	140	0.26 U	0.26 U	0.26 U	0.26 U
Dibenzo(a,h)anthracene in mg/kg	18	0.14	0.26 U	0.26 U	0.26 U	0.26 U
Indeno(1,2,3-cd)pyrene in mg/kg	180	1.4	0.26 U	0.26 U	0.26 U	0.26 U
Total cPAHs TEQ in mg/kg			ND	ND	ND	ND
<b>Other Semivolatiles</b>						
1,2,4-Trichlorobenzene in mg/kg	4,500	35	0.26 U	0.26 U	0.26 U	0.26 U
1,2-Dichlorobenzene in mg/kg	320,000	7,200	0.26 U	0.26 U	0.26 U	0.26 U
1,3-Dichlorobenzene in mg/kg			0.26 U	0.26 U	0.26 U	0.26 U
1,4-Dichlorobenzene in mg/kg			0.26 U	0.26 U	0.26 U	0.26 U
2,4,5-Trichlorophenol in mg/kg	350,000	8,000	1.3 UJ	1.3 UJ	1.3 UJ	1.3 UJ
2,4,6-Trichlorophenol in mg/kg	3,500	91	1.3 UJ	1.3 UJ	1.3 UJ	1.3 UJ
2,4-Dichlorophenol in mg/kg	11,000	240	1.3 UJ	1.3 UJ	1.3 UJ	1.3 UJ
2,4-Dimethylphenol in mg/kg	70,000	1,600	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ
2,4-Dinitrophenol in mg/kg	7,000	160	26 U	26 U	26 U	26 U
2-Chloronaphthalene in mg/kg	280,000	6,400	0.26 U	0.26 U	0.26 U	0.26 U
2-Chlorophenol in mg/kg	18,000	400	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ
2-Methylphenol in mg/kg	180,000	4,000	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ
2-Nitroaniline in mg/kg	35,000	800	1.3 U	1.3 U	1.3 U	1.3 U
2-Nitrophenol in mg/kg			0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ
3,3'-Dichlorobenzidine in mg/kg	290	2.2	1.3 U	1.3 U	1.3 U	1.3 U
3-Nitroaniline in mg/kg			1.3 U	1.3 U	1.3 U	1.3 U
4,6-Dinitro-2-methylphenol in mg/kg			26 U	26 U	26 U	26 U
4-Bromophenyl phenyl ether in mg/kg			0.26 U	0.26 U	0.26 U	0.26 U
4-Chloro-3-methylphenol in mg/kg			1.3 UJ	1.3 UJ	1.3 UJ	1.3 UJ
4-Chloroaniline in mg/kg	660	5	1.3 U	1.3 U	1.3 U	1.3 U
4-Chlorophenyl phenyl ether in mg/kg			0.26 U	0.26 U	0.26 U	0.26 U
4-Methylphenol in mg/kg	18,000	400	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ
4-Nitroaniline in mg/kg			1.3 UJ	1.3 UJ	1.3 UJ	1.3 UJ
4-Nitrophenol in mg/kg			1.3 UJ	1.3 UJ	1.3 UJ	1.3 UJ

# Table 3-1 - Analytical Results for Concrete Samples

CLOSURE REPORT FOR THE HAZARDOUS WASTE ACCUMULATION UNIT

K-C Worldwide Site Upland Area 110207

Chemical Name	Industrial Soil Screening Level	Unrestricted Soil Screening Level	S-1 3/26/13	S-2 3/26/13	S-3 3/26/13	S-4 3/26/13
Benzoic acid in mg/kg	14,000,000	320,000	26 U	26 U	26 U	26 U
Benzyl alcohol in mg/kg	350,000	8,000	1.3 U	1.3 U	1.3 U	1.3 U
Benzyl butyl phthalate in mg/kg	69,000	530	0.26 U	0.26 U	0.26 U	0.26 U
Bis(2-chloro-1-methylethyl) ether in mg/kg	1,900	14	0.26 U	0.26 U	0.26 U	0.26 U
Bis(2-chloroethoxy)methane in mg/kg			0.26 U	0.26 U	0.26 U	0.26 U
Bis(2-chloroethyl) ether in mg/kg	120	0.91	0.26 U	0.26 U	0.26 U	0.26 U
Bis(2-ethylhexyl) phthalate in mg/kg	9,400	71	0.26 U	0.26 U	0.26 U	0.26 U
Carbazole in mg/kg			0.26 U	0.26 U	0.26 U	0.26 U
Diethyl phthalate in mg/kg	2,800,000	64,000	0.26 U	0.26 U	0.26 U	0.26 U
Dimethyl phthalate in mg/kg			0.26 U	0.26 U	0.26 U	0.26 U
Di-n-butyl phthalate in mg/kg	350,000	8,000	0.26 U	0.26 U	0.26 U	0.26 U
Di-n-octyl phthalate in mg/kg			0.26 U	0.26 U	0.26 U	0.26 U
Hexachlorobenzene in mg/kg	82	0.63	0.26 U	0.26 U	0.26 U	0.26 U
Hexachlorobutadiene in mg/kg	1,700	13	0.26 U	0.26 U	0.26 U	0.26 U
Hexachlorocyclopentadiene in mg/kg	21,000	480	1.3 U	1.3 U	1.3 U	1.3 U
Hexachloroethane in mg/kg	3,500	71	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ
Isophorone in mg/kg	140,000	1,100	95	69	200	78
Nitrobenzene in mg/kg	7,000	160	0.26 U	0.26 U	0.26 U	0.26 U
N-Nitroso-di-n-propylamine in mg/kg	19	0.14	0.26 U	0.26 U	0.26 U	0.26 U
N-Nitrosodiphenylamine in mg/kg	27,000	200	0.26 U	0.26 U	0.26 U	0.26 U
Pentachlorophenol in mg/kg	330	2.5	1.3 UJ	1.3 UJ	1.3 UJ	1.3 UJ
Phenol in mg/kg	1,100,000	24,000	0.31 U	0.26 UJ	0.6 U	0.27 U
2,4-Dinitrotoluene in mg/kg	7,000	160	1.3 U	1.3 U	1.3 U	1.3 U
2,6-Dinitrotoluene in mg/kg	3,500	80	1.3 U	1.3 U	1.3 U	1.3 U
<b>Volatile Organic Compounds (VOC)</b>						
1,1,1,2-Tetrachloroethane in mg/kg	5,000	38	0.001 U	0.0009 U	0.001 U	0.001 U
1,1,1-Trichloroethane in mg/kg	2	2	0.001 U	0.0009 U	0.001 U	0.001 U
1,1,2 - Trichlorotrifluoroethane in mg/kg	110,000,000	2,400,000	0.002 U	0.0017 U	0.0021 U	0.002 U
1,1,2,2-Tetrachloroethane in mg/kg	660	5	0.001 U	0.0009 U	0.001 U	0.001 U
1,1,2-Trichloroethane in mg/kg	2,300	18	0.001 U	0.0009 U	0.001 U	0.001 U
1,1-Dichloroethane in mg/kg	700,000	16,000	0.001 U	0.0009 U	0.001 U	0.001 U
1,1-Dichloroethene in mg/kg	180,000	4,000	0.001 U	0.0009 U	0.001 U	0.001 U
1,1-Dichloropropene in mg/kg			0.001 U	0.0009 U	0.001 U	0.001 U
1,2,3-Trichlorobenzene in mg/kg			0.0051 U	0.0044 U	0.0051 U	0.0051 U
1,2,3-Trichloropropane in mg/kg	4.4	0.033	0.002 U	0.0017 U	0.0021 U	0.002 U
1,2,4-Trichlorobenzene in mg/kg	4,500	35	0.0051 U	0.0044 U	0.0051 U	0.0051 U
1,2,4-Trimethylbenzene in mg/kg			0.001 U	0.0009 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane in mg/kg	160	1.3	0.0051 U	0.0044 U	0.0051 U	0.0051 U
1,2-Dibromoethane (EDB) in mg/kg	0.005	0.005	0.001 U	0.0009 U	0.001 U	0.001 U
1,2-Dichlorobenzene in mg/kg	320,000	7,200	0.001 U	0.0009 U	0.001 U	0.001 U
1,2-Dichloroethane (EDC) in mg/kg	1,400	11	0.001 U	0.0009 U	0.001 U	0.001 U
1,2-Dichloropropene in mg/kg			0.001 U	0.0009 U	0.001 U	0.001 U
1,3,5-Trimethylbenzene in mg/kg	35,000	800	0.001 U	0.0009 U	0.001 U	0.001 U
1,3-Dichlorobenzene in mg/kg			0.001 U	0.0009 U	0.001 U	0.001 U
1,3-Dichloropropane in mg/kg			0.001 U	0.0009 U	0.001 U	0.001 U
1,4-Dichloro-2-Butene in mg/kg			0.0051 U	0.0044 U	0.0051 U	0.0051 U
1,4-Dichlorobenzene in mg/kg			0.001 U	0.0009 U	0.001 U	0.001 U
2,2-Dichloropropane in mg/kg			0.001 U	0.0009 U	0.001 U	0.001 U
2-Butanone in mg/kg	2,100,000	48,000	0.0051 U	0.0044 U	0.0051 U	0.0051 U
2-Chloroethyl Vinyl Ether in mg/kg			0.0051 U	0.0044 U	0.0051 U	0.0051 U
2-Chlorotoluene in mg/kg	70,000	1,600	0.001 U	0.0009 U	0.001 U	0.001 U
2-Hexanone in mg/kg			0.0051 U	0.0044 U	0.0051 U	0.0051 U
4-Chlorotoluene in mg/kg			0.001 U	0.0009 U	0.001 U	0.001 U
4-Methyl-2-pentanone in mg/kg	280,000	6,400	0.0051 U	0.0044 U	0.0051 U	0.0051 U
Acetone in mg/kg	3,200,000	72,000	0.036 J	0.058 J	0.16 J	0.081 J
Acrolein in mg/kg	1,800	40	0.051 U	0.044 U	0.051 U	0.051 U
Acrylonitrile in mg/kg	240	1.9	0.0051 U	0.0044 U	0.0051 U	0.0051 U

# Table 3-1 - Analytical Results for Concrete Samples

CLOSURE REPORT FOR THE HAZARDOUS WASTE ACCUMULATION UNIT

K-C Worldwide Site Upland Area 110207

Chemical Name	Industrial Soil Screening Level	Unrestricted Soil Screening Level	S-1 3/26/13	S-2 3/26/13	S-3 3/26/13	S-4 3/26/13
Benzene in mg/kg	0.03	0.03	0.001 U	0.0009 U	0.001 U	0.001 U
Bromobenzene in mg/kg			0.001 U	0.0009 U	0.001 U	0.001 U
Bromochloromethane in mg/kg			0.001 U	0.0009 U	0.001 U	0.001 U
Bromodichloromethane in mg/kg	2,100	16	0.001 U	0.0009 U	0.001 U	0.001 U
Bromoethane in mg/kg			0.002 U	0.0017 U	0.0021 U	0.002 U
Bromoform in mg/kg	17,000	130	0.001 U	0.0009 U	0.001 U	0.001 U
Bromomethane in mg/kg	4,900	110	0.001 U	0.0009 U	0.001 U	0.001 U
Carbon disulfide in mg/kg	350,000	8,000	0.0028	0.0009 U	0.001 U	0.001 U
Carbon tetrachloride in mg/kg	1,900	14	0.001 U	0.0009 U	0.001 U	0.001 U
Chlorobenzene in mg/kg	70,000	1,600	0.001 U	0.0009 U	0.001 U	0.001 U
Chloroethane in mg/kg			0.001 U	0.0009 U	0.001 U	0.001 U
Chloroform in mg/kg	35,000	800	0.001 U	0.0009 U	0.001 U	0.001 U
Chloromethane in mg/kg			0.001 U	0.0009 U	0.001 U	0.001 U
cis-1,2-Dichloroethene (DCE) in mg/kg	7,000	160	0.001 U	0.0009 U	0.001 U	0.001 U
cis-1,3-Dichloropropene in mg/kg			0.001 U	0.0009 U	0.001 U	0.001 U
Dibromochloromethane in mg/kg	1,600	12	0.001 U	0.0009 U	0.001 U	0.001 U
Dibromomethane in mg/kg	35,000	800	0.001 U	0.0009 U	0.001 U	0.001 U
Ethylbenzene in mg/kg	6	6	0.001 U	0.0009 U	0.001 U	0.001 U
Hexachlorobutadiene in mg/kg	1,700	13	0.0051 U	0.0044 U	0.0051 U	0.0051 U
Isopropylbenzene in mg/kg	350,000	8,000	0.001 U	0.0009 U	0.001 U	0.001 U
Methylene chloride in mg/kg	0.02	0.02	0.015 J	0.019 J	0.014 J	0.01 J
Methyliodide in mg/kg			0.001 U	0.0009 U	0.001 U	0.001 U
n-Butylbenzene in mg/kg			0.001 U	0.0009 U	0.001 U	0.001 U
n-Propylbenzene in mg/kg	350,000	8,000	0.001 U	0.0009 U	0.001 U	0.001 U
p-Isopropyltoluene in mg/kg			0.001 U	0.0009 U	0.001 U	0.001 U
sec-Butylbenzene in mg/kg			0.001 U	0.0009 U	0.001 U	0.001 U
Styrene in mg/kg	700,000	16,000	0.001 U	0.0009 U	0.001 U	0.001 U
tert-Butylbenzene in mg/kg			0.001 U	0.0009 U	0.001 U	0.001 U
Tetrachloroethene (PCE) in mg/kg	0.05	0.05	0.001 U	0.0009 U	0.001 U	0.001 U
Toluene in mg/kg	7	7	0.001 U	0.0009 U	0.001 U	0.001 U
trans-1,2-Dichloroethene in mg/kg	70,000	1,600	0.001 U	0.0009 U	0.001 U	0.001 U
trans-1,3-Dichloropropene in mg/kg			0.001 U	0.0009 U	0.001 U	0.001 U
Trichloroethene (TCE) in mg/kg	0.03	0.03	0.001 U	0.0009 U	0.001 U	0.001 U
Trichlorofluoromethane in mg/kg	1,100,000	24,000	0.001 U	0.0009 U	0.001 U	0.001 U
Vinyl acetate in mg/kg	3,500,000	80,000	0.0051 U	0.0044 U	0.0051 U	0.0051 U
Vinyl chloride in mg/kg	11,000	0.67	0.001 U	0.0009 U	0.001 U	0.001 U
m,p-Xylenes in mg/kg			0.001 U	0.0009 U	0.001 U	0.001 U
o-Xylene in mg/kg	700,000	16,000	0.001 U	0.0009 U	0.001 U	0.001 U
Naphthalene in mg/kg	5	5	0.0051 U	0.0044 U	0.0051 U	0.0051 U
<b>Polychlorinated Biphenyls (PCBs)</b>						
Aroclor 1016 in mg/kg	250	14	0.69 U	0.69 U	0.69 U	0.69 U
Aroclor 1221 in mg/kg			0.69 U	0.69 U	0.69 U	0.69 U
Aroclor 1232 in mg/kg			0.69 U	0.69 U	0.69 U	0.69 U
Aroclor 1242 in mg/kg			0.69 U	0.69 U	0.69 U	0.69 U
Aroclor 1248 in mg/kg			0.69 U	0.69 U	0.69 U	0.69 U
Aroclor 1254 in mg/kg	66	0.5	0.69 U	0.69 U	0.69 U	0.69 U
Aroclor 1260 in mg/kg	66	0.5	0.69 U	0.69 U	0.69 U	0.69 U
Total PCBs in mg/kg	10	1	ND	ND	ND	ND

Notes:

Concentrations within bold border indicate value exceeds Industrial Soil Screening Level.

Concentrations in shaded cells indicate value exceeds Unrestricted Soil Screening Level.

J - Analyte was positively identified. The reported result is an estimate.

U - Analyte was not detected at or above the reported result.

UJ - Analyte was not detected at or above the reported estimate

## Table 3-2 - Analytical Results for Water Sample

CLOSURE REPORT FOR THE HAZARDOUS WASTE ACCUMULATION UNIT  
K-C Worldwide Site Upland Area 110207

Chemical Name	Discharge Criteria under City of Everett Discharge Authorization	W-1 3/26/13
<b>Total Petroleum Hydrocarbons (TPH)</b>		
Gasoline Range Hydrocarbons in mg/L		0.25 U
Diesel Range Hydrocarbons in mg/L		0.44
Motor Oil in mg/L		0.84
<b>Metals</b>		
Total Arsenic in mg/L	0.5	0.05 U
Total Barium in mg/L		0.011
Total Cadmium in mg/L	0.24	0.002 U
Total Chromium (Total) in mg/L	5.0	0.005 U
Total Lead in mg/L	1.89	1.65
Total Mercury in mg/L	0.1	0.0001 U
Total Selenium in mg/L		0.05 U
Total Silver in mg/L	0.49	0.003 U
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>		
Acenaphthene in µg/L		1.0 U
Acenaphthylene in µg/L		1.0 U
Anthracene in µg/L		1.0 U
Benzo(g,h,i)perylene in µg/L		1.0 U
Dibenzofuran in µg/L		1.0 U
Fluoranthene in µg/L		1.0 U
Fluorene in µg/L		1.0 U
Phenanthrene in µg/L		1.0 U
Pyrene in µg/L		1.0 U
1-Methylnaphthalene in µg/L		1.0 U
2-Methylnaphthalene in µg/L		1.0 U
Naphthalene in µg/L		1.0 U
Benz(a)anthracene in µg/L		1.0 U
Benzo(a)pyrene in µg/L		1.0 U
Chrysene in µg/L		1.0 U
Dibenzo(a,h)anthracene in µg/L		1.0 U
Indeno(1,2,3-cd)pyrene in µg/L		1.0 U
Total cPAHs TEQ in µg/L		ND
<b>Other Semivolatiles</b>		
1,2,4-Trichlorobenzene in µg/L		1.0 U
1,2-Dichlorobenzene in µg/L		1.0 U
1,3-Dichlorobenzene in µg/L		1.0 U
1,4-Dichlorobenzene in µg/L		1.0 U
2,4,5-Trichlorophenol in µg/L		5.0 U
2,4,6-Trichlorophenol in µg/L		3.0 U
2,4-Dichlorophenol in µg/L		3.0 U
2,4-Dimethylphenol in µg/L		3.0 U
2,4-Dinitrophenol in µg/L		20 U
2-Chloronaphthalene in µg/L		1.0 U
2-Chlorophenol in µg/L		1.0 U
2-Methylphenol in µg/L		1.0 U
2-Nitroaniline in µg/L		3.0 U
2-Nitrophenol in µg/L		3.0 U
3,3'-Dichlorobenzidine in µg/L		5.0 U
3-Nitroaniline in µg/L		3.0 U
4,6-Dinitro-2-methylphenol in µg/L		10 U
4-Bromophenyl phenyl ether in µg/L		1.0 U
4-Chloro-3-methylphenol in µg/L		3.0 U
4-Chloroaniline in µg/L		5.0 U
4-Chlorophenyl phenyl ether in µg/L		1.0 U
4-Methylphenol in µg/L		2.0 U
4-Nitroaniline in µg/L		3.0 U
4-Nitrophenol in µg/L		10 U

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11/12/2013

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Table 3-2

Page 1 of 3

## Table 3-2 - Analytical Results for Water Sample

CLOSURE REPORT FOR THE HAZARDOUS WASTE ACCUMULATION UNIT  
K-C Worldwide Site Upland Area 110207

Chemical Name	Discharge Criteria under City of Everett Discharge Authorization	W-1 3/26/13
Benzoic acid in µg/L		20 U
Benzyl alcohol in µg/L		2.0 U
Benzyl butyl phthalate in µg/L		1.0 U
Bis(2-chloro-1-methylethyl) ether in µg/L		1.0 U
Bis(2-chloroethoxy)methane in µg/L		1.0 U
Bis(2-chloroethyl) ether in µg/L		1.0 U
Bis(2-ethylhexyl) phthalate in µg/L		1.0 U
Carbazole in µg/L		1.0 U
Diethyl phthalate in µg/L		1.0 U
Dimethyl phthalate in µg/L		1.0 U
Di-n-butyl phthalate in µg/L		1.0 U
Di-n-octyl phthalate in µg/L		1.0 U
Hexachlorobenzene in µg/L		1.0 U
Hexachlorobutadiene in µg/L		3.0 U
Hexachlorocyclopentadiene in µg/L		5.0 U
Hexachloroethane in µg/L		2.0 U
Isophorone in µg/L		1.0 U
Nitrobenzene in µg/L		1.0 U
N-Nitroso-di-n-propylamine in µg/L		1.0 U
N-Nitrosodiphenylamine in µg/L		1.0 U
Pentachlorophenol in µg/L		10 U
Phenol in µg/L		1.0 U
2,4-Dinitrotoluene in µg/L		3.0 U
2,6-Dinitrotoluene in µg/L		3.0 U
<b>Volatile Organic Compounds (VOC)</b>		
1,1,1,2-Tetrachloroethane in µg/L		0.2 U
1,1,1-Trichloroethane in µg/L		0.2 U
1,1,2 - Trichlorotrifluoroethane in µg/L		0.2 U
1,1,2,2-Tetrachloroethane in µg/L		0.2 U
1,1,2-Trichloroethane in µg/L		0.2 U
1,1-Dichloroethane in µg/L		0.2 U
1,1-Dichloroethene in µg/L		0.2 U
1,1-Dichloropropene in µg/L		0.2 U
1,2,3-Trichlorobenzene in µg/L		0.5 U
1,2,3-Trichloropropane in µg/L		0.5 U
1,2,4-Trichlorobenzene in µg/L		0.5 U
1,2,4-Trimethylbenzene in µg/L		0.2 U
1,2-Dibromo-3-chloropropane in µg/L		0.5 U
1,2-Dibromoethane (EDB) in µg/L		0.2 U
1,2-Dichlorobenzene in µg/L		0.2 U
1,2-Dichloroethane (EDC) in µg/L		0.2 U
1,2-Dichloropropane in µg/L		0.2 U
1,3,5-Trimethylbenzene in µg/L		0.2 U
1,3-Dichlorobenzene in µg/L		0.2 U
1,3-Dichloropropane in µg/L		0.2 U
1,4-Dichloro-2-Butene in µg/L		1.0 U
1,4-Dichlorobenzene in µg/L		0.2 U
2,2-Dichloropropane in µg/L		0.2 U
2-Butanone in µg/L		5.0 U
2-Chloroethyl Vinyl Ether in µg/L		1.0 U
2-Chlorotoluene in µg/L		0.2 U
2-Hexanone in µg/L		5.0 U
4-Chlorotoluene in µg/L		0.2 U
4-Methyl-2-pentanone in µg/L		5.0 U
Acetone in µg/L		5.0 U
Acrolein in µg/L		5.0 U
Acrylonitrile in µg/L		1.0 U

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Table 3-2

Page 2 of 3

## Table 3-2 - Analytical Results for Water Sample

CLOSURE REPORT FOR THE HAZARDOUS WASTE ACCUMULATION UNIT  
K-C Worldwide Site Upland Area 110207

Chemical Name	Discharge Criteria under City of Everett Discharge Authorization	W-1 3/26/13
Benzene in µg/L		0.2 U
Bromobenzene in µg/L		0.2 U
Bromo-chloromethane in µg/L		0.2 U
Bromo-dichloromethane in µg/L		0.2 U
Bromoethane in µg/L		0.2 U
Bromoform in µg/L		0.2 U
Bromomethane in µg/L		1.0 U
Carbon disulfide in µg/L		0.2 U
Carbon tetrachloride in µg/L		0.2 U
Chlorobenzene in µg/L		0.2 U
Chloroethane in µg/L		0.2 U
Chloroform in µg/L		0.20
Chloromethane in µg/L		0.5 U
cis-1,2-Dichloroethene (DCE) in µg/L		0.2 U
cis-1,3-Dichloropropene in µg/L		0.2 U
Dibromo-chloromethane in µg/L		0.2 U
Dibromomethane in µg/L		0.2 U
Ethylbenzene in µg/L		0.2 U
Hexachlorobutadiene in µg/L		0.5 U
Isopropylbenzene in µg/L		0.2 U
Methylene chloride in µg/L		1.0 U
Methyl iodide in µg/L		1.0 U
n-Butylbenzene in µg/L		0.2 U
n-Propylbenzene in µg/L		0.2 U
p-Isopropyltoluene in µg/L		5.0
sec-Butylbenzene in µg/L		0.2 U
Styrene in µg/L		0.2 U
tert-Butylbenzene in µg/L		0.2 U
Tetrachloroethene (PCE) in µg/L		0.2 U
Toluene in µg/L		0.2 U
trans-1,2-Dichloroethene in µg/L		0.2 U
trans-1,3-Dichloropropene in µg/L		0.2 U
Trichloroethene (TCE) in µg/L		0.2 U
Trichlorofluoromethane in µg/L		0.2 U
Vinyl acetate in µg/L		0.2 U
Vinyl chloride in µg/L		0.2 U
m,p-Xylenes in µg/L		0.4 U
o-Xylene in µg/L		0.2 U
Naphthalene in µg/L		0.5 U
<b>Polychlorinated Biphenyls (PCBs)</b>		
Aroclor 1016 in µg/L		1.0 U
Aroclor 1221 in µg/L		1.0 U
Aroclor 1232 in µg/L		1.0 U
Aroclor 1242 in µg/L		1.0 U
Aroclor 1248 in µg/L		1.0 U
Aroclor 1254 in µg/L		1.0 U
Aroclor 1260 in µg/L		1.0 U
Total PCBs in µg/L		ND

Notes:

Concentrations in shaded cells indicate value exceeds City of Everett Wastewater Discharge Criteria (mg/L).

U - Analyte was not detected at or above the reported result.

## Table 3-3 - Analytical Results for Soil Samples

CLOSURE REPORT FOR THE HAZARDOUS WASTE ACCUMULATION UNIT

K-C Worldwide Site Upland Area 110207

Chemical Name	Industrial Soil Screening Level	Unrestricted Soil Screening Level	HWC-1 6/12/13 (0-1 ft)	HWC-1 6/12/13 (1-1.5 ft)	HWC-2 6/12/13 (0-1 ft)	HWC-2 6/12/13 (1-1.5 ft)	HWC-3 6/12/13 (0-1 ft)	HWC-3 6/12/13 (1-1.5 ft)	HWC-4 6/12/13 (0-1 ft)	HWC-4 6/12/13 (1-1.5 ft)
<b>Total Petroleum Hydrocarbons (TPH)</b>										
Gasoline Range Hydrocarbons in mg/kg	30	100	2 UJ	2 UJ						
Diesel Range Hydrocarbons in mg/kg	2,000	2,000	50 U	50 U						
Oil Range Hydrocarbons in mg/kg	2,000	2,000	250 U	250 U						
<b>Metals</b>										
Arsenic in mg/kg	20	20	1 U	1.24	1.32	10.3	1.55	7.31	1 U	11.9
Barium in mg/kg	700,000	16,000	6.41	18.4	18.7	68.6	18.2	35.1	16.7	57.7
Cadmium in mg/kg	2	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chromium (Total) in mg/kg	2,000	2,000	5.67	11.2	10.8	28.8	11.5	23.7	11.6	47.1
Lead in mg/kg	1,000	250	1.49	2.9	2.56	85.6	3.96	24.7	1.83	132
Mercury in mg/kg	2	2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.28
Selenium in mg/kg	18,000	400	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Silver in mg/kg	18,000	400	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>										
Acenaphthene in mg/kg	210,000	4,800	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Acenaphthylene in mg/kg			0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Anthracene in mg/kg	1,100,000	24,000	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Benzo(g,h,i)perylene in mg/kg			0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Dibenzofuran in mg/kg	3,500	80	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Fluoranthene in mg/kg	140,000	3,200	0.03 U	0.03 U	0.03 U	0.064	0.03 U	0.3 U	0.032	0.046
Fluorene in mg/kg	140,000	3,200	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Phenanthrene in mg/kg			0.03 U	0.03 U	0.03 U	0.049	0.03 U	0.3 U	0.059	0.03 U
Pyrene in mg/kg	110,000	2,400	0.03 U	0.03 U	0.03 U	0.069	0.03 U	0.3 U	0.038	0.054
2-Methylnaphthalene in mg/kg	14,000	320	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Naphthalene in mg/kg	5	5	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Benz(a)anthracene in mg/kg	180	1.4	0.03 U	0.03 U	0.03 U	0.034	0.03 U	0.3 U	0.03 U	0.03 U
Benzo(a)pyrene in mg/kg	2	0.14	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Benzo(b)fluoranthene in mg/kg	180	1.4	0.03 U	0.03 U	0.03 U	0.036	0.03 U	0.3 U	0.03 U	0.03 U
Benzo(k)fluoranthene in mg/kg	1,800	14	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Chrysene in mg/kg	18,000	140	0.03 U	0.03 U	0.03 U	0.034	0.03 U	0.3 U	0.03 U	0.031
Dibenzo(a,h)anthracene in mg/kg	18	0.14	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Indeno(1,2,3-cd)pyrene in mg/kg	180	1.4	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Total cPAHs TEQ in mg/kg			ND	ND	ND	0.0268	ND	ND	ND	0.0228

### Table 3-3 - Analytical Results for Soil Samples

CLOSURE REPORT FOR THE HAZARDOUS WASTE ACCUMULATION UNIT

K-C Worldwide Site Upland Area 110207

Chemical Name	Industrial Soil Screening Level	Unrestricted Soil Screening Level	HWC-1 6/12/13 (0-1 ft)	HWC-1 6/12/13 (1-1.5 ft)	HWC-2 6/12/13 (0-1 ft)	HWC-2 6/12/13 (1-1.5 ft)	HWC-3 6/12/13 (0-1 ft)	HWC-3 6/12/13 (1-1.5 ft)	HWC-4 6/12/13 (0-1 ft)	HWC-4 6/12/13 (1-1.5 ft)
<b>Other Semivolatiles</b>										
1,2,4-Trichlorobenzene in mg/kg	4,500	35	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
1,2-Dichlorobenzene in mg/kg	320,000	7,200	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
1,3-Dichlorobenzene in mg/kg			0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
1,4-Dichlorobenzene in mg/kg			0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
2,4,5-Trichlorophenol in mg/kg	350,000	8,000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U
2,4,6-Trichlorophenol in mg/kg	3,500	91	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U
2,4-Dichlorophenol in mg/kg	11,000	240	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U
2,4-Dimethylphenol in mg/kg	70,000	1,600	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U
2,4-Dinitrophenol in mg/kg	7,000	160	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	9 U	0.9 U	0.9 U
2-Chloronaphthalene in mg/kg	280,000	6,400	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
2-Chlorophenol in mg/kg	18,000	400	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U
2-Methylphenol in mg/kg	180,000	4,000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U
2-Nitroaniline in mg/kg	35,000	800	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
2-Nitrophenol in mg/kg			0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U
3 & 4 Methylphenol in mg/kg			0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	6 U	0.6 U	0.6 U
3-Nitroaniline in mg/kg			3 U	3 U	3 U	3 U	3 U	30 U	3 U	3 U
4,6-Dinitro-2-methylphenol in mg/kg			0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	9 U	0.9 U	0.9 U
4-Bromophenyl phenyl ether in mg/kg			0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
4-Chloro-3-methylphenol in mg/kg			0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U
4-Chloroaniline in mg/kg	660	5	3 U	3 U	3 U	3 U	3 U	30 U	3 U	3 U
4-Chlorophenyl phenyl ether in mg/kg			0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
4-Nitroaniline in mg/kg			3 U	3 U	3 U	3 U	3 U	30 U	3 U	3 U
4-Nitrophenol in mg/kg			0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	9 U	0.9 U	0.9 U
Benzoic acid in mg/kg	14,000,000	320,000	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	15 U	1.5 U	1.5 U
Benzyl alcohol in mg/kg	350,000	8,000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U
Benzyl butyl phthalate in mg/kg	69,000	530	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Bis(2-chloro-1-methylethyl) ether in mg/kg	1,900	14	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Bis(2-chloroethoxy)methane in mg/kg			0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Bis(2-chloroethyl) ether in mg/kg	120	0.91	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Bis(2-ethylhexyl) phthalate in mg/kg	9,400	71	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	4.8 U	0.48 U	0.48 U
Carbazole in mg/kg			0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Diethyl phthalate in mg/kg	2,800,000	64,000	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Dimethyl phthalate in mg/kg			0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Di-n-butyl phthalate in mg/kg	350,000	8,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.05 U	0.05 U
Di-n-octyl phthalate in mg/kg			0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Hexachlorobenzene in mg/kg	82	0.63	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U

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Table 3-3

Page 2 of 5

### Table 3-3 - Analytical Results for Soil Samples

#### CLOSURE REPORT FOR THE HAZARDOUS WASTE ACCUMULATION UNIT

K-C Worldwide Site Upland Area 110207

Chemical Name	Industrial Soil Screening Level	Unrestricted Soil Screening Level	HWC-1 6/12/13 (0-1 ft)	HWC-1 6/12/13 (1-1.5 ft)	HWC-2 6/12/13 (0-1 ft)	HWC-2 6/12/13 (1-1.5 ft)	HWC-3 6/12/13 (0-1 ft)	HWC-3 6/12/13 (1-1.5 ft)	HWC-4 6/12/13 (0-1 ft)	HWC-4 6/12/13 (1-1.5 ft)
Hexachlorobutadiene in mg/kg	1,700	13	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Hexachlorocyclopentadiene in mg/kg	21,000	480	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.9 U	0.09 U	0.09 U
Hexachloroethane in mg/kg	3,500	71	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Isophorone in mg/kg	140,000	1,100	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Nitrobenzene in mg/kg	7,000	160	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
N-Nitroso-di-n-propylamine in mg/kg	19	0.14	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
N-Nitrosodiphenylamine in mg/kg	27,000	200	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
Pentachlorophenol in mg/kg	330	2.5	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U
Phenol in mg/kg	1,100,000	24,000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U
2,4-Dinitrotoluene in mg/kg	7,000	160	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
2,6-Dinitrotoluene in mg/kg	3,500	80	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.03 U	0.03 U
<b>Volatile Organic Compounds (VOC)</b>										
1,1,1,2-Tetrachloroethane in mg/kg	5,000	38	0.05 UJ	0.05 UJ						
1,1,1-Trichloroethane in mg/kg	2	2	0.05 UJ	0.05 UJ						
1,1,2,2-Tetrachloroethane in mg/kg	660	5	0.05 UJ	0.05 UJ						
1,1,2-Trichloroethane in mg/kg	2,300	18	0.05 UJ	0.05 UJ						
1,1-Dichloroethane in mg/kg	700,000	16,000	0.05 UJ	0.05 UJ						
1,1-Dichloroethene in mg/kg	180,000	4,000	0.05 UJ	0.05 UJ						
1,1-Dichloropropene in mg/kg			0.05 UJ	0.05 UJ						
1,2,3-Trichlorobenzene in mg/kg			0.25 UJ	0.25 UJ						
1,2,3-Trichloropropane in mg/kg	4.4	0.033	0.05 UJ	0.05 UJ						
1,2,4-Trichlorobenzene in mg/kg	4,500	35	0.25 UJ	0.25 UJ						
1,2,4-Trimethylbenzene in mg/kg			0.05 UJ	0.05 UJ						
1,2-Dibromo-3-chloropropane in mg/kg	160	1.3	0.5 UJ	0.5 UJ						
1,2-Dibromoethane (EDB) in mg/kg	0.005	0.005	0.05 UJ	0.05 UJ						
1,2-Dichlorobenzene in mg/kg	320,000	7,200	0.05 UJ	0.05 UJ						
1,2-Dichloroethane (EDC) in mg/kg	1,400	11	0.05 UJ	0.05 UJ						
1,2-Dichloropropane in mg/kg			0.05 UJ	0.05 UJ						
1,3,5-Trimethylbenzene in mg/kg	35,000	800	0.05 UJ	0.05 UJ						
1,3-Dichlorobenzene in mg/kg			0.05 UJ	0.05 UJ						
1,3-Dichloropropane in mg/kg			0.05 UJ	0.05 UJ						
1,4-Dichlorobenzene in mg/kg			0.05 UJ	0.05 UJ						
2,2-Dichloropropane in mg/kg			0.05 UJ	0.05 UJ						
2-Butanone in mg/kg	2,100,000	48,000	0.5 UJ	0.5 UJ						
2-Chlorotoluene in mg/kg	70,000	1,600	0.05 UJ	0.05 UJ						
2-Hexanone in mg/kg			0.5 UJ	0.5 UJ						
4-Chlorotoluene in mg/kg			0.05 UJ	0.05 UJ						

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Table 3-3

Page 3 of 5

### Table 3-3 - Analytical Results for Soil Samples

CLOSURE REPORT FOR THE HAZARDOUS WASTE ACCUMULATION UNIT

K-C Worldwide Site Upland Area 110207

Chemical Name	Industrial Soil Screening Level	Unrestricted Soil Screening Level	HWC-1 6/12/13 (0-1 ft)	HWC-1 6/12/13 (1-1.5 ft)	HWC-2 6/12/13 (0-1 ft)	HWC-2 6/12/13 (1-1.5 ft)	HWC-3 6/12/13 (0-1 ft)	HWC-3 6/12/13 (1-1.5 ft)	HWC-4 6/12/13 (0-1 ft)	HWC-4 6/12/13 (1-1.5 ft)
4-Methyl-2-pentanone in mg/kg	280,000	6,400	0.5 UJ	0.5 UJ						
Acetone in mg/kg	3,200,000	72,000	0.5 UJ	0.5 UJ						
Benzene in mg/kg	0.03	0.03	0.03 UJ	0.03 UJ						
Bromobenzene in mg/kg			0.05 UJ	0.05 UJ						
Bromodichloromethane in mg/kg	2,100	16	0.05 UJ	0.05 UJ						
Bromoform in mg/kg	17,000	130	0.05 UJ	0.05 UJ						
Bromomethane in mg/kg	4,900	110	0.5 UJ	0.5 UJ						
Carbon tetrachloride in mg/kg	1,900	14	0.05 UJ	0.05 UJ						
Chlorobenzene in mg/kg	70,000	1,600	0.05 UJ	0.05 UJ						
Chloroethane in mg/kg			0.5 UJ	0.5 UJ						
Chloroform in mg/kg	35,000	800	0.05 UJ	0.05 UJ						
Chloromethane in mg/kg			0.5 UJ	0.5 UJ						
cis-1,2-Dichloroethene (DCE) in mg/kg	7,000	160	0.05 UJ	0.05 UJ						
cis-1,3-Dichloropropene in mg/kg			0.05 UJ	0.05 UJ						
Dibromochloromethane in mg/kg	1,600	12	0.05 UJ	0.05 UJ						
Dibromomethane in mg/kg	35,000	800	0.05 UJ	0.05 UJ						
Dichlorodifluoromethane in mg/kg	700,000	16,000	0.5 UJ	0.5 UJ						
Ethylbenzene in mg/kg	6	6	0.05 UJ	0.05 UJ						
Hexachlorobutadiene in mg/kg	1,700	13	0.25 UJ	0.25 UJ						
Isopropylbenzene in mg/kg	350,000	8,000	0.05 UJ	0.05 UJ						
Methyl tert-butyl ether (MTBE) in mg/kg	0.1	0.1	0.05 UJ	0.05 UJ						
Methylene chloride in mg/kg	0.02	0.02	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.56 UJ
n-Propylbenzene in mg/kg	350,000	8,000	0.05 UJ	0.05 UJ						
p-Isopropyltoluene in mg/kg			0.05 UJ	0.05 UJ						
sec-Butylbenzene in mg/kg			0.05 UJ	0.05 UJ						
Styrene in mg/kg	700,000	16,000	0.05 UJ	0.05 UJ						
tert-Butylbenzene in mg/kg			0.05 UJ	0.05 UJ						
Tetrachloroethene (PCE) in mg/kg	0.05	0.05	0.025 UJ	0.025 UJ						
Toluene in mg/kg	7	7	0.05 UJ	0.05 UJ						
trans-1,2-Dichloroethene in mg/kg	70,000	1,600	0.05 UJ	0.05 UJ						
trans-1,3-Dichloropropene in mg/kg			0.05 UJ	0.05 UJ						
Trichloroethene (TCE) in mg/kg	0.03	0.03	0.03 UJ	0.03 UJ						
Trichlorofluoromethane in mg/kg	1,100,000	24,000	0.5 UJ	0.5 UJ						
Vinyl chloride in mg/kg	11,000	0.67	0.05 UJ	0.05 UJ						
m,p-Xylenes in mg/kg			0.1 UJ	0.1 UJ						
o-Xylene in mg/kg	700,000	16,000	0.05 UJ	0.05 UJ						
Naphthalene in mg/kg	5	5	0.05 UJ	0.05 UJ						

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Table 3-3

Page 4 of 5

## Table 3-3 - Analytical Results for Soil Samples

CLOSURE REPORT FOR THE HAZARDOUS WASTE ACCUMULATION UNIT

K-C Worldwide Site Upland Area 110207

Chemical Name	Industrial Soil Screening Level	Unrestricted Soil Screening Level	HWC-1 6/12/13 (0-1 ft)	HWC-1 6/12/13 (1-1.5 ft)	HWC-2 6/12/13 (0-1 ft)	HWC-2 6/12/13 (1-1.5 ft)	HWC-3 6/12/13 (0-1 ft)	HWC-3 6/12/13 (1-1.5 ft)	HWC-4 6/12/13 (0-1 ft)	HWC-4 6/12/13 (1-1.5 ft)
<b>Polychlorinated Biphenyls (PCBs)</b>										
Aroclor 1016 in mg/kg	250	14	0.1 U	0.1 U						
Aroclor 1221 in mg/kg			0.1 U	0.1 U						
Aroclor 1232 in mg/kg			0.1 U	0.1 U						
Aroclor 1242 in mg/kg			0.1 U	0.1 U						
Aroclor 1248 in mg/kg			0.1 U	0.1 U						
Aroclor 1254 in mg/kg	66	0.5	0.1 U	0.1 U						
Aroclor 1260 in mg/kg	66	0.5	0.1 U	0.1 U						
Total PCBs in mg/kg	10	1	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

Sample depths are relative to the fill interface, which is several feet below current grade (backfilled).

Concentrations within bold border indicate value exceeds Industrial Soil Screening Level.

Concentrations in shaded cells indicate value exceeds Unrestricted Soil Screening Level.

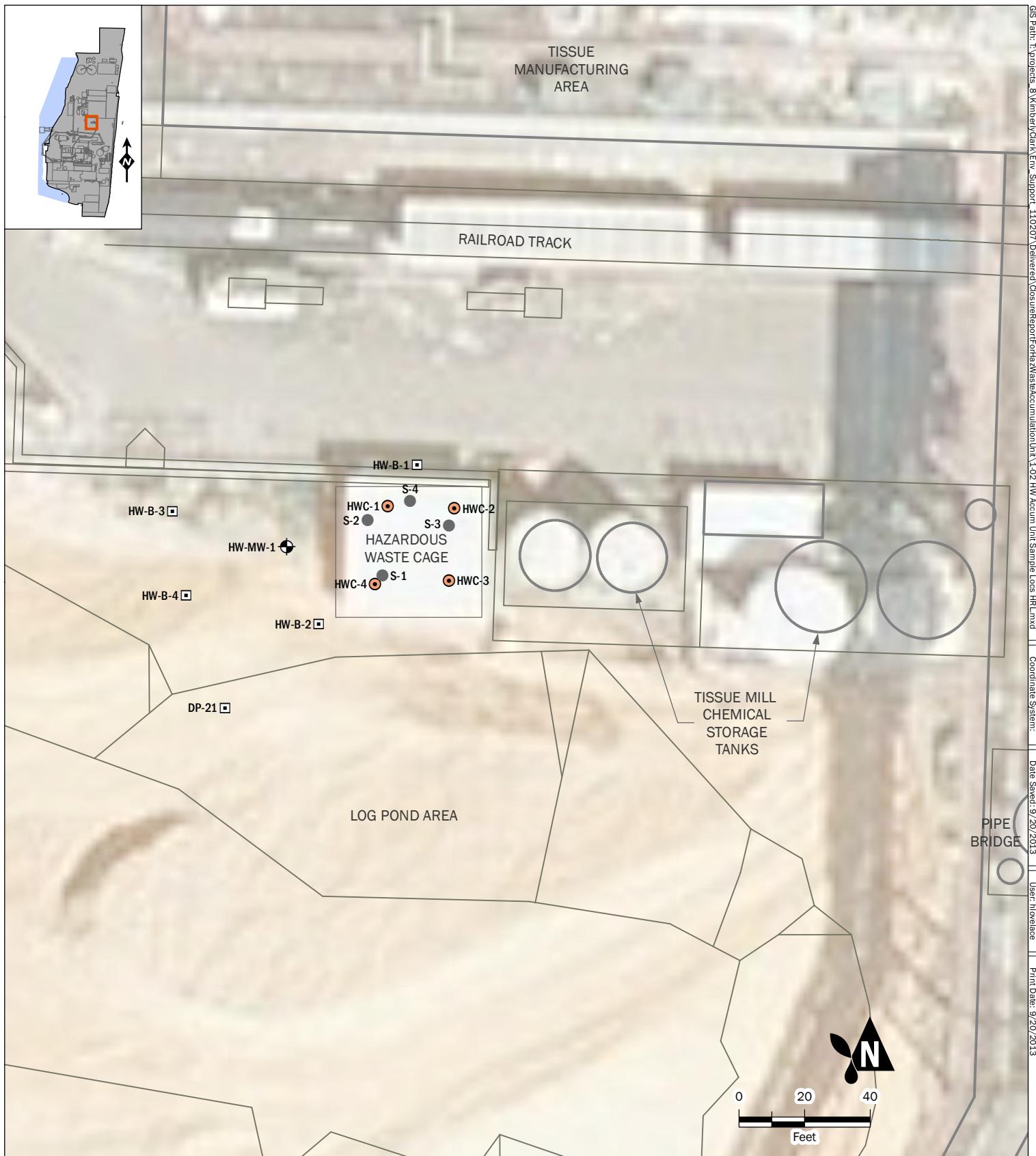
U - Analyte was not detected at or above the reported result.

UJ - Analyte was not detected at or above the reported estimate



# Vicinity Map

Closure Report for the Hazardous Waste Accumulation Unit  
K-C Worldwide Site Upland Area  
Everett, Washington



- Soil Boring (Independent Phase 2 ESA)
- Monitoring Well (Independent Phase 2 ESA)
- Concrete Sample (for RCRA closure)
- Sub-slab Soil Sample (for RCRA closure)

## Sample Locations for Hazardous Waste Accumulation Unit

Closure Report for the Hazardous Waste Accumulation Unit  
K-C Worldwide Site Upland Area  
Everett, Washington

## **APPENDIX A**

### **Summary of Historical Hazardous Waste Management, K-C Mill**

This appendix summarizes the Kimberly-Clark (K-C) mill's historical management of hazardous/dangerous wastes under the federal Resource Conservation and Recovery Act (RCRA). The Washington State Department of Ecology (Ecology) implements the federal RCRA requirements under the state Dangerous Waste Regulations (Chapter 173-303 WAC). The summary is based on review of documents provided by Ecology from their RCRA files and information provided by K-C.

No documentation is available regarding management of hazardous/dangerous wastes before the passage of RCRA in 1977. Communications with former employees indicate that hazardous substances were generally stored in the top floor of the pump mill above the bleach plant and used oils/lubricants were stored on the north wall of the Distribution Warehouse close to the Central Maintenance Shop before that area was reworked.

The first documentation of the mill's RCRA program is a November 14, 1980, letter from Scott Paper to the United States Environmental Protection Agency (EPA) with a completed Hazardous Waste Permit Application-Part A. The application included a facility drawing (included in Attachment A-1) showing a laboratory chemical storage area within the Pulp Mill, and an empty chemical barrel storage area adjacent to the Paint Shop immediately south of the Log Pond. The facility was assigned the RCRA ID number WAD009250820.

In 1982, RCRA management in the State of Washington was transitioned from EPA to Ecology. The facility's transition to the state program was documented in a revised Hazardous Waste Permit Application-Part A that was submitted to Ecology on August 9, 1982.

Ecology conducted an RCRA inspection on November 17, 1982, as documented in an internal Ecology memorandum dated November 29, 1982. The inspection clarified the materials that would be managed as dangerous waste: mercuric chloride, halogenated solvents (trichloroethylene and Brulins), non-halogenated solvents (Red Band, Shell Sol 71, xylene, ethyl acetate, ethyl ether, methanol, and acetone, toluene, and methylethyl ketone), and urea formaldehyde resin sludge. The inspection also documented that, prior to August 1982, the facility had generated zinc-contaminated boiler ash due to the burning of used tires in the hog fuel boiler. An August 25, 1982, letter from Scott Paper to Ecology states that rubber tires were burned in the hog fuel boiler between January 1981 and June 1982, generating an estimated 2,525 cubic yards of material, which was reportedly placed as fill during filling of the Log Pond.

In December 1983, Scott Paper requested (and Ecology agreed) to withdraw the RCRA Part A permit application since the facility no longer met the requirements as a dangerous waste storage facility (i.e., no dangerous waste was stored for longer than 90 days); however, the mill remained a large quantity generator of dangerous wastes until its closure in 2012 (RCRA ID number WAD009250820).

Another Ecology dangerous waste compliance inspection was conducted in early 1984, as documented in an internal Ecology memorandum dated January 16, 1984. The inspection documented that the mill is capable of generating dangerous wastes including mercuric chloride, halogenated and non-halogenated solvents, and resin sludge. The inspection documented generation of two dangerous waste streams in 1982: mercuric chloride and laboratory test solutions, and reported that waste solvents burned in the hog fuel boiler

should have been reported in Scott's 1982 dangerous waste annual report. The inspection also reviewed a 1983 investigation by state Labor and Industries and EPA regarding the alleged boiler burning of a waste oil-solvent mixture containing PCBs. Labor and Industries and EPA determined that the oil-solvent mixture did not contain PCBs at the time of their investigation. Ecology had not been notified of the 1983 investigation at the time it occurred.

Ecology conducted a Potential Hazardous Waste Site Preliminary Assessment on November 27, 1984. The assessment identified the aforementioned 2,525 cubic yards of zinc-laden ash, and noted that, prior to 1982, the facility had dumped solvents on the hog fuel pile prior to boiler burning to increase the fuel's energy output. In addition, the assessment indicated that small quantities of solvents and acids were generated and drummed for transport off site to a permitted recycler. The assessment recommended that soil sampling for solvents be conducted in the hog fuel area if possible.

Ecology conducted an RCRA inspection on May 17, 1985. In a letter dated May 31, 1985, Ecology notified the facility of the following violations of the Dangerous Waste Regulations: a lack of triple rinsing for containers holding dangerous wastes, a lack of specificity in the facility Personnel Training Plan, and deficiencies in the facility Contingency Plan. Scott Paper provided responses to the violations in a letter dated July 30, 1985. A follow-up letter from Ecology extending the deadline for compliance indicates a meeting occurred on September 4, 1985. No further documentation regarding these issues was located, suggesting they were resolved.

An annotated version of a 1985 map showing electrical transformer locations across the facility is included in Attachment A-1. A Toxic Substances Control Act (TSCA) inspection conducted by Ecology on February 29, 1988, documented 40 Askeral (100% PCB oil) transformers and three non-PCB-containing transformers at the facility. The inspection noted that the transformers are in isolated situations (including locked vaults) with leak-proof flooring and curbs and drip management devices, and noted that what oil leaks occur are a result of sampling the transformer oils. No concerns were identified in the inspection report; in fact, the inspector noted "The Attachments, all other documents and the equipment inspected seemed to be the best case of PCB transformer management that this inspector has experienced." EPA reviewed Ecology's TSCA inspection report and concluded that there were no violations of the PCB regulations and stated that Scott's PCB management program appeared to be "exemplary." (June 1, 1988, letter from EPA to Scott Paper).

Attachment A-1 includes an annotated version of the 1990 facility chemical locations map, presumably created as part of the Hazardous Materials and Wastes Management Program.

The facility reported to Ecology a leak in the 50% caustic storage tank (estimated 170 gallons) in a letter dated October 20, 1992. The leak was reportedly contained and cleaned up, as documented in a follow up letter dated January 19, 1993, from the Scott Paper to Ecology's Industrial Section.

Ecology conducted a dangerous waste inspection on January 13, 1993, documented in a letter from Ecology dated April 1, 1993. The inspection reported generation and off-site management of the following wastes: mercuric chloride, mercury from spill mixed with

saw dust, a mixture of non-halogenated solvents and paint, petroleum distillates, naphtha solvent, trichloroethylene, a mixture of dodecylquaniidine hydrochloride, methylene bis-thiocyanate, and isorpropyl alcohol, a mixture of water, rust/soil, and kerosene/gasoline, petroleum naptha, cleaning liquid, and lacquer thinner. A review of dangerous waste manifests from 1991 indicated compliance with the Dangerous Waste Regulations. No violations were found during the inspection.

In 1994, the facility updated pages to the Hazardous Materials and Wastes Management Program. The updates included two figures of note: "Everett Chemical Storage and Handling Locations Pulp/Utilities/Secondary Treatment" and "Everett Paper Mill Chemical Storage & Handling Locations". Annotated versions of the figures are included in Attachment A-1.

In 1995, Scott Paper reported a 525-gallon spill of sodium bisulfite to the mill's wastewater treatment system. Ecology issued a warning, but no enforcement order, as discussed in an Ecology letter dated March 29, 1995.

In 1996, the facility updated pages to the Hazardous Materials and Wastes Management Program to meet contingency plan requirements under Chapter 173-303 WAC. The update includes two figures of note: "Buildings and Grounds Chemical Storage and Handling Locations, Pulp/Utilities/Secondary Treatment", and "Buildings and Grounds Chemical Storage and Handling Locations (for Paper Mill area)", which are very similar to the 1994 versions of the maps. Annotated versions of the figures are included in Attachment A-1.

## Hazardous Waste Accumulation Unit

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The Hazardous Waste Accumulation Unit (HWAU, aka "haz waste cage") was a 90-day hazardous waste accumulation unit in which hazardous and non-hazardous waste materials generated at the mill were temporarily stored prior to proper off-site disposal. Prior to closure, K-C accumulated waste materials within the accumulation unit for periods less than 90 days, and handled and disposed of the wastes in accordance with applicable requirements of Chapter 173-303 WAC. Closure of the HWAU, one of the final steps in mill demolition, is detailed in the body of this report.

## Management of Hazardous Substances during Mill Closure

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During closure of the mill facility, K-C removed the remaining chemical inventory from each portion of the mill prior to its demolition. To do this, K-C contracted with Veolia ES Technical Solutions to perform a "chemical sweep" of the entire mill, in which surplus chemical inventory is identified, profiled for disposition, and then loaded and transported for proper off-site recycling, treatment, and/or disposal in accordance with applicable laws, regulations, and permits. As part of this effort, Veolia cleaned the mill's chemical storage tanks to prepare them for demolition. When additional small containers of hazardous substances were encountered during demolition, the demolition contractor, Cambria Contracting, profiled them for off-site recycling or disposal and staged them temporarily in the HWAU pending transport. Ecology conducted a Dangerous Waste Inspection of the mill while these chemical management activities were underway, and

concluded that the procedures were being done in conformance with Chapter 173-303 WAC, as described in Section 5 of this report.

## **Ecology Dangerous Waste Inspection during Mill Closure (November 2012)**

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Robert Carruthers of Ecology's Industrial Section conducted a dangerous waste inspection of K-C's mill on November 7, 2012 to assess whether mill closure and demolition was being conducted in accordance with the state Dangerous Waste Regulations (Chapter 173-303 WAC).

Based on the inspection, Ecology concluded that closure of the K-C Everett site is being done in conformance with Chapter 173-303 WAC. Section 5 of this report provides a summary of the 2012 inspection, and a copy of Ecology's inspection report is included in Attachment A-2.

## **ATTACHMENT A-1**

**Ecology's Report of Dangerous  
Waste Inspection during Mill  
Closure (November 2012)**



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000  
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

November 13, 2012

Bryan Lust  
Site Closure Manager  
Kimberly Clark World Wide, Inc.  
2600 Federal Avenue  
Everett, WA 98201

**Re: Dangerous Waste Inspection Report**

Dear Mr. Lust:

Thank you for your assistance during the November 7, 2012 Dangerous Waste Inspection of your facility. The purpose of the inspection was to assess whether facility closure and demolition was being done in accordance with the dangerous waste regulations, Chapter 173.303 WAC. Attached is a copy of the inspection report. Based on my site inspection, closure and demolition of the Everett facility are being done in accordance with Chapter 173.303 WAC. If you have any questions, please contact me at (360) 407-6954 or Robert.carruthers@ecy.wa.gov.

Sincerely,

A handwritten signature in black ink that reads "Robert Carruthers".

Robert Carruthers, P.E.  
Environmental Engineer  
Industrial Section

Enclosure



WASHINGTON STATE DEPARTMENT OF ECOLOGY  
SOLID AND HAZARDOUS WASTE PROGRAM  
INSPECTION REPORT

**Name and Address of Entity:** Kimberly-Clark World Wide, Inc.  
2600 Federal Avenue  
Everett, WA 98201

**ID Number:** WAD009250820

**Date of Inspection:** November 7, 2012

**Last Inspection:** November 7, 2009

**Date of Inspection Report:** November 8, 2012

**Phone Number and Contact:** Brian Lust 425 259 5702

**Type of Inspection:** Field and record inspection

**Reason for Inspection:** Confirm mill demolition being done  
in compliance with DW  
requirements

**Personnel Present During  
Inspection:** Robert Carruthers - Ecology  
Bryan Lust - Kimberly-Clark

  
Robert Carruthers  
Inspector Signature

**Inspection Findings Summary:**

**Based on my observations made during my site visit on November 7, 2012, the closure and demolition of the KC Everett site is being done in conformance with the state's dangerous waste regulations (WAC 173-303).**

## **Description of Facility and Current Activities.**

The Kimberly-Clark (KC) Everett facility ceased operations as of April 15, 2012. Cleanup and closure of the KC Everett site is being done voluntarily under the oversight of Ecology's Toxic Clean Up Program (TCU). Removal of structures currently designated for demolition is anticipated to be completed by December 31, 2012. Overall brown field status is anticipated by April 2013. Further remediation after this timeframe will occur as necessary.

Operations had consisted of the sulfite pulp mill, tissue unit, and boilers. The sulfite mill produced pulp used for producing a range of paper products, including toilet paper, paper towels, and tissue. Mill capacity was about 500 tons per day. The facility was considered a large quantity generator (LQG) of dangerous waste as defined by WAC 173-303.

A site map of the KC Everett mill is attached. The buildings lacking color shading have already been removed.

### **1. Inspection Objective**

Andrew Kallus is the Ecology TCU site manager. Andrew received comments expressing concerns about the closure activities at the mill. A principle concern was whether closure was being done in accordance with Washington State's dangerous waste regulations (WAC 173-303). Andrew conveyed these concerns to Ecology's Industrial Section because the Industrial Section is responsible for on-site dangerous waste regulatory compliance oversight. I visited the site and did an overview inspection to evaluate whether closure was being done in accordance with WAC 173-303.

### **2. Inspection Criteria**

Clean closure is the process by which dangerous waste management units are taken out of service and the unit and all areas affected by releases at or from the unit are properly cleaned up. During clean closure, facility owners/operators must:

- ▶ Remove and properly manage all wastes and waste residues from the closing unit;
- ▶ Remove and properly manage the unit structure and all associated piping, equipment, containment areas, and any other materials used in construction or operation of the unit, or decontaminate these materials; and
- ▶ Remove and properly manage any environmental media (soil, ground water, surface water, and sediments) affected by releases from the unit, or decontaminate such environmental media.

The federal "clean debris standard" (defined in 40 CFR Part 268.45) allows that a visual inspection may be sufficient to determine if floors, sumps, equipment, or other structures require

additional decontamination beyond the initial effort. Source sampling and analysis can also be used to verify that structures have been adequately decontaminated.

I used the following specific criteria as my guide during the inspection and evaluated the areas inspected against the criteria to determine the status of compliance.

1. Dangerous Waste Accumulation Areas: Designate and dispose of dangerous waste accumulated in containers and tanks. Properly decontaminate or dispose of all contaminated equipment and structures. Designate all residues and cleanup waste as required in WAC 173-303-070, and properly dispose of them. Maintain records to track any material managed off-site.

KC had and continues to utilize a designated 90 day accumulation area. DW found during closure is brought here prior to final disposal. No DW was present during this inspection. The area covered, labeled, and secured with a cyclone fence. The area appeared in compliance with WAC 173-303-200 (Accumulating Dangerous Waste On-site).

2. Process Areas: Clean-up any chemical residue deposited on floors, equipment, or structures in the facility. Designate all residues and cleanup waste as required in WAC 173-303-070 and properly dispose of them. Maintain records to track any material managed off-site.

I was taken on a general tour of the overall site. In addition I toured several process areas, tank farms, and two laboratories. I saw no evidence of chemical residue. All tanks inspected were empty. Tank containment areas showed no indication of chemical residue. I saw no indication of ground releases. The demolition activities in general appeared well run and the recycling effort of the waste material appeared orderly .

3. Wash Water: Designate any wash water generated during the closure as required in WAC 173-303-070 and properly dispose of it. Obtain authorization before discharging wash water to the sanitary sewer. Maintain records to track any material discharged or managed off-site.

Storm water generated on most of the site is collected and routed to the mill's secondary clarifiers which are currently used as collection and holding tanks prior to discharge to the City of Everett's wastewater treatment system. A flow meter monitors the volume of discharge to the city. The clarifiers had been cleaned of sludge prior to current usage. The storm water present showed no visual indication of contamination. Discharge to the City of Everett is done per agreement with the City of Everett. Additional measures have been taken to contain and prevent runoff from the site. A barrier wall lines the bay side of the facility and an absorption sock ran continuously along the interior base of the barrier wall.

4. Product Chemicals/Hazardous Materials: Designate any discarded or unusable material as required in WAC 173-303-070 and properly dispose of it. If another business can use the materials, you may want to list them on the King County Industrial Materials Exchange website at [www.govlink.org/hazwastelbusinesslimex/](http://www.govlink.org/hazwastelbusinesslimex/). Maintain records to track any material managed off-site.

I reviewed manifests of material being managed as DW. Disposal of process chemicals had become necessary with the mill closure. Most process chemicals were stored and used in tanks. Process chemicals used on site included ammonium bisulfite and sulfuric acid for chip cooking. Raw materials used to create the cooking acid were anhydrous ammonia, molten sulfur, and water. Pulp bleaching was accomplished with chlorine dioxide and sodium hydroxide. Broke was treated with hypochlorite to bleach dyes and to aid defibering. Excess chlorine was neutralized with sodium bisulfate. The manifests reviewed corresponded to these chemicals. The manifests appeared complete and corresponded in date to the timeframe of the cleanup activities. Veolia ES Technical Solutions has been tasked with the general waste characterization and documentation was also reviewed documenting preliminary characterization efforts to properly manage substances after initial characterization.

General recycling of any and all demolition material was evident in the segregation efforts. Metals were being separated and prepared for recycling as were building materials such as brick and concrete.

5. Inspection and Documentation; Manifest all dangerous wastes (including those generated in the clean-out of the site. After cleaning and removing equipment, inspect all floors, walls, and other structures located in areas of the facility where you generated or accumulated dangerous wastes. Document this inspection, including photographs and an inspection log. The inspection must focus on determining whether release of contaminants could have occurred through cracks or gaps in concrete, through floor drains, or other conveyances. The inspection must also focus on determining which structures must undergo decontamination or removal, based on the presence of contaminants.

KC is using a "sweep" technique where buildings undergo a preliminary inspection and further efforts are dependent on the findings. For example, I inspected the wastewater treatment lab and the paper mill lab and in both cases it was evident that the labs had been inspected and chemicals removed. Asbestos floor tiling had been removed from the paper mill lab. The converting bldg and the paper mill bldg were in the early stages of preparation for demolition. Carts were present filled with material such as empty containers indicating that the buildings are free of obvious miscellaneous materials prior to demolition.

6. Releases: Investigate any potential release to the environment. At other facilities, this work has included coring through concrete to obtain soil and groundwater samples. Determine risks and review potential implications. If you determine that soils or groundwater have been impacted, then the company must meet the standards in the State's Model Toxics Control Act (MTCA), Chapter 173-340 WAC.

This aspect of clean closure is ongoing or has not yet been performed. KC has acknowledged areas of anticipated remediation so there is anecdotal indication that

**appropriate investigation is underway. This concern is more appropriately addressed by the TCP oversight.**

7. Final Dangerous Waste Annual Report: After transporting all dangerous waste off site, file a final Dangerous Waste Annual Report (DWAR). Include the final loads and the amounts of dangerous wastes removed and then withdraw the RCRA ID number. For questions on annual reporting, contact Ecology's DWAR team at 360-407-6170 or 1-800 874-2022.

**Since the site is going through closure this requirement is not timely.**

**Within 30-days of closure:**

Provide the following documentation per WAC 173-303-220(3) - Additional Reports:

- Copies of the manifests for all dangerous waste managed off-site from the time closure started to the final closure date.
- A copy of any inspection results (photographs and written documentation) demonstrating that the dangerous waste accumulation area(s) and process area(s) have been properly cleaned and closed.
- A copy of the final DWAR for the facility.

**Closure is still quite a ways away. This is included now as a heads up to KC since they will get a copy of this inspection.**

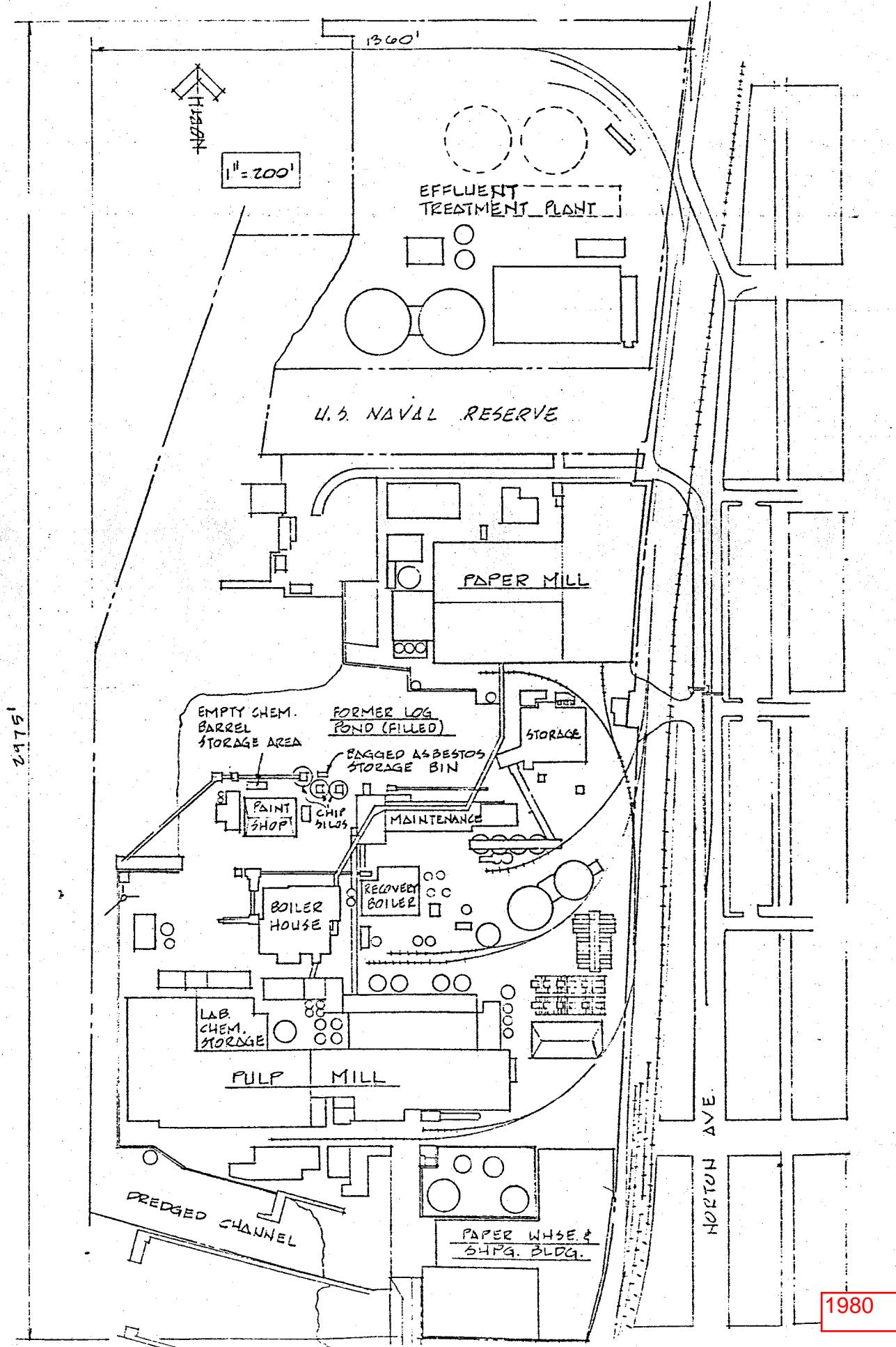
**Conclusion: Based on my observations made during my site visit on November 7, 2012, the closure of the KC Everett site is being done in conformance with the state's dangerous waste regulations (WAC 173-303).**

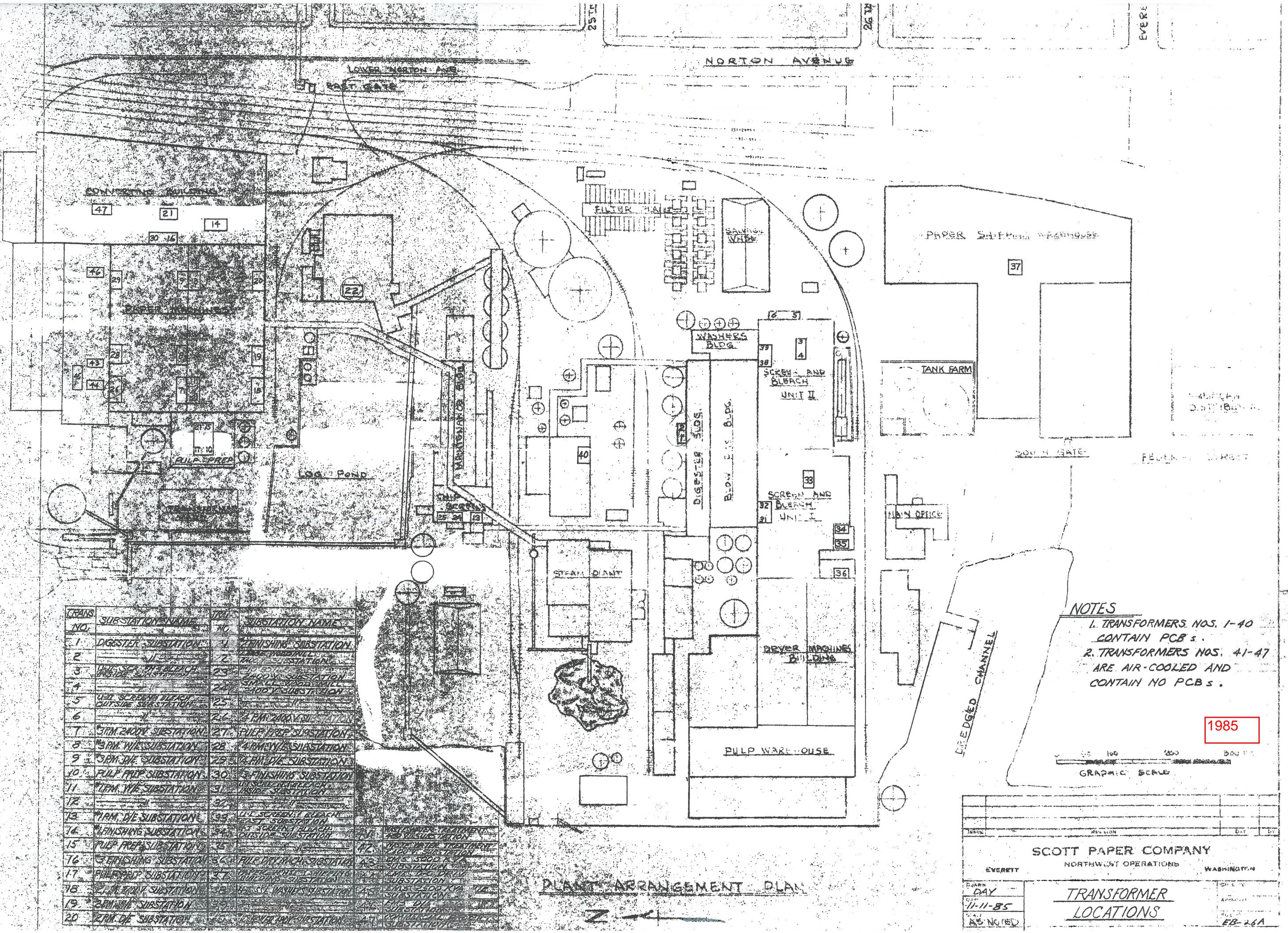
## **ATTACHMENT A-2**

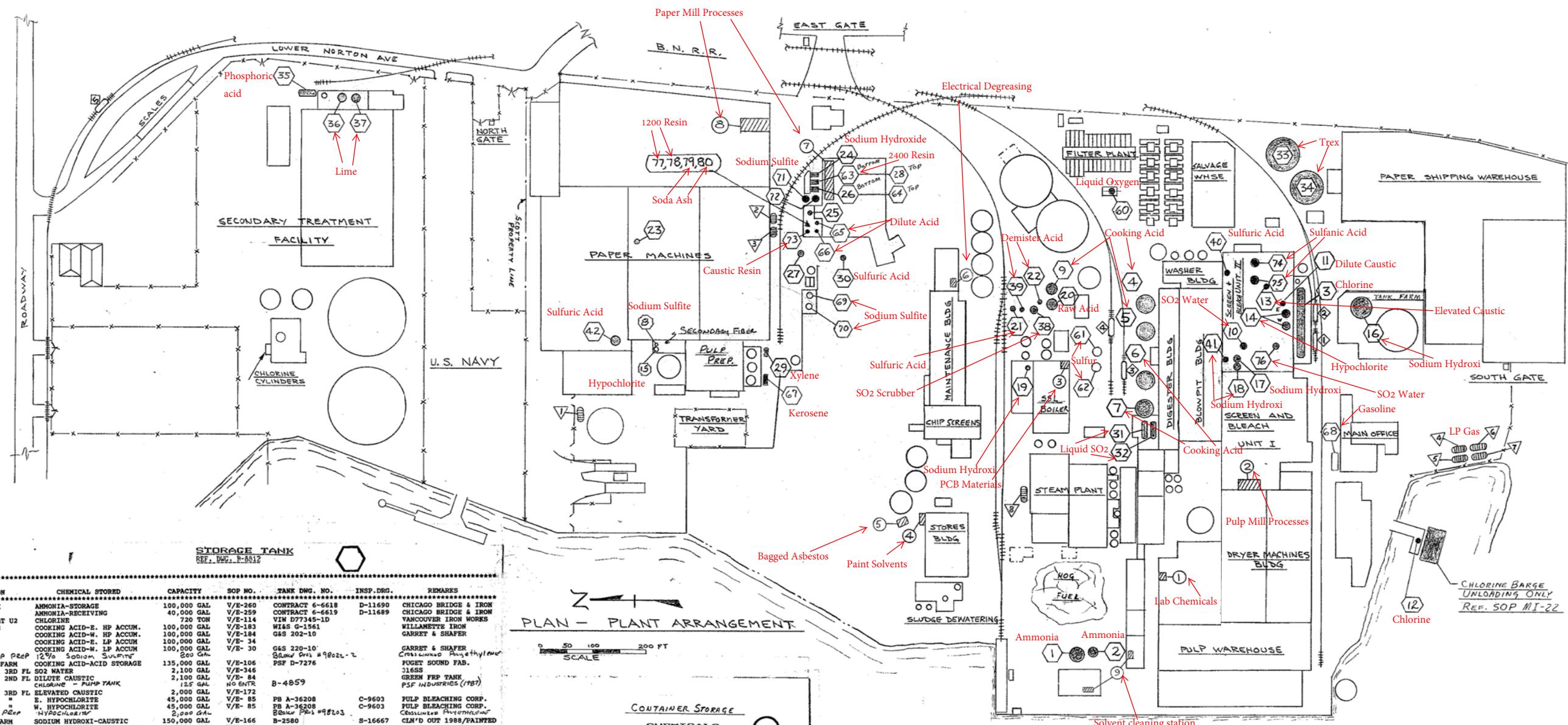
### **Historical Maps Depicting Hazardous Substance Use/Storage Locations**

## V. FACILITY DRAWING (see page 4)

SCOTT PAPER COMPANY, EVERETT, WA.  
ID: WAD 004250820







TK	LOCATION	CHEMICAL STORED	CAPACITY	SOP NO.	TANK DNG. NO.	INSP. DRG.	REMARKS
1	PUMP DOCK	AMMONIA- STORAGE	100,000 GAL	V/E-260	CONTRACT 6-6618	D-11690	CHICAGO BRIDGE & IRON
2	"	AMMONIA- RECEIVING	40,000 GAL	V/E-259	CONTRACT 6-6619	D-11689	CHICAGO BRIDGE & IRON
3	BLEACH PLT U2	CHLORINE	720 TON	V/E-114	VIN 7D7345-1D		VANCOUVER IRON WORKS
4	DIGESTERS	COOKING ACID-E. HP ACCUM.	100,000 GAL	V/E-183	WILS G-1561		WILLAMETTE IRON
5	"	COOKING ACID-W. HP ACCUM.	100,000 GAL	V/E-184	G502 202-10		GARRET & SHAFER
6	"	COOKING ACID-E. LP ACCUM.	100,000 GAL	V/E-184			
7	"	COOKING ACID-W. LP ACCUM.	100,000 GAL	V/E-184			
8 P.M.	PULP PREP	12% Sodium Sulfite	260 GAL	V/E- 30	OES 220-10'		GARRET & SHAFER
9	SSL TANK FARM	COOKING ACID-ACID STORAGE	135,000 GAL	V/E-106	Qdow Orts #9802-2		Cross Lined Polyethylene
10	BL PLT U2	3RD FL SO2 WATER	2,100 GAL	V/E-346	PSF D-7276		FUGET SOUND FAB.
11	BL PLT U2 2ND FL	DILUTE CAUSTIC	2,100 GAL	V/E-84			316SS
12	CLC DOCK	CHLORINE PUMP TANK	125 GAL	NO ENTR			GREEN FRP TANK
13	BL PLT U2 3RD FL	ELEVATED CAUSTIC	2,000 GAL	V/E-172	B-4859		PSF INDUSTRIES (1987)
14 E	"	LIQUID CHLORINE	45,000 GAL	V/E- 85	PB A-36208	C-9603	FUL BLEACHING CORP.
15	"	M. HYPOCHLORITE	45,000 GAL	V/E- 85	PB A-36208	C-9603	FUL BLEACHING CORP.
16 P.M.	PULP PREP	HYPCHLORITE	2,000 GAL		2nd flr PB#98103		Crosslinked Polyethylene
16 S.	TANK FARM	SODIUM HYDROXIDE-CAUSTIC	150,000 GAL	V/E-166	B-2580	S-16667	CIN'D OUT 1988/PAINTED
17	BL PLT U2, BSNT	SODIUM HYDROXIDE-50% CAUSTIC	13,800 GAL	V/E-167	B-6339		
18	BL PLT U2, BSNT	SODIUM HYDROXIDE-DILUTE CAUSTIC	3,000 GAL	V/E-168	B-6339		
19	EVAP BUILDING	SODIUM HYDROXIDE-CAUSTIC	1,000 GAL	V/E-144	B-6339		
20	SSL TANK FARM	RAG ACID- STIRRING	135,000 GAL	V/E-111	PSF D-7228		FUGET SOUND FAB.
21	"	SULFURIC ACID	6,400 GAL	V/E- 10	B-15317	D-12685	
22	"	DEMISTER AND STORAGE	15,000 GAL	V/E- 82	S-13592B		CHEM-PROOF
23 #4	PM MEZZANINE	(OUT OF SERVICE)	1,400 GAL	V/E-116	S-888		
24	P M CHEM PREP	SODIUM HYDROXIDE-CAUSTIC	10,000 GAL	V/E-106	DF5V2-W1-BIC		
25	"	(EMPTY)	10,000 GAL	V/E-104	DCFSV5-341-B8		
26	"	(EMPTY)	10,000 GAL	V/E-107	C-4830		
27	"	(REMOVED)					
28	"	EMPTY	10,000 GAL	V/E-105	C-4830		
29	P M PULP PREP	XYLENE	12,500 GAL	V/E-151	CTM1092-11-5-31		
30	"	CHEM	SULFURIC ACID-WEAK	10,000 GAL	V/E-113		
31	DIGESTERS	N. LIQUID SO2	25,000 GAL	V/E-146	B-6650	D-6289	
32	"	S. LIQUID SO2	25,000 GAL	V/E-146	B-6650	S-14854	
33	TREX FARM	TREX	1,100,000 GAL	V/E- 25		S-14854	
34	"	TREX	1,100,000 GAL	V/E- 25			
35	SBC. W. N. TREAT.	PHOSPHORIC ACID	16,000 GAL	V/E- 69			
36	"	N. LIME (NOT HAZARDOUS)	160 TON	V/E- 77			
37	"	S. LIME (NOT HAZARDOUS)	160 TON	V/E- 78			
38	SSL TANK FARM	Bo. SCRUBBER TANKS	35,000 GAL	V/E-162	PSF B-8087 (2LSH93)		ERSHIG
39	"	DEMISTER PAD - MIX	1,000 GAL	V/E-161	S-13579		
40	BLEACH PLT/J FLR	SULFURIC ACID-PH CONTROL	350 GAL	V/E-221	C-8977		SCOTT
41	"	SULFURIC ACID-PH CONTROL	600 GAL	NO ENTR			
42	NO. 5 P M	SULFURIC ACID	1,500 GAL	V/E-533			
43	60 FILTER PLANT	LIQUID OXYGEN	11,000 GAL	NO ENTR			
44	61 SULFUR UNLOAD	SULFUR STORAGE - E.	41,000 GAL	V/E-146		D-12642	Liquid Air
45	62 SULFUR UNLOAD	SULFUR STORAGE - W.	41,000 GAL	V/E-146		D-12643	
46	PM CHEM PREP	2400 RESIN	10,000 GAL	V/E-109	C-4830		
47	PM CHEM PREP	(EMPTY)	10,000 GAL	V/E-108	C-4830		
48	PM CHEM PREP	BASIC DILUTE ACID/4%H2SO4	3,008 GAL	V/E-	C-9063		CHEMPROOF
49	PM CHEM PREP	WEST DILUTE ACID/4%H2SO4	1,744 GAL	V/E-	C-9063		CHEMPROOF
50	PM PULP PREP	(OUT OF SERVICE)		NO ENTR			KEROSENE TANK
51	OFFICE AREA	GASOLINE	300 GAL	NO ENTR			
52	PM CHEM PREP	E. SODIUM SULFITE					
53	PM CHEM PREP	W. SODIUM SULFITE					
54	PM CHEM PREP	N. CATIONIC SODA 1/2%					
55	PM CHEM PREP	(EMPTY)					
56	PM CHEM PREP	CAUSTIC RESIN COOLER					
57	BL PLT U2 3D FLR	E. SULFAMIC ACID	450 GAL	V/E-222	CHENPROOF	PO 5E-04880	
58	BL PLT U2 3D FLR	W. SULFAMIC ACID	450 GAL	V/E-223	CHENPROOF	PO 5E-04880	
59	BL PLT U2 3D FLR	AUX. SO2 WATER	3,000 GAL	V/E-345			
60	PM CHEM PREP	12000 RESIN EAST	10,000 GAL	V/E- 39			
61	PM CHEM PREP	11000 RESIN WEST	10,000 GAL	V/E- 34			
62	PM CHEM PREP	EAST SO2 ASH	6,000 GAL	V/E-100			
63	PM CHEM PREP	WEST SO2 ASH	6,000 GAL	V/E-101			

PLAN - PLANT ARRANGEMENT

0 50 100 200 FT  
SCALE

CONTAINER STORAGE

CHEMICALS  
REF. I.D.# E-8812

NO.	I	CHEMICALS
1	1	LABORATORY CHEMICALS
2	1	PULP MILL PROCESSES
3	1	P.C.B MATERIALS
4	1	PAINT SOLVENTS
5	1	BAGGED ASBESTOS
6	1	ELECTRICAL DEGREASING
7	1	PAPER MILL PROCESSES
8	1	PAPER MILL PROCESSES
9	1	SOLVENT CLEANING STATION

RAILROAD TANK CARS  
REF. DIG. R-8812

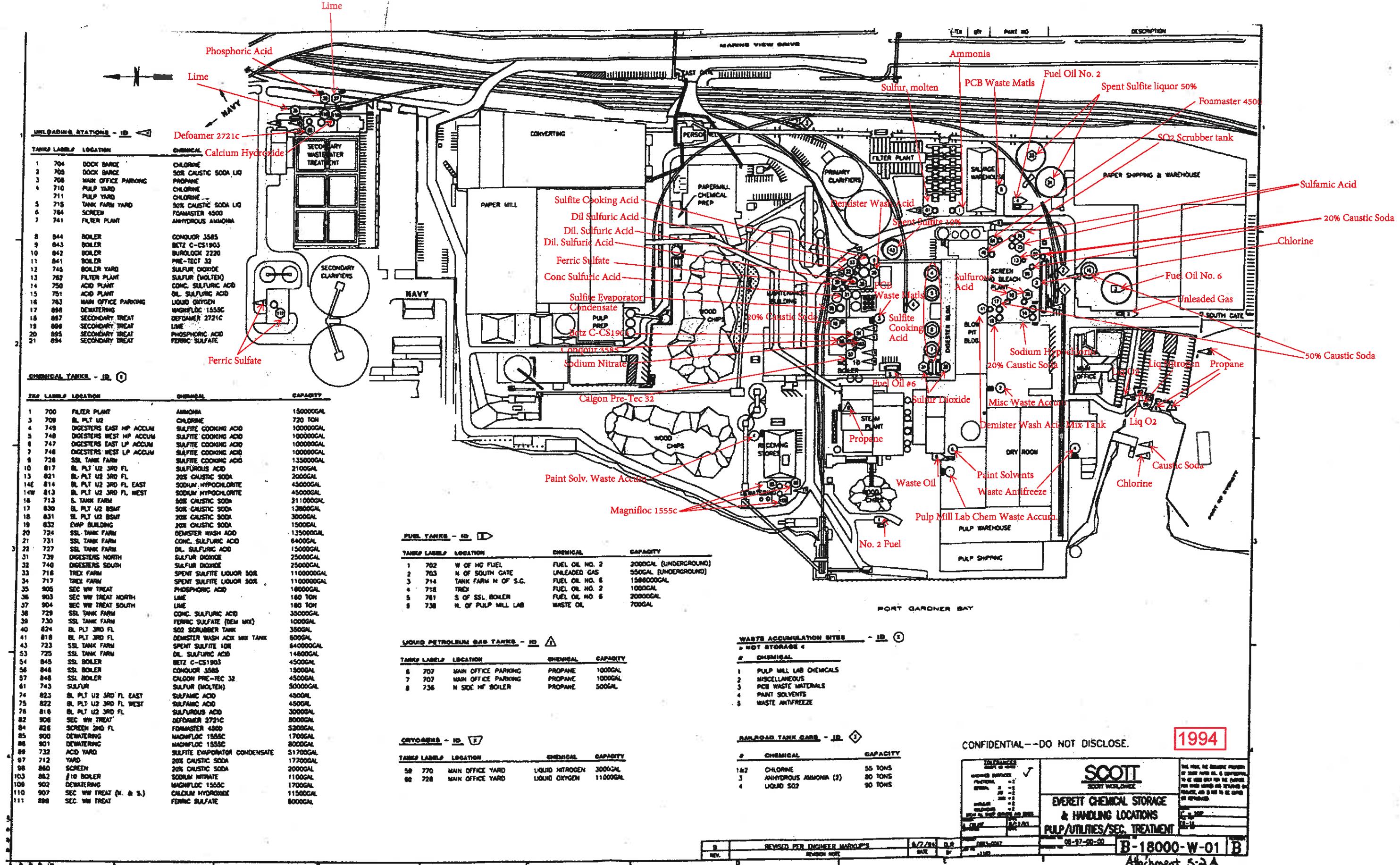
10.	1	CHEMICALS	1	CAP.
			1	TONS
*****				
1		CHLORINE	1	55
1		T. R. E. X.	1	95
1		ANHYDROUS AMMONIA	1	60
1		LIQUID SO <sub>2</sub>	1	90
1		OPTIONAL HOLDING AREA FOR		
1		CHLORINE, ANHYDROUS AMMONIA,		
1		AND LIQUID SO <sub>2</sub> .		

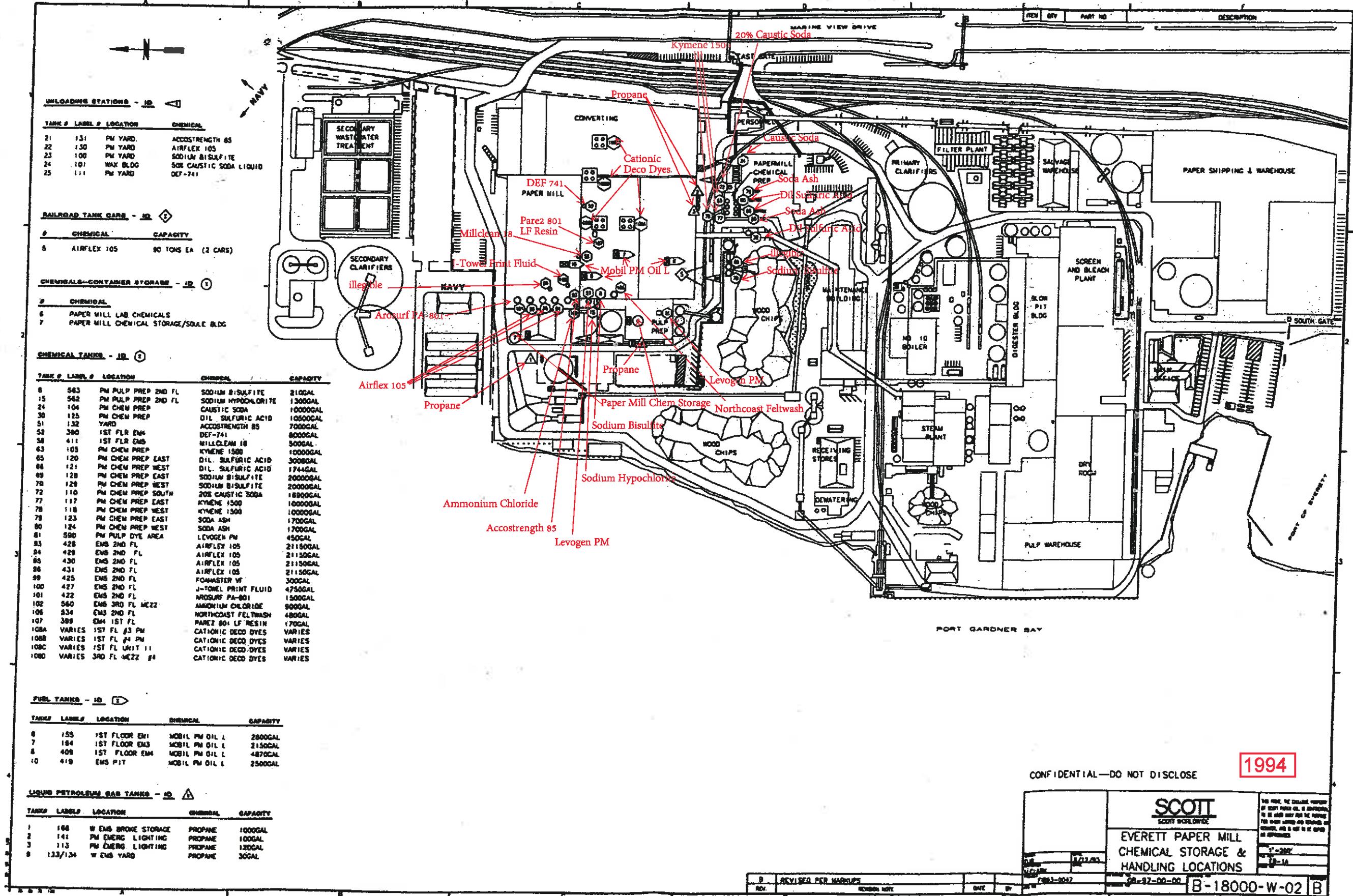
LIQUID PETROLEUM GAS TANKS					
TANK NO.	LOCATION	MATERIAL	STORED CAPACITY	TANK SER. NO.	REMARKS
<u>WEST OF EN-5</u>					
BROKE STORAGE	PROPANE	1000 GAL	793556	CAL GAS TA	
PF REED LIGHTING	PROPANE	100 GAL	76681	CAL GAS TA	
PF REED LIGHTING	PROPANE	120 GAL	710766	CAL GAS TA	
HAIN OFF PARK LOT	PROPANE	1000 GAL	445703	CAL GAS TA	
HAIN OFF PARK LOT	PROPANE	1000 GAL	373736	CAL GAS TA	
HAIN OFF PARK LOT	PROPANE	1000 GAL	495563	CAL GAS TA	
HAIN OFF PARK LOT	PROPANE	1000 GAL	495553	CAL GAS TA	
HAIN OFF PARK LOT	PROPANE	1000 GAL	495553	CAL GAS TA	
H.A. SITTING PT. ROAD END	PROPANE	130 GAL	720256	CAL GAS TA	

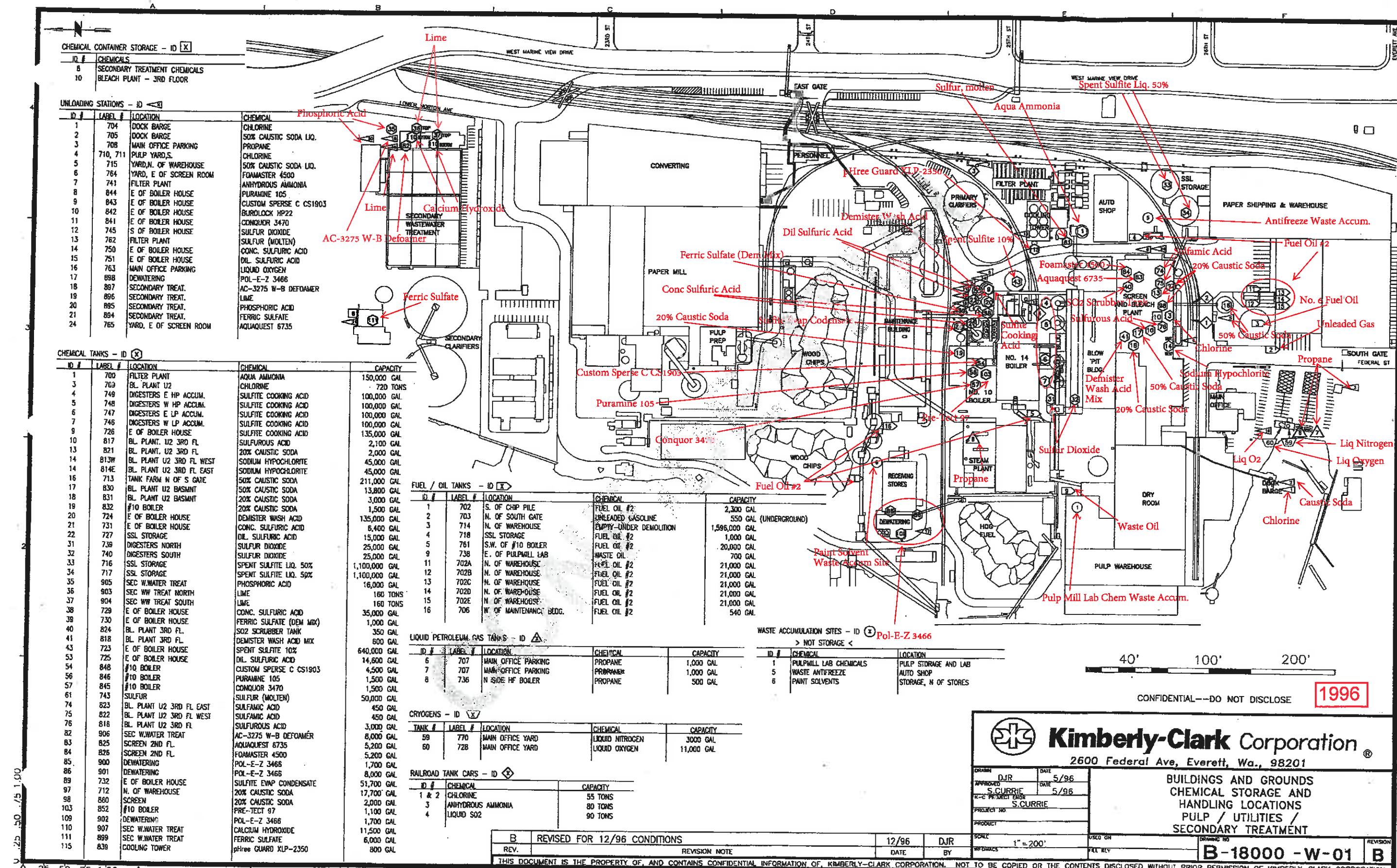
REVISIONS FOR SOL SCRUBBER		2/7/93	DU)
ISSUE	REVISION	DATE	BY
G	ADD TANK 12 TO LIST	3/9/93	WRG
F	REVISE AND ADD TANK INFORMATION	7/14/91	EE
E	REVISE - ADD STG. TANK AND PROPANE TANK INFO.	4/25/89	SFR
D	REVISE AND ADD TANK INFORMATION	6/11/85	SFR
C	ADD LIQUID OXYGEN	11-16-84	EHR
B	ADDED B.R. TANK CARS	6-17-81	FIL
A	COMBINED B-BB12 & C-C98Z, ADDED CONTAINER STORAGE	6-5-81	FIL
ISSUE	REVISION	DATE	BY

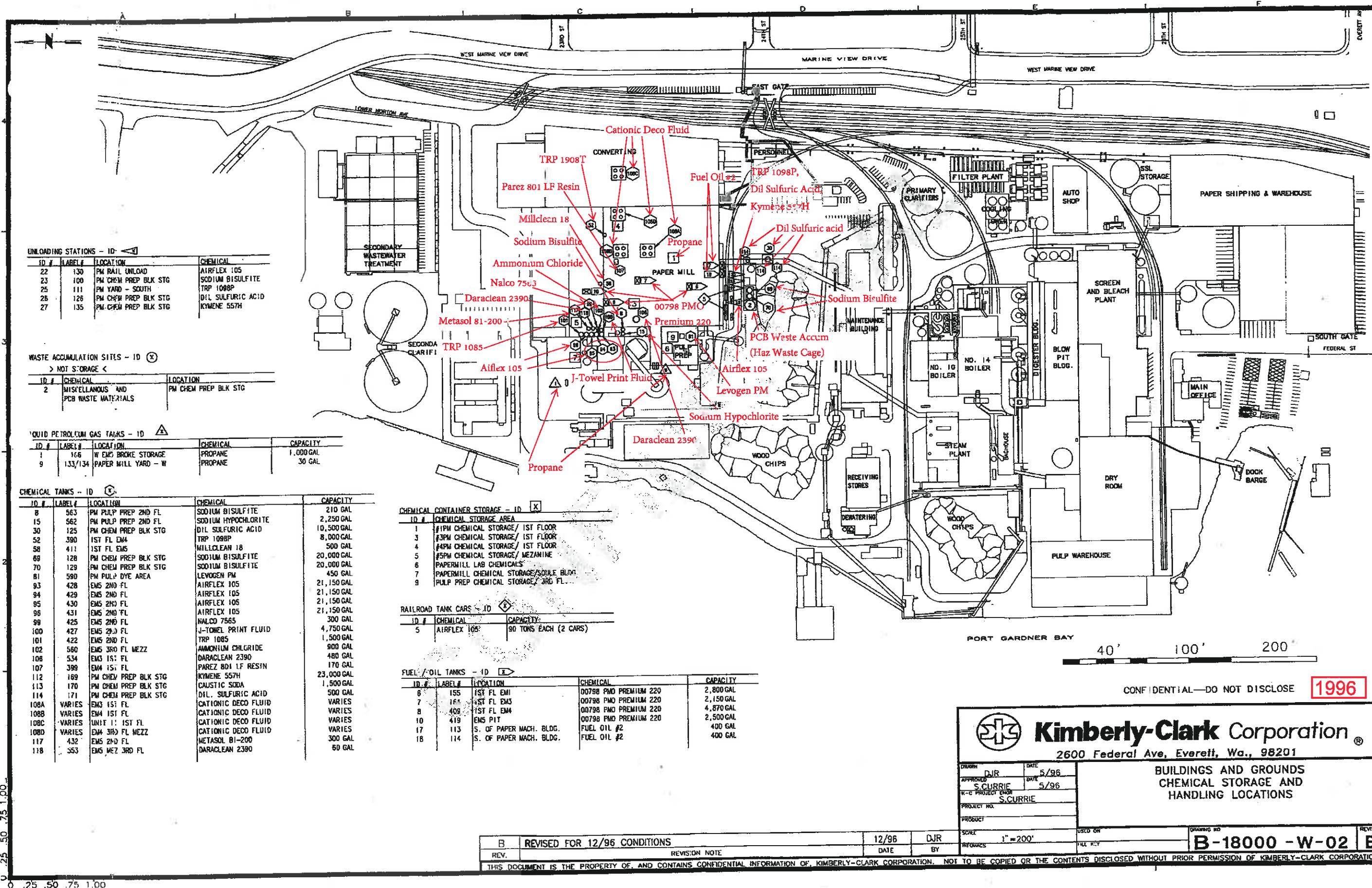
  

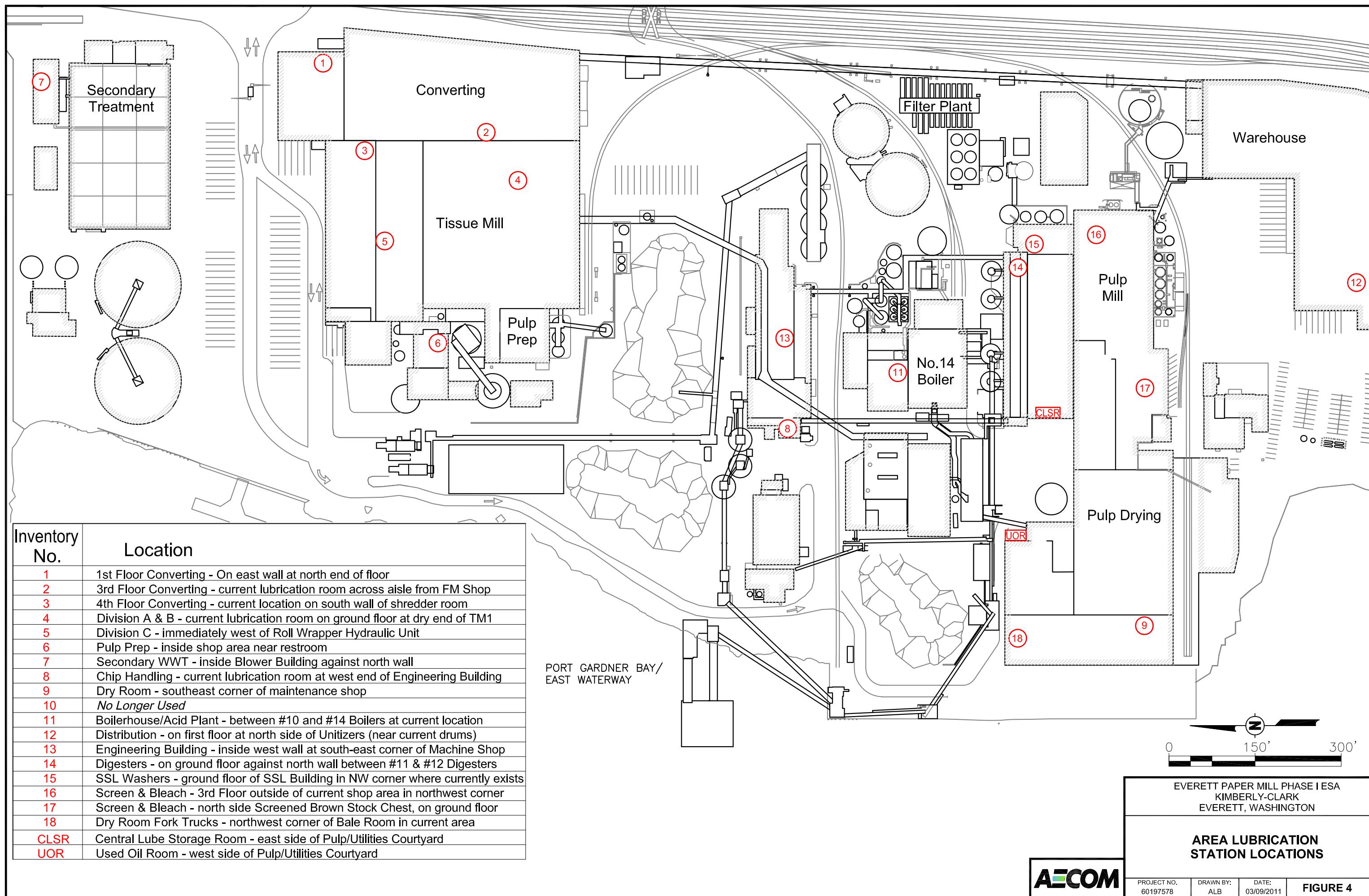
SCOTT PAPER COMPANY		
EVERETT	NORTHWEST OPERATIONS	
WASHINGTON		
DRAWN	HAZARDOUS SUBSTANCES	CHECKED
DATE	STORAGE LOCATIONS	APPROVED
SCALE		FILE KEY
For No.	Project No.	EB-1A

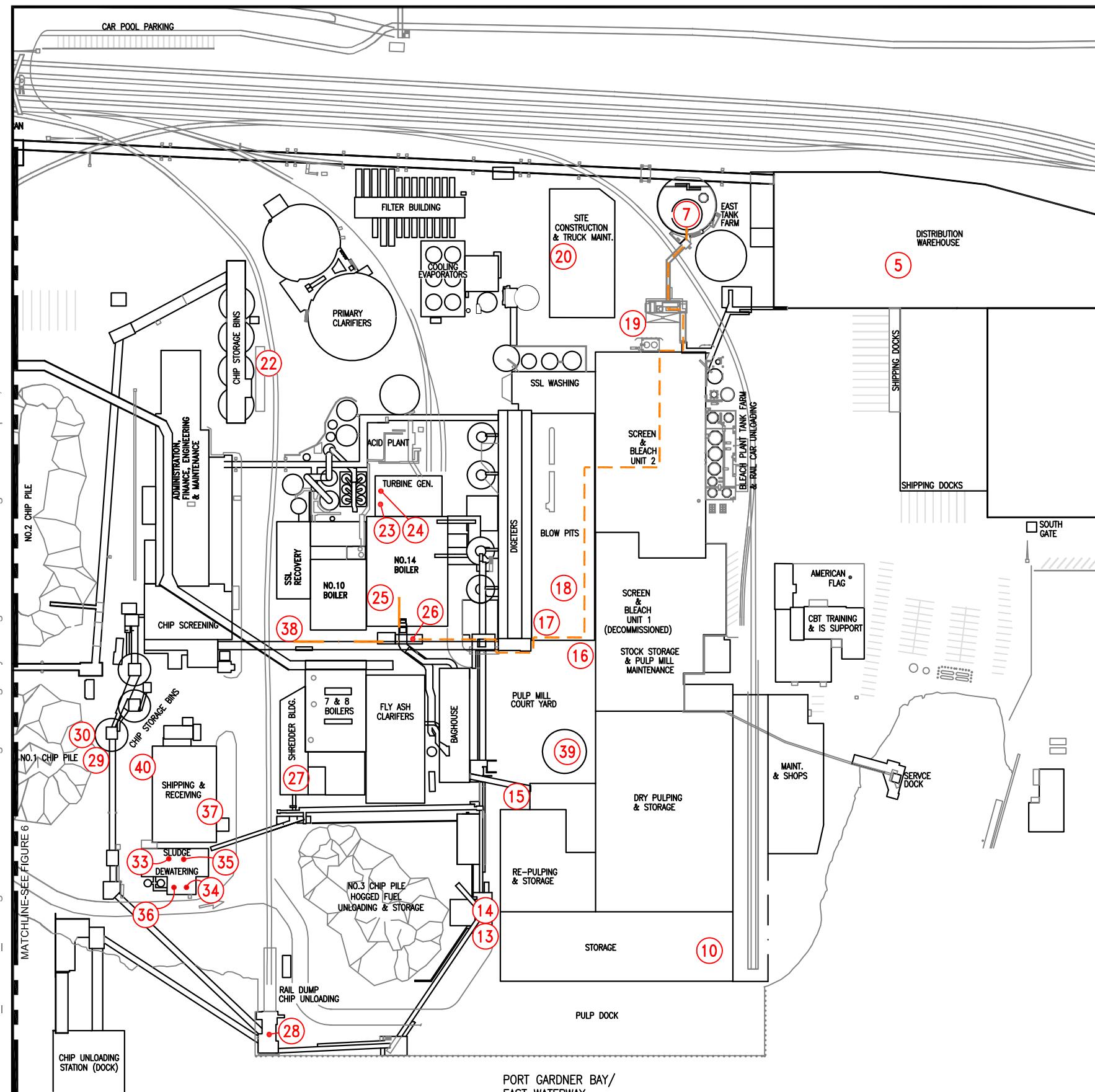






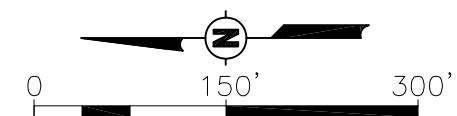






## **Oil Based Products Storage Locations Map - South**

Location ID	Location Description	Content	Storage Capacity
1	No Longer Used		
2	""		
3	""		
4	""		
5	Distribution Warehouse, No.1 Unitizers Oil System	Unitizers Hydraulic Oil System	80 gal.
5	Distribution Warehouse, No.2 Unitizers Oil System	Unitizers Hydraulic Oil System	80 gal.
6	""		
7	South of Warehouse Tank Farm	Fuel Oil No.2	250,000 gal.
8	""		
9	""		
10	Dry Room, Bale Press No.1	Hydraulic Oil System	132 gal.
10	Dry Room, Bale Press No.2	Hydraulic Oil System	132 gal.
11	""		
12	""		
13	Under Chip Conveyor near Heavy Equipment Shop	Drum Storage	55 gal. Drums
14	Stoker	Hydraulic Oil	500 gal.
15	Used Oil Room	Used Oil Tank	700 gal.
15	Used Oil Room	Used Oil Drum Storage	55 gal.
15	Used Oil Room	Used Oil Filter Bin	390 gal.
15	Used Oil Room	Used Oil Filter Trough	105 gal.
16	Pulp Mill - South East Corner (Court Yard)	Diesel - Emergency Generator	100 gal.
17	Central Lube Storage Room	Lubricating Oil	55 gal. Drums
18	Blow Pits, Air Compressor Room	Oil Drum Storage	55 gal. Drums
19	Pulp Mill - East (Across Roadway)	Decommissioned Diesel Tank - Empty	300 gal.
20	""		
21	""		
22	Chip Truck Dump - Inside	Hydraulic Oil	260 gal.
23	No.14 Boiler, 1st Floor - East	Lubricating Oil	2,500 gal.
24	No.14 Boiler, 1st Floor - East	Hydraulic Oil	500 gal.
25	No.14 Boiler, 1st Floor - (Central)	Hydraulic Oil	500 gal.
26	No.14 Boiler - West (Outside)	Fuel Oil No.2	20,000 gal.
27	Shredder Building - West	Hydraulic Oil	455 gal.
28	Rail Dump Hydraulic System	Hydraulic Oil	664 gal.
29	South of No.1 Chip Pile	Fuel Oil No.2	2,500 gal.
30	Bay View Mobile Service	Hydraulic Oil	250 gal.
30	Bay View Mobile Service	Engine Oil	250 gal.
30	Bay View Mobile Service	Transmission Oil	250 gal.
31	""		
32	""		
33	DeWatering Totes	Nalco 61505 / Core Shell 71301	275 gal. Totes
34	DeWatering Run	Nalco 61505 / Core Shell 71301	1,700 gal.
35	DeWatering Bulk	Nalco 61505 / Core Shell 71301	8,000 gal.
36	DeWatering Mix	Nalco 61505 / Core Shell 71301	1,700 gal.
37	Shipping & Receiving	Oil Drum Storage	55 gal. Drums
38	Under Conveyor (outside of No.10 Boiler)	Diesel Tank	500 gal.
39	Top of Blend Chest, Gear Box	Lubricating Oil	80 gal.
39	Courtyard next to Blend Chest	Used Oil	55 gal.
40	Paint Shed	Mineral Spirits	55 gal. Drums



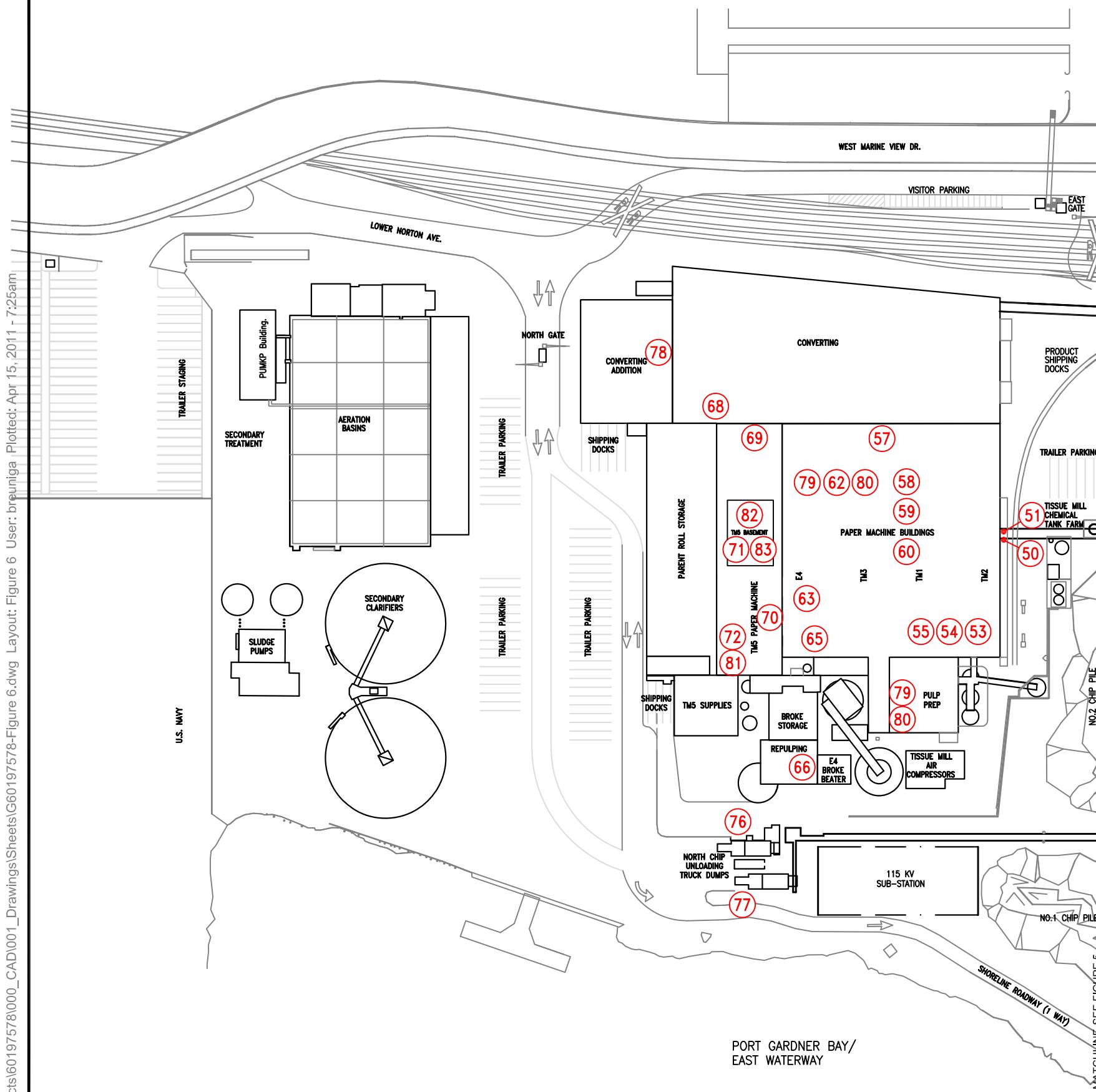
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KIMBERLY-CLARK  
EVERETT WASHINGTON

# OIL BASE PRODUCTS STORAGE LOCATIONS SOUTH MILL

N

- NOTE:

  - 1) DIESEL FUEL OIL PIPE LINE TO DAY TANK
  - 2) DIESEL FUEL OIL PIPED TO BOILER
  - 3) SOME DRUM STORAGE AREAS HAVE BEEN CONVERTED TO LUBE STATIONS.  
THESE LOCATIONS ARE NOW ILLUSTRATED ON THE LUBE STATION FIGURE.



Oil Based Products Storage Locations Map - North			
Location ID	Location Description	Content	Storage Capacity
50	Paper Machine Building. - South (Outside), Emergency Generator	Fuel Oil No. 2	400 gal.
51	Paper Machine Building. - South (Outside), Emergency Generator	Fuel Oil No. 2	400 gal.
52	No Longer Used		
53	Paper Machine No.2, 1st Fl. South West	Hydraulic Oil	90 gal.
54	Paper Machine No.1, 1st Fl. South West	Hydraulic Oil	90 gal.
55	Paper Machine No.1 & 2, 1st Fl. South West	Lube Oil	2,800 gal.
55	Paper Machine No.1 & 2, 1st Fl. South West	Lube Oil	2,800 gal.
55	Paper Machine No.1, 1st Fl. South West	Lube Oil	1,400 gal.
55	Paper Machine No.2, 1st Fl. South West	Lube Oil	1,400 gal.
57	Paper Machine Building, near TM5, North Central, Baler #1	Hydraulic Oil	132 gal.
57	Paper Machine Building, near TM5, North Central, Baler #2	Hydraulic Oil	132 gal.
58	Paper Machine No.3, 1st Fl. Central East	Hydraulic Oil	90 gal.
59	Paper Machine No.3, 1st Fl. Central East	Lube Oil	1,400 gal.
59	Paper Machine No.3, 1st Fl. Central East	Lube Oil	2,150 gal.
60	Paper Machine Building, 1st Fl., outside Paper Mill Oil House, TM1, spill supply closet empty.	Drum Storage	55 gal. Drums
61	"		
62	Paper Machine No.4, 1st Fl. North East	Hydraulic Oil	90 gal.
63	Paper Machine No.4, 1st Fl. North Central	Lube Oil	2,400 gal.
63	Paper Machine No.4, 1st Fl. North Central	Lube Oil	1,050 gal.
63	Paper Machine No.4, 1st Fl. North Central	Lube Oil	2,400 gal.
64	"		
65	Paper Machine Building. - North West, Simz	Hydraulic Oil	1050 gal.
66	Broke Storage & Repulping, South West, Baler Hydraulic System	Hydraulic Oil	235 gal.
67	"		
68	Converting Building, 4th Fl., North West, Shredder	Hydraulic Oil	455 gal.
69	Paper Machine No.5, East Wall, DRC Baler	Hydraulic Oil	235 gal.
70	Paper Machine No.5, Yankee Fan Lube System, 3rd Fl.	Lube Oil	80 gal.
71	Paper Machine No.5, Basement	Lube Oil	1,200 gal.
71	Paper Machine No.5, Basement	Hydraulic Oil	700 gal.
72	Paper Machine No.5, 1st Floor - North West, Roll Wrap Hydraulic	Hydraulic Oil	400 gal.
73	"		
74	"		
75	"		
76	Truck Dump, North East Unit	Hydraulic Oil	380 gal.
77	Truck Dump, North West Unit	Hydraulic Oil	380 gal.
78	Converting Building, 1st Fl., North Central, Columbia Palletizer	Hydraulic Oil	183 gal.
79	Paper Machine No.4, 1st Fl. Central, Vacuum Gear Box	Lube Oil	55 gal.
79	Paper Machine No.4, 1st Fl. Central, Vacuum Gear Box	Lube Oil	55 gal.
80	Paper Machine No.4, 1st Fl. Central, Water Jet Slitter	Hydraulic Oil	80 gal.
80	Paper Machine No.4, 1st Fl. Central, Water Jet Slitter	Hydraulic Oil	80 gal.
81	Paper Machine No.5, 2nd Fl. West, Vacuum Turbine	Lube Oil	284 gal.
82	Paper Machine No.5, Basement, Reel Loading Hydraulic	Hydraulic Oil	242 gal.
83	Paper Machine No.5, Basement, Diesel Motor	Diesel	60 gal.

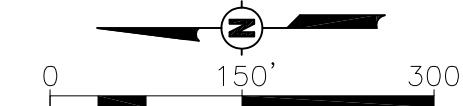
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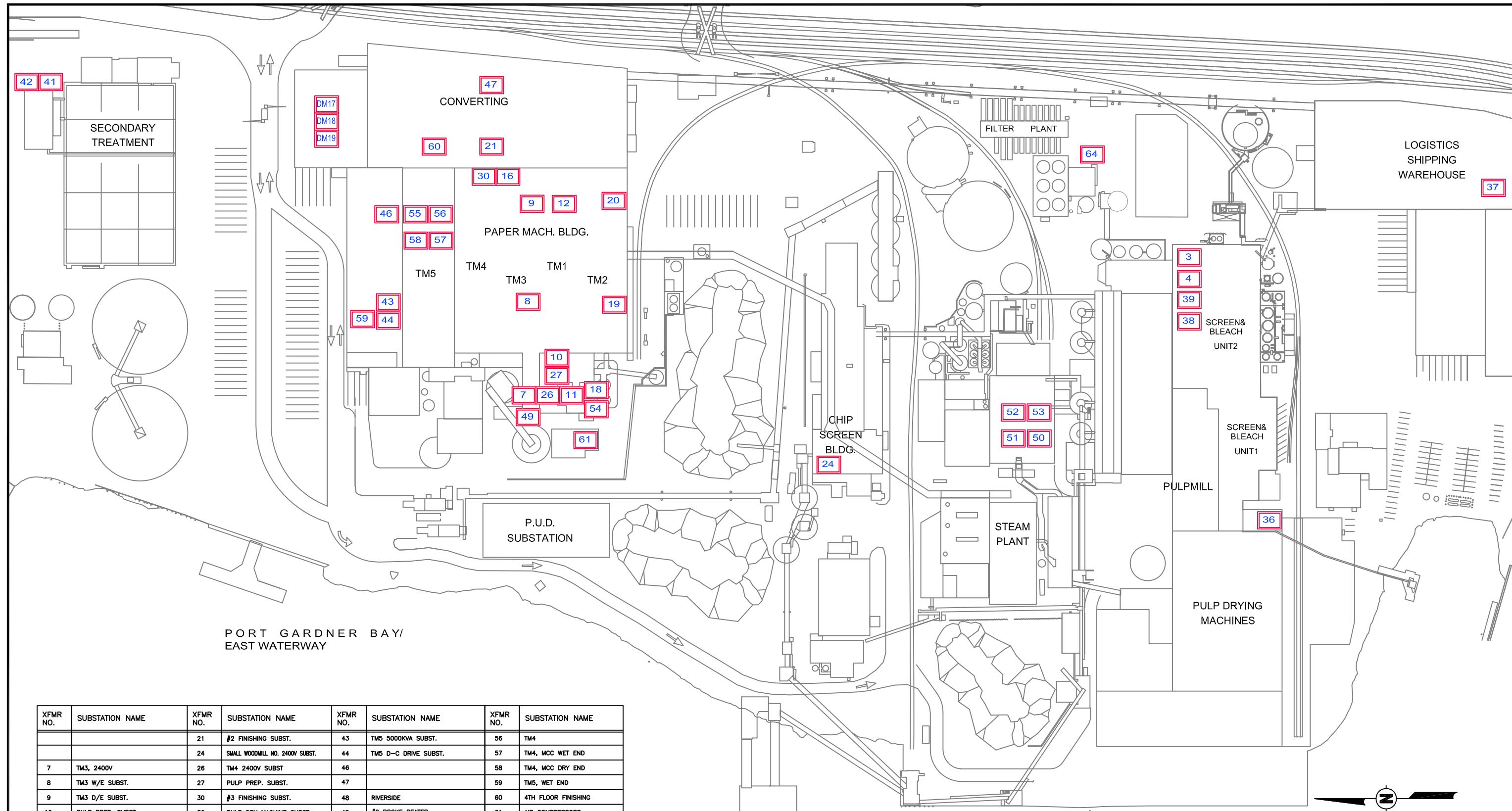
- 1) SOME DRUM STORAGE AREAS HAVE BEEN CONVERTED TO LUBE STATIONS.  
THESE LOCATIONS ARE NOW ILLUSTRATED ON THE LUBE STATION FIGURE.

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KIMBERLY-CLARK  
EVERETT, WASHINGTON

OIL BASE PRODUCTS  
STORAGE LOCATIONS  
NORTH MILL

AECOM





XFMR NO.	SUBSTATION NAME	XFMR NO.	SUBSTATION NAME	XFMR NO.	SUBSTATION NAME	XFMR NO.	SUBSTATION NAME
		21	#2 FINISHING SUBST.	43	TM5 5000KVA SUBST.	56	TM4
		24	SMALL WOODMILL NO. 2400V SUBST.	44	TM5 D-C DRIVE SUBST.	57	TM4, MCC WET END
7	TM3, 2400V	26	TM4 2400V SUBST	46		58	TM4, MCC DRY END
8	TM3 W/E SUBST.	27	PULP PREP. SUBST.	47		59	TM5, WET END
9	TM3 D/E SUBST.	30	#3 FINISHING SUBST.	48	RIVERSIDE	60	4TH FLOOR FINISHING
10	PULP PREP. SUBST.	36	PULP DRY MACHINE SUBST	49	#6 BROKE BEATER	61	AIR COMPRESSORS
11	TM1, 2400V	37	PAPER WHSE & SHIP. BLDG. SUBST.	50	#10 BOILER		
12	TM1 SUBST., WET END	38	UNIT 2 SSL WASHERS SUBST.	51	#14 BOILER		
16	TM5 FINISHING SUBST.	39	2ND FLOOR EAST SUBST.	52	#14 BOILER	64	FILTER PLANT
18	TM2 2400V SUBST			53	#10 BOILER		
19	TM2 W/E SUBST			54	TM4, 4160V	DM17	E4 ISOLATION TRANSFORMER
20	TM2 D/E SUBST	42	WASTE WATER TREAT. 2400V SUBST.	55	TM4	DM18	E4 ISOLATION TRANSFORMER
				56		DM19	E4 ISOLATION TRANSFORMER

LEGEND:

NON PCB SUBSTATION

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EVERETT, WASHINGTON

EVERETT MILL SUBSTATION LOCATIONS



## **APPENDIX B**

### **Photographs of Hazardous Waste Accumulation Unit**

## Hazardous Waste Accumulation Unit Inspection Photos

View of HWAU from the east.



View of HWAU from the south.



## Hazardous Waste Accumulation Unit Inspection Photos

West side of HWAU from the north.

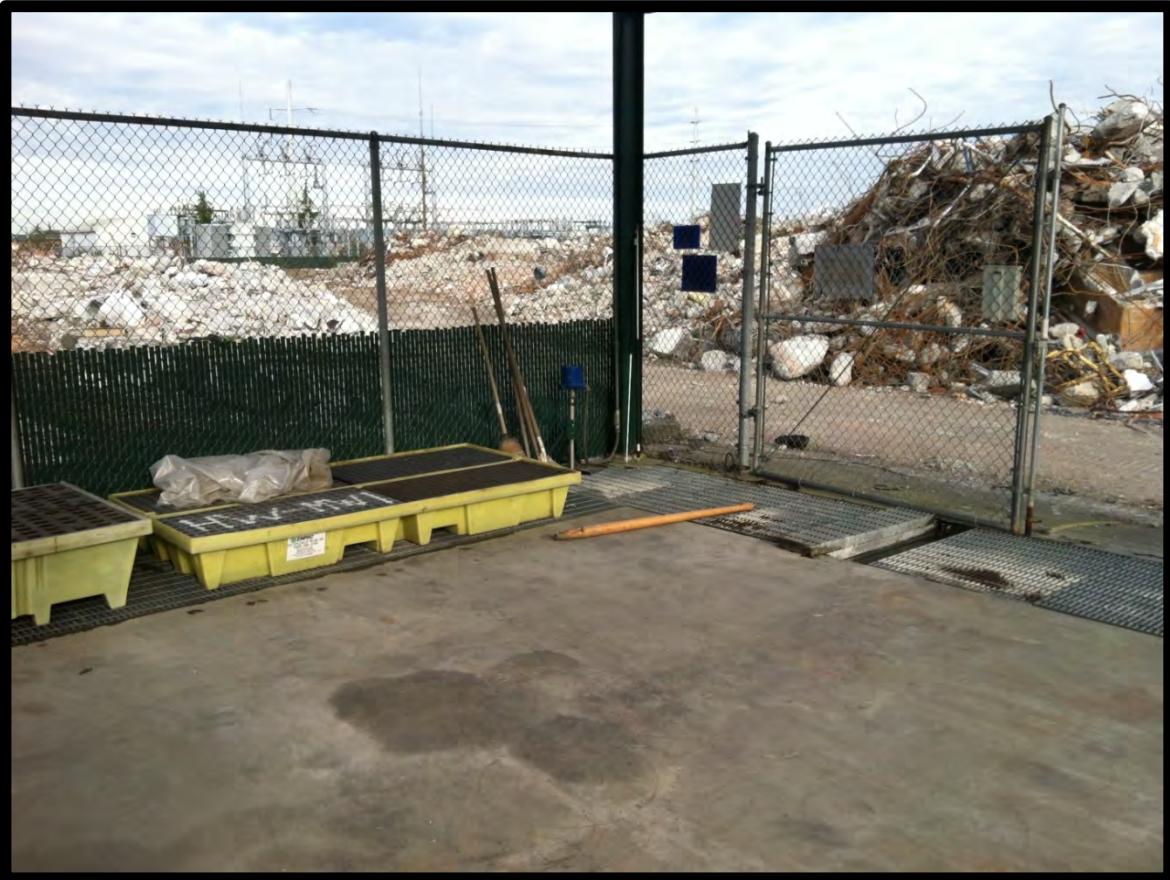


View of northeast corner of HWAU from the southwest.



## Hazardous Waste Accumulation Unit Inspection Photos

View of northwest corner HWAU from the southeast.



View of southeast corner of HWAU from the northwest.



## Hazardous Waste Accumulation Unit Inspection Photos

View of southwest corner of HWAU from the northeast.



Stain in northwest quadrant.



## Hazardous Waste Accumulation Unit Inspection Photos

Stain in northeast corner.



Typical rust-colored stain.

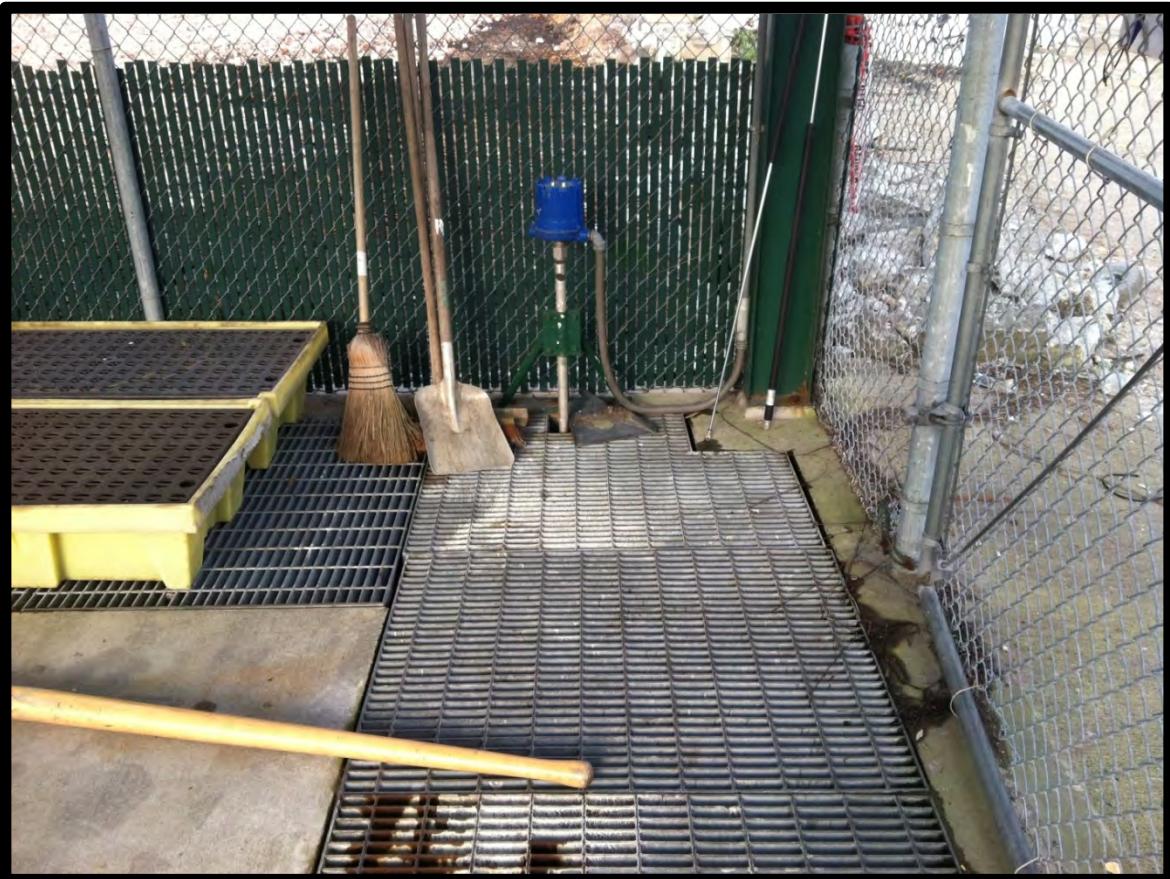


## Hazardous Waste Accumulation Unit Inspection Photos

Stain in north side.



Sump pump in northwest corner.



## **APPENDIX C**

**Data Validation Reports and  
Analytical Data Reports (on CD)**

# **Data Validation Report**

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**Kimberly Clark Everett Mill  
Hazardous Waste Accumulation Area Sampling and Analysis  
Bellingham, Washington**

*Prepared for:*

**Aspect Consulting LLC**  
401 Second Ave South, Suite 201  
Seattle, WA 98014

*Prepared by:*

**Pyron Environmental, Inc.**  
3530 32<sup>nd</sup> Way, NW  
Olympia, WA 98502

**May 6, 2013**

## ACRONYMS

<b>%D</b>	percent difference
<b>%R</b>	percent recovery
<b>CLP</b>	U.S. EPA Contract Laboratory Program
<b>COC</b>	chain-of-custody
<b>CVAAS</b>	Cold vapor atomic absorption spectrometer
<b>EPA</b>	U.S. Environmental Protection Agency
<b>GC/ECD</b>	gas chromatograph/electron capture detector
<b>GC/FID</b>	gas chromatograph/flame ionization detector
<b>GC/MS</b>	gas chromatograph/mass spectrometer
<b>ICP/AES</b>	inductively coupled plasma atomic emission spectrometer
<b>LCS</b>	laboratory control sample
<b>LCSD</b>	laboratory control sample duplicate
<b>MS</b>	matrix spike
<b>MSD</b>	matrix spike duplicate
<b>NFGs</b>	CLP National Functional Guidelines for Data Review (EPA 2008 – Organics; EPA 2010 – Inorganics)
<b>PCBs</b>	polychlorinated biphenyls
<b>QA/QC</b>	quality assurance/quality control
<b>RL</b>	reporting limit
<b>RPD</b>	relative percent difference
<b>SDG</b>	sample delivery group
<b>SVOCs</b>	semi-volatile organic compounds
<b>TPH</b>	Total petroleum hydrocarbons
<b>VOCs</b>	Volatile organic compounds

## INTRODUCTION

This report presents and discusses findings of the data validation performed on analytical data for samples collected during March 2013 for the referenced project. The laboratory reports reviewed herein were submitted by Analytical Resources, Inc. (ARI).

A summary (Level II) data review was performed on these laboratory reports. The review followed the procedures specified in USEPA CLP Functional Guidelines ([NFGs], EPA 2008 – Organics; EPA 2010 – Inorganics), with modifications to accommodate analytical method requirements. The numerical quality assurance/quality control (QA/QC) criteria applied to the review were based on the current performance-based control limits established by the laboratory (laboratory control limits).

The data review findings are discussed in each section pertinent to the QC parameter for each type of analysis. Qualified data with applied data qualifiers are summarized in the **Summary** section at the end of this report. Note that the data review was not requested on data associated with the water sample reported in this SDG. Samples and the associated analyses validated herein are summarized as follows:

Field Sample ID	Laboratory Sample ID	Sampling Date	Matrix	Analysis				
				VOCs	SVOCs	PCBs	TPH-Dx	TPH-G
S-1	WJ08A	03/26/13	Solid	X	X	X	X	X
S-2	WJ08B	03/26/13	Solid	X	X	X	X	X
S-3	WJ08C	03/26/13	Solid	X	X	X	X	X
S-4	WJ08D	03/26/13	Solid	X	X	X	X	X

**Notes:**

Metals - Arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver.

PCBs - Polychlorinated biphenyls

SVOCs - Semivolatile organic compounds

TPH-Dx - Diesel and motor oil range total petroleum hydrocarbon (TPH)

TPH-G - Gasoline range TPH.

VOCs - Volatile organic compounds

X - The analysis was requested and performed on the sample.

The analytical parameters requested for the samples, the respective analytical methods, and the analytical laboratories are summarized below:

Parameter	Analytical Method	Analytical Laboratory
Volatile Organic Compounds (VOCs)	SW846 Method 8260C	Analytical Resources, Inc. Tukwila, Washington
Semi-volatile Organic Compounds (SVOCs)	SW846 Method 8270D	
PCB Aroclors	SW846 Method 8082A	
TPH - Gasoline Range	NWTPH-Gx	
TPH - Diesel & Motor Oil Range	NWTPH-Dx	
Metals/Mercury	SW846 Methods 6010C/7471A	

**Notes:**

1. SW846 - USEPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, Third Edition, December 1996.
2. NWTPH Methods – Washington State Department of Ecology, Analytical Methods for Petroleum Hydrocarbons, Publication No. ECY 97-602, June 1997.

## DATA VALIDATION FINDINGS

### 1. VOCs by GC/MS (EPA Method SW8260C)

#### 1.1 Sample Management and Holding Time

Samples were received in the laboratory intact and in consistence with the accompanying chain-of-custody (COC) documentation. No anomalies were identified in relation to sample preservation, handling, and transport.

Solid samples should be extracted and analyzed within 14 days of collection. All samples were analyzed within the required holding time.

#### 1.2 Method Blank

A method blank was prepared and analyzed as required. Target compounds were not detected at or above the reporting limits (RLs) in the method blank.

#### 1.3 Laboratory Control Sample (LCS) and LCS Duplicate (LCSD)

LCS and LCSD were prepared and analyzed as required by the method. All percent recovery (%R) and relative percent difference (RPD) values either met the laboratory control criteria or the outlier had no adverse effects on data quality (i.e., biased-high recovery for a compound not detected in samples).

#### 1.4 Surrogate Spikes

Surrogate spikes were added to all samples as required by the method. All surrogate spike %R values were within the project control limits.

#### 1.5 Matrix Spike (MS) and MS Duplicate (MSD)

MS/MSD analyses were performed on a project sample in this SDG.

#### 1.6 Overall Assessment of VOCs Data Usability

The laboratory report case narrative stated that the continuing calibration verification percent difference (%D) value for acetone biased low (%D value was <-20%), and biased high for methylene chloride. Acetone and methylene chloride were detected in all samples; acetone and methylene chloride results for all samples were qualified (J) as estimated.

Based on the information submitted by the laboratory in the laboratory reports, VOCs data are acceptable for use, as qualified.

## 2. SVOCs by GC/MS (EPA Method SW8270D)

### 2.1 Sample Management and Holding Times

No anomalies were identified in relation to sample preservation, handling, and transport, as discussed in Section 1.1.

Solid samples should be extracted within 14 days of collection, and extracts should be analyzed within 40 days of extraction. All samples were extracted and analyzed within the required holding times.

### 2.2 Method Blanks

A method blank was prepared and analyzed as required by the method. Target compounds were not detected at or above RLs in the method blank.

### 2.3 Surrogate Spikes

Surrogate spikes were added to all samples as required by the method. The %R values for three of the four acid surrogate spikes (2-fluophenol, 2,4,6-tribromophenol, and 2-chlorophenol-d<sub>4</sub>) were less than the lower detection limits in all samples, and the %R for the fourth surrogate spike, phenol-d<sub>5</sub>, was also less than the lower control limit in sample S-3. The primary composition of these samples was concrete, which might pose severe interference and suppress the recovery of acid compounds, as indicated by the low recovery of acid surrogate spikes. Acid SVOCs were not detected in any of the samples; the results for these compounds were qualified (UJ) as estimated in all samples (see **SUMMARY, Table I** for individual affected compounds).

### 2.4 Matrix Spike and Matrix Spike Duplicate (MS/MSD)

MS/MSD analyses were performed on sample S-3. All RPD values met the control criteria. The %R values for most of the acid compounds were less than lower control limits due to matrix interference (see Section 2.3); No data qualifiers were assigned in addition to those already identified in Section 2.3, except that benzoic acid, 2,4-dinotrophenol, and 4,6-dinitro-2-methylphenol were not recovered or the %R value was <10% in the MS/MSD analyses. The much lower recovery of these compounds may indicate a more severe suppression on compound recovery resulted from the sample matrix. Results for these compounds were qualified (R) and rejected for all samples.

### 2.5 Laboratory Control Sample (LCS)

LCS analyses were performed as required by the method. All %R values met the project control criteria, except for the following:

LCS ID	Compound	%R	Control Limit	Affected Sample	Data Qualifier
LCS-041213	Hexachloroethane	41.6%	43-104%	S-1 S-2 S-3 S-4	UJ

## 2.6 Overall Assessment of SVOCs Data Usability

The laboratory report case narrative stated that the continuing calibration verification %D value for 4-nitroaniline biased low (%D value was <-20%). 4-Nitroaniline was not detected in any of the samples; the results for all samples were qualified (UJ) as estimated.

Phenol was detected at concentrations slightly above their RLs in samples S-1, S-3, and S-4. These detections did not meet the ion ratio criteria specified in the method. Phenol results were qualified (U) as non-detected at the reported values in all samples.

Note that all samples required dilution analyses because the isophorone concentrations exceeded the instrument calibration range. Isophorone results for all samples were to be reported from the dilution analysis; results for all other SVOCs were to be reported from the initial analyses in favor of the lower detection limits.

Based on the information submitted in the laboratory reports, SVOCs data are acceptable for use, as qualified.

## 3. PCB Aroclors by GC/EDC (EPA Method SW8082A)

### 3.1 Sample Management and Holding Times

No anomalies were identified in relation to sample preservation, handling, and transport, as discussed in Section 1.1.

Solid samples should be extracted within 14 days of collection, and extracts should be analyzed within 40 days of extraction. All samples were extracted and analyzed within the required holding times.

### 3.2 Method Blank

A method blank was prepared and analyzed as required by the method. PCB Aroclors were not detected at or above the RLs in the method blank.

### **3.3 Surrogate Spikes**

Surrogate spikes were added to all samples as required by the method. All surrogate spike %R values were within the laboratory control limits.

### **3.4 Laboratory Control Sample (LCS)**

LCS analyses were performed as required by the method. All %R values were within the laboratory control limits.

### **3.5 Matrix Spike (MS) and MS Duplicate (MSD)**

MS/MSD analyses were performed on sample S-2. All %R and RPD values met the laboratory control criteria.

### **3.6 Overall Assessment of PCB Aroclors Data Usability**

Based on the information submitted by the laboratory, PCB Aroclor data are acceptable for use.

## **4. TPH-Gasoline by GC/FID (NWTPH-Gx)**

### **4.1 Sample Management and Holding Times**

No anomalies were identified in relation to sample preservation, handling, and transport.

Solid samples should be extracted and analyzed within 14 days of collection. All samples were analyzed within the required holding time.

### **4.2 Method Blanks**

A method blank was prepared and analyzed as required by the method. Target compounds were not detected at or above the RLs in the method blank.

### **4.3 Surrogate Spikes**

Surrogate spikes were added to all samples as required by the method. All surrogate spike %R values were within the laboratory control limits.

### **4.4 Matrix Spike (MS) and MS Duplicate (MSD)**

MS/MSD analyses were not performed on a project sample in this SDG.

#### **4.5 Laboratory Control Sample (LCS) and LCS Duplicate (LCSD)**

LCS and LCSD analyses were performed as required by the method. The %R and RPD values met the laboratory control criteria.

#### **4.6 Overall Assessment of TPH-G Data Usability**

Based on the information submitted in the laboratory reports, TPH-G and BTEX data are acceptable for use.

### **5. TPH-Diesel & Motor Oil by GC/FID (Methods NWTPH-Dx)**

#### **5.1 Sample Management and Holding Times**

No anomalies were identified in relation to sample preservation, handling, and transport.

Solid samples should be extracted within 14 days of collection, and extracts should be analyzed within 40 days of extraction. All samples were extracted and analyzed within the required holding times.

#### **5.2 Method Blank**

A method blank was prepared and analyzed as required by the method. Target compounds were not detected at or above the RLs in the method blank.

#### **5.3 Surrogate Spikes**

Surrogate spikes were added to all samples as required by the method. All surrogate spike %R values were within the laboratory control limits.

#### **5.4 Matrix Spike (MS) and MS Duplicate (MSD)**

MS and MSD analyses were performed on sample S-4 for TPH-Diesel. The %R and RPD values met the laboratory control criteria.

#### **5.5 Laboratory Control Sample (LCS)**

LCS analyses were performed as required by the method. The %R values met the laboratory control criteria.

## **5.6 Target Compound Identification**

TPH-Diesel and TPH-Motor Oil were reported at concentrations above their RLs in sample S-1. The chromatographic pattern of the reported TPH resembled motor oil based on the sample chromatogram.

## **5.7 Overall Assessment of TPH-Diesel and Motor Oil Data Usability**

Based on the information submitted in the laboratory reports, TPH-Diesel and TPH-Motor Oil data are acceptable for use.

# **6. Metals by ICP/AES and CVAAS (EPA Methods SW6010C and 7471A)**

## **6.1 Sample Management and Holding Times**

No anomalies were identified in relation to sample preservation, handling, and transport.,

Solid samples should be analyzed within 180 days for ICP/AES metals and 28 days for mercury. Samples were analyzed within the required holding times.

## **6.2 Method Blanks**

Method blanks were prepared and analyzed as required. Target analytes were not detected at or above the RLs in the method blanks.

## **6.3 Laboratory Control Sample (LCS)**

LCS analyses were performed as required by the method. All %R values met the laboratory control criteria.

## **6.4 Matrix Spike (MS)**

MS analyses were performed on sample S-4. All %R values met the laboratory control criteria.

## **6.5 Laboratory Duplicate**

Laboratory duplicate analyses were performed on sample S-4. All RPD or concentration difference values met the laboratory control criteria.

## **6.6 Overall Assessment of Metals Data Usability**

Based on the information submitted in the laboratory reports, metals data are acceptable for use.

## SUMMARY

Data qualification is summarized as follows:

Laboratory ID	Sample ID	Analyte	Data Qualifier	Reason	Report Section
WJ08A WJ08B WJ08C WJ08D	S-1 S-2 S-3 S-4	Methylene Chloride	J	Continuing calibration verification %D value biased high.	1.6
WJ08A WJ08B WJ08C WJ08D	S-1 S-2 S-3 S-4	Acetone	J	Continuing calibration verification %D value biased low.	1.6
WJ08A WJ08B WJ08C WJ08D	S-1 S-2 S-3 S-4	4-Nitrophenol 2,4-Dimethylphenol 4-Methylphenol Phenol <sup>(A)</sup> 2,4-Dichlorophenol 2,4-Dinitrophenol 4,6-Dinitro-2-methylphenol 4-Chloro-3-methylphenol Benzoic acid Pentachlorophenol 2,4,6-Trichlorophenol 2-Nitrophenol 2-Methylphenol 2-Chlorophenol 2,4,5-Trichlorophenol 4-Nitrophenol 2,4-Dimethylphenol 4-Methylphenol Phenol 2,4-Dichlorophenol 2,4-Dinitrophenol 4,6-Dinitro-2-methylphenol 4-Chloro-3-methylphenol Benzoic acid Pentachlorophenol 2,4,6-Trichlorophenol 2-Nitrophenol 2-Methylphenol 2-Chlorophenol 2,4,5-Trichlorophenol	UJ	Surrogate spike %R value was less than the lower control limit due to matrix interference.	2.3
WJ08A WJ08B WJ08C WJ08D	S-1 S-2 S-3 S-4	Benzoic acid, 2,4-Dinitrophenol 4,6-Dinitro-2-methylphenol	R	MS/MSD was not recovered or %R value was <10%.	2.4

Laboratory ID	Sample ID	Analyte	Data Qualifier	Reason	Report Section
WJ08A	S-1				
WJ08B	S-2				
WJ08C	S-3	Hexachloroethane			
WJ08D	S-4				
WJ08A	S-1				
WJ08B	S-2				
WJ08C	S-3	4-Nitroaniline			
WJ08D	S-4				
WJ08A	S-1				
WJ08C	S-3	Phenol			
WJ08D	S-4				
WJ08A	S-1				
WJ08B	S-2	Isophorone (Initial Analysis)			
WJ08C	S-3				
WJ08D	S-4				
WJ08A	S-1				
WJ08B	S-2	All SVOCs except Isophorone (Dilution Analysis)			
WJ08C	S-3				
WJ08D	S-4				

**Note:** <sup>(A)</sup> – This compound was qualified (UJ) for sample S-2 only. All other samples were qualified (U) due to ion ratio outlier.

Data Qualifiers are defined as follows:

Data Qualifier	Definition
DNR	Do not report. The result for this analyte was to be reported from an alternative analysis.
R	The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
J	The analyte was detected above the reported quantitation limit, and the reported concentration was an estimated value.
U	The analyte was analyzed for, but was considered not detected at the reporting limit or reported value.
UJ	The analyte was analyzed for, and the associated quantitation limit was an estimated value.

Approved By:



Mingta Lin

Date: 5/6/2013

## **REFERENCES**

- USEPA *Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Office of Superfund Remediation and Technical Innovation, U.S. Environmental Protection Agency, January 2010, USEPA 540/R-10/011
- USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, Office of Superfund Remediation and Technical Innovation, U.S. Environmental Protection Agency, June 2008, USEPA-540-R-08-01.
- USEPA *Test Methods for Evaluating Solid Waste (SW-846). Third Edition and Revised Update IIIA*. Office of Solid Waste and Emergency Response, Washington, D.C. April 1998.
- Ecology (Washington State Department of) *Analytical Methods for Petroleum Hydrocarbons*. Publication No. ECY 97-602. June 1997.

# **Data Validation Report**

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**Kimberly Clark Everett Mill  
Hazardous Waste Accumulation Area Sampling and Analysis  
Bellingham, Washington**

**June 2013 Sampling**

*Prepared for:*

**Aspect Consulting LLC**  
401 Second Ave South, Suite 201  
Seattle, WA 98014

*Prepared by:*

**Pyron Environmental, Inc.**  
3530 32<sup>nd</sup> Way, NW  
Olympia, WA 98502

**July 24, 2013**

## ACRONYMS

<b>%D</b>	percent difference
<b>%R</b>	percent recovery
<b>CLP</b>	U.S. EPA Contract Laboratory Program
<b>COC</b>	chain-of-custody
<b>CVAAS</b>	Cold vapor atomic absorption spectrometer
<b>EPA</b>	U.S. Environmental Protection Agency
<b>F&amp;BI</b>	Friedman & Bruya, Inc., Seattle, Washington
<b>GC/ECD</b>	gas chromatograph/electron capture detector
<b>GC/FID</b>	gas chromatograph/flame ionization detector
<b>GC/MS</b>	gas chromatograph/mass spectrometer
<b>ICP/MS</b>	inductively coupled plasma/mass spectrometer
<b>LCS</b>	laboratory control sample
<b>LCSD</b>	laboratory control sample duplicate
<b>MS</b>	matrix spike
<b>MSD</b>	matrix spike duplicate
<b>NFGs</b>	CLP National Functional Guidelines for Data Review (EPA 2008 – Organics; EPA 2010 – Inorganics)
<b>PCBs</b>	polychlorinated biphenyls
<b>QA/QC</b>	quality assurance/quality control
<b>RL</b>	reporting limit
<b>RPD</b>	relative percent difference
<b>SDG</b>	sample delivery group
<b>SVOCs</b>	semi-volatile organic compounds
<b>TPH</b>	Total petroleum hydrocarbons
<b>VOCs</b>	Volatile organic compounds

## INTRODUCTION

This report presents and discusses findings of the data validation performed on analytical data for samples collected during June 2013 for the referenced project. The laboratory report reviewed herein was submitted by Friedman & Bruya, Inc. (F&BI).

A summary (Level II) data review was performed on these laboratory reports. The review followed the procedures specified in USEPA CLP Functional Guidelines ([NFGs], EPA 2008 – Organics; EPA 2010 – Inorganics), with modifications to accommodate analytical method requirements. The numerical quality assurance/quality control (QA/QC) criteria applied to the review were based on the current performance-based control limits established by the laboratory (laboratory control limits).

The data review findings are discussed in each section pertinent to the QC parameter for each type of analysis. Qualified data with applied data qualifiers are summarized in the **Summary** section at the end of this report. Note that the data review was not requested on data associated with the water sample reported in this SDG. Samples and the associated analyses validated herein are summarized as follows:

Field Sample ID	Laboratory Sample ID	Sampling Date	Matrix	Analysis					
				VOCs	SVOCs	PCBs	TPH-Dx	TPH-G	Metals
HWC-1S	306203-01	06/12/13	Soil	X	X	X	X	X	X
HWC-1D	306203-02	06/12/13	Soil	X	X	X	X	X	X
HWC-2S	306203-03	06/12/13	Soil	X	X	X	X	X	X
HWC-2D	306203-04	06/12/13	Soil	X	X	X	X	X	X
HWC-3S	306203-05	06/12/13	Soil	X	X	X	X	X	X
HWC-3D	306203-06	06/12/13	Soil	X	X	X	X	X	X
HWC-4S	306203-07	06/12/13	Soil	X	X	X	X	X	X
HWC-4D	306203-08	06/12/13	Soil	X	X	X	X	X	X

**Notes:**

Metals - Arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver.

PCBs - Polychlorinated biphenyls

SVOCs - Semivolatile organic compounds

TPH-Dx - Diesel and motor oil range total petroleum hydrocarbon (TPH)

TPH-G - Gasoline range TPH.

VOCs - Volatile organic compounds

X - The analysis was requested and performed on the sample.

The analytical parameters requested for the samples, the respective analytical methods, and the analytical laboratories are summarized below:

Parameter	Analytical Method	Analytical Laboratory
Volatile Organic Compounds (VOCs)	SW846 Method 8260C	Friedman & Bruya, Inc. Seattle, Washington
Semi-volatile Organic Compounds (SVOCs)	SW846 Method 8270D	
PCB Aroclors	SW846 Method 8082A	
TPH - Gasoline Range	NWTPH-Gx	
TPH - Diesel & Motor Oil Range	NWTPH-Dx	
Metals/Mercury	EPA Method 200.8/SW846 Method 7471A	

**Notes:**

1. SW846 - USEPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, Third Edition, December 1996.
2. NWTPH Methods – Washington State Department of Ecology, Analytical Methods for Petroleum Hydrocarbons, Publication No. ECY 97-602, June 1997.
3. EPA Methods - USEPA Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1983 Revision.

## DATA VALIDATION FINDINGS

### 1. VOCs by GC/MS (EPA Method SW8260C)

#### 1.1 Sample Management and Holding Time

Samples were received in the laboratory intact and in consistence with the accompanying chain-of-custody (COC) documentation. No anomalies were identified in relation to sample handling and transport.

All soil samples were not collected and preserved as required by SW846 Method 5035; VOCs results for all soil samples were qualified (J) for detections and (UJ) for non-detects as estimated.

Soil samples should be extracted and analyzed within 14 days of collection. All samples were analyzed within the required holding time.

#### 1.2 Method Blank

A method blank was prepared and analyzed as required. Target compounds were not detected at or above the reporting limits (RLs) in the method blank. Methylene chloride was detected in sample HWC-4D. The instrument raw data indicated that this compound was present in the method blank and all other soil samples in this SDG at levels less than RLs but comparable to that of sample HWC-4D. The methylene chloride result in sample HWC-4D was qualified (U) as non-detected at the reported value.

#### 1.3 Laboratory Control Sample (LCS)

LCS analysis was performed as required by the method. All percent recovery (%R) values met the laboratory control criteria.

#### 1.4 Surrogate Spikes

Surrogate spikes were added to all samples as required by the method. All surrogate spike %R values were within the project control limits.

#### 1.5 Matrix Spike (MS) and MS Duplicate (MSD)

MS/MSD analyses were performed on a batch QC sample in this SDG. The %R and relative percent difference (RPD) values either met the laboratory control criteria, or the outlier had no effects on data quality (*e.g.*, biased-high RPD value for a compound not detected in samples).

## **1.6 Overall Assessment of VOCs Data Usability**

The laboratory report case narrative stated that the continuing calibration verification percent difference (%D) value for hexachlorobutadiene biased low (%D value was <-20%). Hexachlorobutadiene was not detected in any of the field samples; hexachlorobutadiene results for all samples were qualified (UJ) as estimated.

Based on the information submitted by the laboratory in the laboratory reports, VOCs data are acceptable for use, as qualified.

## **2. SVOCs by GC/MS (EPA Method SW8270D)**

### **2.1 Sample Management and Holding Times**

No anomalies were identified in relation to sample preservation, handling, and transport, as discussed in Section 1.1.

Soil samples should be extracted within 14 days of collection, and extracts should be analyzed within 40 days of extraction. All samples were extracted and analyzed within the required holding times.

### **2.2 Method Blanks**

A method blank was prepared and analyzed as required by the method. Target compounds were not detected at or above RLs in the method blank.

### **2.3 Surrogate Spikes**

Surrogate spikes were added to all samples as required by the method. The %R values met the laboratory control criteria.

### **2.4 Matrix Spike and Matrix Spike Duplicate (MS/MSD)**

MS/MSD analyses were performed on a batch QC sample in this SDG. The %R and RPD values either met the laboratory control criteria, or the outlier had no effects on data quality (e.g., biased-high RPD value for a compound not detected in samples).

### **2.5 Laboratory Control Sample (LCS) and LCS Duplicate (LCSD)**

LCS analyses were performed as required by the method. All %R and RPD values met the project control criteria.

## **2.6 Overall Assessment of SVOCs Data Usability**

Based on the information submitted in the laboratory reports, SVOCs data are acceptable for use.

## **3. PCB Aroclors by GC/EDC (EPA Method SW8082A)**

### **3.1 Sample Management and Holding Times**

No anomalies were identified in relation to sample preservation, handling, and transport, as discussed in Section 1.1.

Soil samples should be extracted within 14 days of collection, and extracts should be analyzed within 40 days of extraction. All samples were extracted and analyzed within the required holding times.

### **3.2 Method Blank**

A method blank was prepared and analyzed as required by the method. PCB Aroclors were not detected at or above the RLs in the method blank.

### **3.3 Surrogate Spikes**

Surrogate spikes were added to all samples as required by the method. All surrogate spike %R values were within the laboratory control limits.

### **3.4 Laboratory Control Sample (LCS)**

LCS analyses were performed as required by the method. All %R values were within the laboratory control limits.

### **3.5 Matrix Spike (MS) and MS Duplicate (MSD)**

MS/MSD analyses were performed on sample HWC-1D. All %R and RPD values met the laboratory control criteria.

### **3.6 Overall Assessment of PCB Aroclors Data Usability**

Based on the information submitted by the laboratory, PCB Aroclor data are acceptable for use.

#### **4. TPH-Gasoline by GC/FID (Method NWTPH-Gx)**

##### **4.1 Sample Management and Holding Times**

No anomalies were identified in relation to sample handling and transport.

All soil samples were not collected and preserved as required by SW846 Method 5035 (specified in Method NWTPH-Gx); TPH-Gasoline was not detected in any of the samples; results for all soil samples were qualified (UJ) as estimated.

Solid samples should be extracted and analyzed within 14 days of collection. All samples were analyzed within the required holding time.

##### **4.2 Method Blanks**

A method blank was prepared and analyzed as required by the method. Target compounds were not detected at or above the RLs in the method blank.

##### **4.3 Surrogate Spikes**

Surrogate spikes were added to all samples as required by the method. All surrogate spike %R values were within the laboratory control limits.

##### **4.4 Laboratory Duplicate Analysis**

Laboratory duplicate analyses were performed on sample HWC-1S. TPH-Gasoline was not detected in either analysis; the analytical precision met the laboratory control criterion (concentration difference <RL).

##### **4.5 Laboratory Control Sample (LCS)**

LCS analysis was performed as required by the method. The %R value met the laboratory control criteria.

##### **4.6 Overall Assessment of TPH-Gasoline Data Usability**

Based on the information submitted in the laboratory reports, TPH-G and BTEX data are acceptable for use as qualified.

## 5. TPH-Diesel & Motor Oil by GC/FID (Method NWTPH-Dx)

### 5.1 Sample Management and Holding Times

No anomalies were identified in relation to sample preservation, handling, and transport.

Soil samples should be extracted within 14 days of collection, and extracts should be analyzed within 40 days of extraction. All samples were extracted and analyzed within the required holding times.

### 5.2 Method Blank

A method blank was prepared and analyzed as required by the method. Target compounds were not detected at or above the RLs in the method blank.

### 5.3 Surrogate Spikes

Surrogate spikes were added to all samples as required by the method. All surrogate spike %R values were within the laboratory control limits.

### 5.4 Matrix Spike (MS) and MS Duplicate (MSD)

MS and MSD analyses were performed on sample HWC-1D for TPH-Diesel and TPH-Motor Oil in combination (TPH-Diesel extended). The %R and RPD values met the laboratory control criteria.

### 5.5 Laboratory Control Sample (LCS)

LCS analyses were performed as required by the method. The %R values met the laboratory control criteria.

### 5.6 Overall Assessment of TPH-Diesel and Motor Oil Data Usability

Based on the information submitted in the laboratory reports, TPH-Diesel and TPH-Motor Oil data are acceptable for use.

## 6. Metals by ICP/MS and CVAAS (EPA Method 200.8 and SW846 Method 7471A)

### 6.1 Sample Management and Holding Times

No anomalies were identified in relation to sample preservation, handling, and transport.,

Solid samples should be analyzed within 180 days for metals analyzed with ICP/MS and 28 days for mercury. Samples were analyzed within the required holding times.

## **6.2 Method Blanks**

Method blanks were prepared and analyzed as required. Target analytes were not detected at or above the RLs in the method blanks.

## **6.3 Laboratory Control Sample (LCS)**

LCS analyses were performed as required by the method. All %R values met the laboratory control criteria.

## **6.4 Matrix Spike (MS) and MS Duplicate (MSD)**

MS and MSD analyses were performed on a batch QC sample. All %R values met the laboratory control criteria.

## **6.5 Internal Standards**

Internal standards were added to all field and QC samples as required by the method. All %R values met the method control criteria (60-125%).

## **6.6 Overall Assessment of Metals Data Usability**

Based on the information submitted in the laboratory reports, metals data are acceptable for use.

## SUMMARY

Data qualification is summarized as follows:

Laboratory ID	Sample ID	Analyte	Data Qualifier	Reason	Report Section
306203-01	HWC-1S				
306203-02	HWC-1D				
306203-03	HWC-2S				
306203-04	HWC-2D				
306203-05	HWC-3S	All VOCs	J/UJ	Samples were not preserved as required by SW846 Method 5035.	1.1
306203-06	HWC-3D				
306203-07	HWC-4S				
306203-08	HWC-4D				
306203-08	HWC-4D	Methylene Chloride	U	The detection was a result of laboratory contamination.	1.2
306203-01	HWC-1S				
306203-02	HWC-1D				
306203-03	HWC-2S				
306203-04	HWC-2D				
306203-05	HWC-3S	Hexachlorobutadiene	UJ	The CCV %D value was >20% (low bias).	1.6
306203-06	HWC-3D				
306203-07	HWC-4S				
306203-08	HWC-4D				
306203-01	HWC-1S				
306203-02	HWC-1D				
306203-03	HWC-2S				
306203-04	HWC-2D				
306203-05	HWC-3S	TPH-Gasoline	UJ	Samples were not preserved as required by SW846 Method 5035.	4.1
306203-06	HWC-3D				
306203-07	HWC-4S				
306203-08	HWC-4D				

**Note:** J/UJ – The detections were qualified (J) and non-detects were qualified (UJ).

Data Qualifiers are defined as follows:

Data Qualifier	Definition
J	The analyte was detected above the reported quantitation limit, and the reported concentration was an estimated value.
U	The analyte was analyzed for, but was considered not detected at the reporting limit or reported value.
UJ	The analyte was analyzed for, and the associated quantitation limit was an estimated value.

Approved By:



Mingta Lin

Date:

7/24/2013

## **REFERENCES**

- USEPA *Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Office of Superfund Remediation and Technical Innovation, U.S. Environmental Protection Agency, January 2010, USEPA 540/R-10/011
- USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, Office of Superfund Remediation and Technical Innovation, U.S. Environmental Protection Agency, June 2008, USEPA-540-R-08-01.
- USEPA *Test Methods for Evaluating Solid Waste (SW-846). Third Edition and Revised Update IIIA*. Office of Solid Waste and Emergency Response, Washington, D.C. April 1998.
- USEPA *Methods for Chemical Analysis of Water and Wastes*, EPA-600/4-79-020, March 1983 and updates.
- Ecology (Washington State Department of) *Analytical Methods for Petroleum Hydrocarbons*. Publication No. ECY 97-602. June 1997.



**Analytical Resources, Incorporated**  
Analytical Chemists and Consultants

April 17, 2013

Scott Kindred  
Aspect Consulting  
401 - 2<sup>nd</sup> Avenue, Suite 201  
Seattle, WA 98104

**RE: Kimberly Clark Haz Waste Cage**  
**ARI Job: WJ08**

Dear Scott:

Please find enclosed the Chain of Custody record (COC), sample receipt documentation, and the final results for samples from the project referenced above. Analytical Resources, Inc. accepted four concrete samples and one water sample on March 26, 2013. For further details regarding sample receipt, please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for VOCs, SVOCs, PCBs, NWTPH-Dx, NWTPH-Gx, and RCRA Metals, as requested.

The VOC concrete continuing calibration fell outside the 20% control limit low for Acetone, and was out high for Methylene Chloride and Iodomethane. All detected results associated with this continuing calibration have been flagged with a "Q" qualifier. No further corrective action was taken.

The VOC LCS and LCSD percent recoveries of Acetone, 2-Butanone, and Acrylonitrile were outside the control limits high for **LCS-040313A**. All other percent recoveries were within control limits. No corrective action was taken.

The SVOC concrete continuing calibration fell outside the 20% control limit low for 4-Nitroaniline. All detected results associated with this continuing calibration have been flagged with a "Q" qualifier. No further corrective action was taken.

Several SVOC surrogate percent recoveries fell outside control limits low for the concrete samples due to matrix interferences. The samples were re-extracted and re-analyzed with comparable results. No further corrective action was taken.

The SVOC LCS percent recovery of Hexachloroethane fell outside the control limits low for **LCS-041213**. All other percent recoveries were within control limits. No corrective action was taken.



**Analytical Resources, Incorporated**  
Analytical Chemists and Consultants

The SVOC LCS and LCSD percent recoveries of 4-Chloroaniline and 3-Nitroaniline were outside the control limits high for **LCS-040113**. All other percent recoveries were within control limits. No corrective action was taken.

Several SVOC matrix spike and matrix spike duplicate percent recoveries were outside advisory control limits with wide RPDs for sample **S-3**. No corrective action is required for matrix QC.

An electronic copy of this report as well as all supporting raw data will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Sincerely,

**ANALYTICAL RESOURCES, INC.**

Cheronne Oreiro  
Project Manager  
(206) 695-6214  
[cheronneo@arilabs.com](mailto:cheronneo@arilabs.com)

cc: eFile WJ08

Enclosures

## **Chain of Custody Record & Laboratory Analysis Request**

Comments/Special Instructions		Turn-around Requested:		Page: 1 of		Analysis Requested		Notes/Comments				
ARI Assigned Number: W08	Client Company: Aspett Consulting	Phone: 506-838-6589	Client Contact: Scott Kindred	Date: 3/26	Ice Present? No.	Sample ID	Date	Time	Matrix	No. Containers		
Client Project Name: Kimberly Clark Ita Z Waste Cage	Samplers: S. Kindred											
S-1	3/26	12:00	Concrete	4	X	X	X	X	X	X		
S-2	"	12:50	"	4	X	X	X	X	X	X		
S-3	"	1:30	"	4	X	X	X	X	X	X		
S-4	"	2:00	"	4	X	X	X	X	X	X		
W-1	"	3:30	water	12	X	X	X	X	X	X		
											Received by: (Signature)	Relinquished by: (Signature)
											Printed Name: J. Scott Kindred	Printed Name: Rich Hause
											Company: Aspett	Company: ARI
											Date & Time: 3/26/01 4:35	Date & Time: 3/26/01 1635



# Cooler Receipt Form

ARI Client: Aspect

COC No(s): \_\_\_\_\_ NA

Assigned ARI Job No: WJOE

## Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?  YES  NO

Were custody papers included with the cooler?  YES  NO

Were custody papers properly filled out (ink, signed, etc.)  YES  NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry).....

If cooler temperature is out of compliance fill out form 00070F

Cooler Accepted by: [Signature] Date: 3/26/13 Time: 1635 Temp Gun ID#: 90377952

*Complete custody forms and attach all shipping documents*

## Log-In Phase:

Was a temperature blank included in the cooler?  YES  NO

What kind of packing material was used? ...  Bubble Wrap  Wet Ice  Gel Packs  Baggies  Foam Block  Paper  Other: \_\_\_\_\_

Was sufficient ice used (if appropriate)? ..... NA  YES  NO

Were all bottles sealed in individual plastic bags? .....  YES  NO

Did all bottles arrive in good condition (unbroken)? .....  YES  NO

Were all bottle labels complete and legible? .....  YES  NO

Did the number of containers listed on COC match with the number of containers received? .....  YES  NO

Did all bottle labels and tags agree with custody papers? .....  YES  NO

Were all bottles used correct for the requested analyses? .....  YES  NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)... NA  YES  NO

Were all VOC vials free of air bubbles? ..... NA  YES  NO

Was sufficient amount of sample sent in each bottle? .....  YES  NO

Date VOC Trip Blank was made at ARI..... NA

Was Sample Split by ARI: (NA) YES Date/Time: \_\_\_\_\_ Equipment: \_\_\_\_\_ Split by: \_\_\_\_\_

Samples Logged by: AV Date: 3/27/13 Time: 815

**\*\* Notify Project Manager of discrepancies or concerns \*\***

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

## Additional Notes, Discrepancies, & Resolutions:

By:

Date:

<small>Small Air Bubbles ~2mm</small>	<small>Peabubbles 2-4 mm</small>	<small>LARGE Air Bubbles &gt; 4 mm</small>	<small>Small → "sm" Peabubbles → "pb" Large → "lg" Headspace → "hs"</small>
• •	• •	• •	
• •	• •	• •	
• •	• •	• •	
• •	• •	• •	

**PRESERVATION VERIFICATION 03/27/13**

Page 1 of 1

Inquiry Number: NONE  
Analysis Requested: 03/27/13  
Contact: Kindred, Scott  
Client: Aspect Consulting LLC  
Logged by: AV  
Sample Set Used: Yes-494  
Validatable Package: No  
Deliverables:

ARI Job No: **WJ08**PC: Cheronne  
VTSR: 03/26/13

Project #: 110207  
Project: Kimberly Clark Haz Waste Cage  
Sample Site:  
SDG No:  
Analytical Protocol: In-house

LOGNUM ARI ID	CLIENT ID	CN >12	WAD >12	NH3 <2	COD <2	FOG <2	MET <2	PHEN TOT	TKN TOT	NO23 <2	TOC <2	S2 >9	TPHD <2	DMET DOC FLT FLT	Fe2+ <2	DATE/BY
13-6318 <b>WJ08E</b>	W-1															

WJ08 : 000005

Checked By PN Date 3/27/13



**Analytical Resources, Incorporated**  
Analytical Chemists and Consultants

**Client: Aspect Consulting LLC**

**ARI Job No.: WJ08**

**Client Project: Kimberly Clark Haz Waste Cage Client Project No.: 110207**

**Case Narrative**

1. Four samples were submitted to be prepped for chemical analysis by crushing on March 27, 2013. Each sample was submitted in two 16oz glass jars, and was in good condition.
2. The jaw crusher and related equipment was vacuumed, washed with Citranox detergent, rinsed with deionized water, then rinsed with isopropyl alcohol and allowed to dry completely before each sample was crushed.
3. All utensils used in handling the samples were decontaminated in the same manner as the jaw crusher and then rinsed with dichloromethane.
4. After each sample was crushed, 5gram subsamples were placed in appropriate vials for volatile and semi-volatile analysis. The remaining sample was then poured back into the original sample containers.
5. There were no anomalies in the samples or methods on this project.

Released by: Suzanna Curtis  
Geotechnical Laboratory Manager

Date: 4/2/13

Reviewed by: Elizabeth Bohne  
Technician

Date: April 1, 2013

# Sample ID Cross Reference Report



ARI Job No: WJ08  
Client: Aspect Consulting LLC  
Project Event: 110207  
Project Name: Kimberly Clark Haz Waste Cage

Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1. S-1	WJ08A	13-6314	Concrete	03/26/13 12:00	03/26/13 16:35
2. S-2	WJ08B	13-6315	Concrete	03/26/13 12:50	03/26/13 16:35
3. S-3	WJ08C	13-6316	Concrete	03/26/13 13:30	03/26/13 16:35
4. S-4	WJ08D	13-6317	Concrete	03/26/13 14:00	03/26/13 16:35
5. W-1	WJ08E	13-6318	Water	03/26/13 14:30	03/26/13 16:35

Printed 03/27/13 Page 1 of 1

WJ08 : 00007

## ORGANICS ANALYSIS DATA SHEET

Volatile by Purge &amp; Trap GC/MS-Method SW8260C

Page 1 of 2

**ANALYTICAL  
RESOURCES  
INCORPORATED**

Sample ID: S-1  
**SAMPLE**

Lab Sample ID: WJ08A  
 LIMS ID: 13-6314  
 Matrix: Concrete  
 Data Release Authorized: *MW*  
 Reported: 04/03/13

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207  
 Date Sampled: 03/26/13  
 Date Received: 03/26/13

Instrument/Analyst: NT5/PAB  
 Date Analyzed: 04/01/13 20:46

Sample Amount: 4.88 g-dry-wt  
 Purge Volume: 5.0 mL  
 Moisture: 4.1%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.0	< 1.0	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-00-3	Chloroethane	1.0	< 1.0	U
75-09-2	<b>Methylene Chloride</b>	2.0	15	Q
67-64-1	<b>Acetone</b>	5.1	36	Q
75-15-0	<b>Carbon Disulfide</b>	1.0	2.8	
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
75-34-3	1,1-Dichloroethane	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
78-93-3	2-Butanone	5.1	< 5.1	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
56-23-5	Carbon Tetrachloride	1.0	< 1.0	U
108-05-4	Vinyl Acetate	5.1	< 5.1	U
75-27-4	Bromodichloromethane	1.0	< 1.0	U
78-87-5	1,2-Dichloropropane	1.0	< 1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
124-48-1	Dibromochloromethane	1.0	< 1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0	U
110-75-8	2-Chloroethylvinylether	5.1	< 5.1	U
75-25-2	Bromoform	1.0	< 1.0	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.1	< 5.1	U
591-78-6	2-Hexanone	5.1	< 5.1	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
108-90-7	Chlorobenzene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
100-42-5	Styrene	1.0	< 1.0	U
75-69-4	Trichlorofluoromethane	1.0	< 1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	< 2.0	U
179601-23-1	m,p-Xylene	1.0	< 1.0	U
95-47-6	o-Xylene	1.0	< 1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
107-02-8	Acrolein	51	< 51	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	2.0	< 2.0	U
107-13-1	Acrylonitrile	5.1	< 5.1	U
563-58-6	1,1-Dichloropropene	1.0	< 1.0	U
74-95-3	Dibromomethane	1.0	< 1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.1	< 5.1	U
96-18-4	1,2,3-Trichloropropane	2.0	< 2.0	U
110-57-6	trans-1,4-Dichloro-2-butene	5.1	< 5.1	U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0	U

## ORGANICS ANALYSIS DATA SHEET

Volatile by Purge &amp; Trap GC/MS-Method SW8260C

Page 2 of 2

**ANALYTICAL  
RESOURCES  
INCORPORATED**

**Sample ID: S-1  
SAMPLE**

Lab Sample ID: WJ08A

LIMS ID: 13-6314

Matrix: Concrete

Date Analyzed: 04/01/13 20:46

 QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

CAS Number	Analyte	RL	Result	Q
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0	U
87-68-3	Hexachlorobutadiene	5.1	< 5.1	U
106-93-4	1,2-Dibromoethane	1.0	< 1.0	U
74-97-5	Bromochloromethane	1.0	< 1.0	U
594-20-7	2,2-Dichloropropane	1.0	< 1.0	U
142-28-9	1,3-Dichloropropane	1.0	< 1.0	U
98-82-8	Isopropylbenzene	1.0	< 1.0	U
103-65-1	n-Propylbenzene	1.0	< 1.0	U
108-86-1	Bromobenzene	1.0	< 1.0	U
95-49-8	2-Chlorotoluene	1.0	< 1.0	U
106-43-4	4-Chlorotoluene	1.0	< 1.0	U
98-06-6	tert-Butylbenzene	1.0	< 1.0	U
135-98-8	sec-Butylbenzene	1.0	< 1.0	U
99-87-6	4-Isopropyltoluene	1.0	< 1.0	U
104-51-8	n-Butylbenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.1	< 5.1	U
91-20-3	Naphthalene	5.1	< 5.1	U
87-61-6	1,2,3-Trichlorobenzene	5.1	< 5.1	U

Reported in µg/kg (ppb)

**Volatile Surrogate Recovery**

d4-1,2-Dichloroethane	119%
d8-Toluene	102%
Bromofluorobenzene	102%
d4-1,2-Dichlorobenzene	104%

**ORGANICS ANALYSIS DATA SHEET**

**Volatiles by Purge & Trap GC/MS-Method SW8260C**

Page 1 of 2

**Sample ID: S-2  
SAMPLE**

Lab Sample ID: WJ08B

LIMS ID: 13-6315

Matrix: Concrete

Data Release Authorized: *MW*

Reported: 04/03/13

QC Report No: WJ08-Aspect Consulting LLC

Project: Kimberly Clark Haz Waste Cage

110207

Date Sampled: 03/26/13

Date Received: 03/26/13

Instrument/Analyst: NT5/PAB

Date Analyzed: 04/01/13 21:10

Sample Amount: 5.75 g-dry-wt

Purge Volume: 5.0 mL

Moisture: 3.6%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.9	< 0.9	U
74-83-9	Bromomethane	0.9	< 0.9	U
75-01-4	Vinyl Chloride	0.9	< 0.9	U
75-00-3	Chloroethane	0.9	< 0.9	U
<b>75-09-2</b>	<b>Methylene Chloride</b>	<b>1.7</b>	<b>19</b>	<b>Q</b>
<b>67-64-1</b>	<b>Acetone</b>	<b>4.4</b>	<b>58</b>	<b>Q</b>
75-15-0	Carbon Disulfide	0.9	< 0.9	U
75-35-4	1,1-Dichloroethene	0.9	< 0.9	U
75-34-3	1,1-Dichloroethane	0.9	< 0.9	U
156-60-5	trans-1,2-Dichloroethene	0.9	< 0.9	U
156-59-2	cis-1,2-Dichloroethene	0.9	< 0.9	U
67-66-3	Chloroform	0.9	< 0.9	U
107-06-2	1,2-Dichloroethane	0.9	< 0.9	U
78-93-3	2-Butanone	4.4	< 4.4	U
71-55-6	1,1,1-Trichloroethane	0.9	< 0.9	U
56-23-5	Carbon Tetrachloride	0.9	< 0.9	U
108-05-4	Vinyl Acetate	4.4	< 4.4	U
75-27-4	Bromodichloromethane	0.9	< 0.9	U
78-87-5	1,2-Dichloropropane	0.9	< 0.9	U
10061-01-5	cis-1,3-Dichloropropene	0.9	< 0.9	U
79-01-6	Trichloroethene	0.9	< 0.9	U
124-48-1	Dibromochloromethane	0.9	< 0.9	U
79-00-5	1,1,2-Trichloroethane	0.9	< 0.9	U
71-43-2	Benzene	0.9	< 0.9	U
10061-02-6	trans-1,3-Dichloropropene	0.9	< 0.9	U
110-75-8	2-Chloroethylvinylether	4.4	< 4.4	U
75-25-2	Bromoform	0.9	< 0.9	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	4.4	< 4.4	U
591-78-6	2-Hexanone	4.4	< 4.4	U
127-18-4	Tetrachloroethene	0.9	< 0.9	U
79-34-5	1,1,2,2-Tetrachloroethane	0.9	< 0.9	U
108-88-3	Toluene	0.9	< 0.9	U
108-90-7	Chlorobenzene	0.9	< 0.9	U
100-41-4	Ethylbenzene	0.9	< 0.9	U
100-42-5	Styrene	0.9	< 0.9	U
75-69-4	Trichlorofluoromethane	0.9	< 0.9	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.7	< 1.7	U
179601-23-1	m,p-Xylene	0.9	< 0.9	U
95-47-6	o-Xylene	0.9	< 0.9	U
95-50-1	1,2-Dichlorobenzene	0.9	< 0.9	U
541-73-1	1,3-Dichlorobenzene	0.9	< 0.9	U
106-46-7	1,4-Dichlorobenzene	0.9	< 0.9	U
107-02-8	Acrolein	4.4	< 4.4	U
74-88-4	Iodomethane	0.9	< 0.9	U
74-96-4	Bromoethane	1.7	< 1.7	U
107-13-1	Acrylonitrile	4.4	< 4.4	U
563-58-6	1,1-Dichloropropene	0.9	< 0.9	U
74-95-3	Dibromomethane	0.9	< 0.9	U
630-20-6	1,1,1,2-Tetrachloroethane	0.9	< 0.9	U
96-12-8	1,2-Dibromo-3-chloropropane	4.4	< 4.4	U
96-18-4	1,2,3-Trichloropropane	1.7	< 1.7	U
110-57-6	trans-1,4-Dichloro-2-butene	4.4	< 4.4	U
108-67-8	1,3,5-Trimethylbenzene	0.9	< 0.9	U

**ORGANICS ANALYSIS DATA SHEET**

**Volatiles by Purge & Trap GC/MS-Method SW8260C**  
Page 2 of 2

**Sample ID: S-2  
SAMPLE**

Lab Sample ID: WJ08B

LIMS ID: 13-6315

Matrix: Concrete

Date Analyzed: 04/01/13 21:10

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

CAS Number	Analyte	RL	Result	Q
95-63-6	1,2,4-Trimethylbenzene	0.9	< 0.9	U
87-68-3	Hexachlorobutadiene	4.4	< 4.4	U
106-93-4	1,2-Dibromoethane	0.9	< 0.9	U
74-97-5	Bromochloromethane	0.9	< 0.9	U
594-20-7	2,2-Dichloropropane	0.9	< 0.9	U
142-28-9	1,3-Dichloropropane	0.9	< 0.9	U
98-82-8	Isopropylbenzene	0.9	< 0.9	U
103-65-1	n-Propylbenzene	0.9	< 0.9	U
108-86-1	Bromobenzene	0.9	< 0.9	U
95-49-8	2-Chlorotoluene	0.9	< 0.9	U
106-43-4	4-Chlorotoluene	0.9	< 0.9	U
98-06-6	tert-Butylbenzene	0.9	< 0.9	U
135-98-8	sec-Butylbenzene	0.9	< 0.9	U
99-87-6	4-Isopropyltoluene	0.9	< 0.9	U
104-51-8	n-Butylbenzene	0.9	< 0.9	U
120-82-1	1,2,4-Trichlorobenzene	4.4	< 4.4	U
91-20-3	Naphthalene	4.4	< 4.4	U
87-61-6	1,2,3-Trichlorobenzene	4.4	< 4.4	U

Reported in  $\mu\text{g}/\text{kg}$  (ppb)

**Volatile Surrogate Recovery**

d4-1,2-Dichloroethane	120%
d8-Toluene	103%
Bromofluorobenzene	103%
d4-1,2-Dichlorobenzene	105%

**ORGANICS ANALYSIS DATA SHEET**

**Volatiles by Purge & Trap GC/MS-Method SW8260C**

Page 1 of 2

**Sample ID: S-3  
SAMPLE**

Lab Sample ID: WJ08C

LIMS ID: 13-6316

Matrix: Concrete

Data Release Authorized: *MW*

Reported: 04/03/13

QC Report No: WJ08-Aspect Consulting LLC

Project: Kimberly Clark Haz Waste Cage

110207

Date Sampled: 03/26/13

Date Received: 03/26/13

Instrument/Analyst: NT5/PAB

Date Analyzed: 04/01/13 21:34

Sample Amount: 4.87 g-dry-wt

Purge Volume: 5.0 mL

Moisture: 3.7%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.0	< 1.0	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-00-3	Chloroethane	1.0	< 1.0	U
75-09-2	<b>Methylene Chloride</b>	<b>2.1</b>	<b>14</b>	<b>Q</b>
67-64-1	<b>Acetone</b>	<b>5.1</b>	<b>160</b>	<b>Q</b>
75-15-0	Carbon Disulfide	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
75-34-3	1,1-Dichloroethane	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
78-93-3	2-Butanone	5.1	< 5.1	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
56-23-5	Carbon Tetrachloride	1.0	< 1.0	U
108-05-4	Vinyl Acetate	5.1	< 5.1	U
75-27-4	Bromodichloromethane	1.0	< 1.0	U
78-87-5	1,2-Dichloropropane	1.0	< 1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
124-48-1	Dibromochloromethane	1.0	< 1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0	U
110-75-8	2-Chloroethylvinylether	5.1	< 5.1	U
75-25-2	Bromoform	1.0	< 1.0	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.1	< 5.1	U
591-78-6	2-Hexanone	5.1	< 5.1	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
108-90-7	Chlorobenzene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
100-42-5	Styrene	1.0	< 1.0	U
75-69-4	Trichlorofluoromethane	1.0	< 1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.1	< 2.1	U
179601-23-1	m,p-Xylene	1.0	< 1.0	U
95-47-6	o-Xylene	1.0	< 1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
107-02-8	Acrolein	51	< 51	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	2.1	< 2.1	U
107-13-1	Acrylonitrile	5.1	< 5.1	U
563-58-6	1,1-Dichloropropene	1.0	< 1.0	U
74-95-3	Dibromomethane	1.0	< 1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.1	< 5.1	U
96-18-4	1,2,3-Trichloropropane	2.1	< 2.1	U
110-57-6	trans-1,4-Dichloro-2-butene	5.1	< 5.1	U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0	U

**ORGANICS ANALYSIS DATA SHEET**

**Volatiles by Purge & Trap GC/MS-Method SW8260C**  
Page 2 of 2

**Sample ID: S-3  
SAMPLE**

Lab Sample ID: WJ08C  
LIMS ID: 13-6316  
Matrix: Concrete  
Date Analyzed: 04/01/13 21:34

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>	<b>Q</b>
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0	U
87-68-3	Hexachlorobutadiene	5.1	< 5.1	U
106-93-4	1,2-Dibromoethane	1.0	< 1.0	U
74-97-5	Bromochloromethane	1.0	< 1.0	U
594-20-7	2,2-Dichloropropane	1.0	< 1.0	U
142-28-9	1,3-Dichloropropane	1.0	< 1.0	U
98-82-8	Isopropylbenzene	1.0	< 1.0	U
103-65-1	n-Propylbenzene	1.0	< 1.0	U
108-86-1	Bromobenzene	1.0	< 1.0	U
95-49-8	2-Chlorotoluene	1.0	< 1.0	U
106-43-4	4-Chlorotoluene	1.0	< 1.0	U
98-06-6	tert-Butylbenzene	1.0	< 1.0	U
135-98-8	sec-Butylbenzene	1.0	< 1.0	U
99-87-6	4-Isopropyltoluene	1.0	< 1.0	U
104-51-8	n-Butylbenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.1	< 5.1	U
91-20-3	Naphthalene	5.1	< 5.1	U
87-61-6	1,2,3-Trichlorobenzene	5.1	< 5.1	U

Reported in  $\mu\text{g}/\text{kg}$  (ppb)

**Volatile Surrogate Recovery**

d4-1,2-Dichloroethane	120%
d8-Toluene	102%
Bromofluorobenzene	104%
d4-1,2-Dichlorobenzene	104%

**ORGANICS ANALYSIS DATA SHEET**

**Volatiles by Purge & Trap GC/MS-Method SW8260C**  
Page 1 of 2

**Sample ID: S-4  
SAMPLE**

Lab Sample ID: WJ08D  
LIMS ID: 13-6317  
Matrix: Concrete  
Data Release Authorized: *MW*  
Reported: 04/03/13

Instrument/Analyst: NT5/PAB  
Date Analyzed: 04/01/13 21:58

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207  
Date Sampled: 03/26/13  
Date Received: 03/26/13

Sample Amount: 4.92 g-dry-wt  
Purge Volume: 5.0 mL  
Moisture: 3.9%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.0	< 1.0	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-00-3	Chloroethane	1.0	< 1.0	U
<b>75-09-2</b>	<b>Methylene Chloride</b>	<b>2.0</b>	<b>10</b>	<b>Q</b>
<b>67-64-1</b>	<b>Acetone</b>	<b>5.1</b>	<b>81</b>	<b>Q</b>
75-15-0	Carbon Disulfide	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
75-34-3	1,1-Dichloroethane	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
78-93-3	2-Butanone	5.1	< 5.1	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
56-23-5	Carbon Tetrachloride	1.0	< 1.0	U
108-05-4	Vinyl Acetate	5.1	< 5.1	U
75-27-4	Bromodichloromethane	1.0	< 1.0	U
78-87-5	1,2-Dichloropropane	1.0	< 1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
124-48-1	Dibromochloromethane	1.0	< 1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0	U
110-75-8	2-Chloroethylvinylether	5.1	< 5.1	U
75-25-2	Bromoform	1.0	< 1.0	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.1	< 5.1	U
591-78-6	2-Hexanone	5.1	< 5.1	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
108-90-7	Chlorobenzene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
100-42-5	Styrene	1.0	< 1.0	U
75-69-4	Trichlorofluoromethane	1.0	< 1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	< 2.0	U
179601-23-1	m,p-Xylene	1.0	< 1.0	U
95-47-6	o-Xylene	1.0	< 1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
107-02-8	Acrolein	51	< 51	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	2.0	< 2.0	U
107-13-1	Acrylonitrile	5.1	< 5.1	U
563-58-6	1,1-Dichloropropene	1.0	< 1.0	U
74-95-3	Dibromomethane	1.0	< 1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.1	< 5.1	U
96-18-4	1,2,3-Trichloropropane	2.0	< 2.0	U
110-57-6	trans-1,4-Dichloro-2-butene	5.1	< 5.1	U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0	U

**ORGANICS ANALYSIS DATA SHEET**

**Volatiles by Purge & Trap GC/MS-Method SW8260C**

Page 2 of 2

**Sample ID: S-4  
SAMPLE**

Lab Sample ID: WJ08D

LIMS ID: 13-6317

Matrix: Concrete

Date Analyzed: 04/01/13 21:58

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

CAS Number	Analyte	RL	Result	Q
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0	U
87-68-3	Hexachlorobutadiene	5.1	< 5.1	U
106-93-4	1,2-Dibromoethane	1.0	< 1.0	U
74-97-5	Bromochloromethane	1.0	< 1.0	U
594-20-7	2,2-Dichloropropane	1.0	< 1.0	U
142-28-9	1,3-Dichloropropane	1.0	< 1.0	U
98-82-8	Isopropylbenzene	1.0	< 1.0	U
103-65-1	n-Propylbenzene	1.0	< 1.0	U
108-86-1	Bromobenzene	1.0	< 1.0	U
95-49-8	2-Chlorotoluene	1.0	< 1.0	U
106-43-4	4-Chlorotoluene	1.0	< 1.0	U
98-06-6	tert-Butylbenzene	1.0	< 1.0	U
135-98-8	sec-Butylbenzene	1.0	< 1.0	U
99-87-6	4-Isopropyltoluene	1.0	< 1.0	U
104-51-8	n-Butylbenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.1	< 5.1	U
91-20-3	Naphthalene	5.1	< 5.1	U
87-61-6	1,2,3-Trichlorobenzene	5.1	< 5.1	U

Reported in µg/kg (ppb)

**Volatile Surrogate Recovery**

d4-1,2-Dichloroethane	123%
d8-Toluene	103%
Bromofluorobenzene	103%
d4-1,2-Dichlorobenzene	104%

**VOA SURROGATE RECOVERY SUMMARY**

Matrix: Concrete

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

<b>ARI ID</b>	<b>Client ID</b>	<b>Level</b>	<b>DCE</b>	<b>TOL</b>	<b>BFB</b>	<b>DCB</b>	<b>TOT OUT</b>
MB-040113A	Method Blank	Low	103%	100%	100%	102%	0
LCS-040113A	Lab Control	Low	102%	99.7%	101%	100%	0
LCSD-040113A	Lab Control Dup	Low	99.9%	99.9%	99.4%	99.3%	0
WJ08A	S-1	Low	119%	102%	102%	104%	0
WJ08B	S-2	Low	120%	103%	103%	105%	0
WJ08C	S-3	Low	120%	102%	104%	104%	0
WJ08D	S-4	Low	123%	103%	103%	104%	0

**SW8260C**

(DCE) = d4-1,2-Dichloroethane  
(TOL) = d8-Toluene  
(BFB) = Bromofluorobenzene  
(DCB) = d4-1,2-Dichlorobenzene

**LCS/MB LIMITS**

Low	Med
80-122	76-120
80-120	80-120
80-120	80-120
80-120	80-120

**QC LIMITS**

Low	Med
80-149	69-120
77-120	80-120
80-120	76-128
80-120	80-120

Log Number Range: 13-6314 to 13-6317

**ORGANICS ANALYSIS DATA SHEET**

**Volatiles by Purge & Trap GC/MS-Method SW8260C**

Page 1 of 2

**Sample ID: LCS-040113A**

**LAB CONTROL SAMPLE**

Lab Sample ID: LCS-040113A

LIMS ID: 13-6314

Matrix: Concrete

Data Release Authorized: *MW*

Reported: 04/03/13

QC Report No: WJ08-Aspect Consulting LLC

Project: Kimberly Clark Haz Waste Cage  
110207

Date Sampled: NA

Date Received: NA

Instrument/Analyst LCS: NT5/PAB

LCSD: NT5/PAB

Date Analyzed LCS: 04/01/13 17:26

LCSD: 04/01/13 17:50

Sample Amount LCS: 5.00 g-dry-wt

LCSD: 5.00 g-dry-wt

Purge Volume LCS: 5.0 mL

LCSD: 5.0 mL

Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	48.8	50.0	97.6%	50.1	50.0	100%	2.6%
Bromomethane	50.1	50.0	100%	50.4	50.0	101%	0.6%
Vinyl Chloride	52.4	50.0	105%	53.9	50.0	108%	2.8%
Chloroethane	52.8	50.0	106%	53.0	50.0	106%	0.4%
Methylene Chloride	59.1 Q	50.0	118%	56.7 Q	50.0	113%	4.1%
Acetone	163 Q	250	65.2%	182 Q	250	72.8%	11.0%
Carbon Disulfide	56.3	50.0	113%	55.0	50.0	110%	2.3%
1,1-Dichloroethene	54.7	50.0	109%	53.5	50.0	107%	2.2%
1,1-Dichloroethane	51.3	50.0	103%	51.0	50.0	102%	0.6%
trans-1,2-Dichloroethene	58.7	50.0	117%	56.2	50.0	112%	4.4%
cis-1,2-Dichloroethene	50.2	50.0	100%	50.0	50.0	100%	0.4%
Chloroform	51.0	50.0	102%	51.2	50.0	102%	0.4%
1,2-Dichloroethane	50.6	50.0	101%	49.6	50.0	99.2%	2.0%
2-Butanone	247	250	98.8%	261	250	104%	5.5%
1,1,1-Trichloroethane	52.5	50.0	105%	52.0	50.0	104%	1.0%
Carbon Tetrachloride	51.8	50.0	104%	52.1	50.0	104%	0.6%
Vinyl Acetate	50.8	50.0	102%	50.2	50.0	100%	1.2%
Bromodichloromethane	50.7	50.0	101%	49.9	50.0	99.8%	1.6%
1,2-Dichloropropane	50.8	50.0	102%	49.7	50.0	99.4%	2.2%
cis-1,3-Dichloropropene	53.3	50.0	107%	51.7	50.0	103%	3.0%
Trichloroethene	52.3	50.0	105%	52.4	50.0	105%	0.2%
Dibromochloromethane	51.0	50.0	102%	49.6	50.0	99.2%	2.8%
1,1,2-Trichloroethane	51.0	50.0	102%	49.9	50.0	99.8%	2.2%
Benzene	53.5	50.0	107%	53.5	50.0	107%	0.0%
trans-1,3-Dichloropropene	54.4	50.0	109%	52.6	50.0	105%	3.4%
2-Chloroethylvinylether	53.4	50.0	107%	53.3	50.0	107%	0.2%
Bromoform	51.0	50.0	102%	51.1	50.0	102%	0.2%
4-Methyl-2-Pentanone (MIBK)	267	250	107%	279	250	112%	4.4%
2-Hexanone	259	250	104%	274	250	110%	5.6%
Tetrachloroethene	53.1	50.0	106%	53.0	50.0	106%	0.2%
1,1,2,2-Tetrachloroethane	50.2	50.0	100%	51.7	50.0	103%	2.9%
Toluene	52.6	50.0	105%	52.6	50.0	105%	0.0%
Chlorobenzene	52.8	50.0	106%	52.3	50.0	105%	1.0%
Ethylbenzene	56.3	50.0	113%	56.1	50.0	112%	0.4%
Styrene	57.2	50.0	114%	57.0	50.0	114%	0.4%
Trichlorofluoromethane	52.8	50.0	106%	52.8	50.0	106%	0.0%
1,1,2-Trichloro-1,2,2-trifluoroetha	58.7	50.0	117%	56.7	50.0	113%	3.5%

**ORGANICS ANALYSIS DATA SHEET**

Volatiles by Purge & Trap GC/MS-Method SW8260C  
Page 2 of 2

Sample ID: LCS-040113A  
LAB CONTROL SAMPLE

Lab Sample ID: LCS-040113A  
LIMS ID: 13-6314  
Matrix: Concrete

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
m,p-Xylene	114	100	114%	113	100	113%	0.9%
o-Xylene	54.5	50.0	109%	53.9	50.0	108%	1.1%
1,2-Dichlorobenzene	52.4	50.0	105%	51.6	50.0	103%	1.5%
1,3-Dichlorobenzene	55.5	50.0	111%	55.1	50.0	110%	0.7%
1,4-Dichlorobenzene	53.4	50.0	107%	52.9	50.0	106%	0.9%
Acrolein	262	250	105%	283	250	113%	7.7%
Iodomethane	84.2 Q	50.0	168%	84.0 Q	50.0	168%	0.2%
Bromoethane	56.1	50.0	112%	56.3	50.0	113%	0.4%
Acrylonitrile	53.0	50.0	106%	55.6	50.0	111%	4.8%
1,1-Dichloropropene	52.2	50.0	104%	52.8	50.0	106%	1.1%
Dibromomethane	50.9	50.0	102%	50.0	50.0	100%	1.8%
1,1,1,2-Tetrachloroethane	52.4	50.0	105%	51.0	50.0	102%	2.7%
1,2-Dibromo-3-chloropropane	48.4	50.0	96.8%	51.8	50.0	104%	6.8%
1,2,3-Trichloropropane	51.1	50.0	102%	52.4	50.0	105%	2.5%
trans-1,4-Dichloro-2-butene	53.7	50.0	107%	55.6	50.0	111%	3.5%
1,3,5-Trimethylbenzene	57.0	50.0	114%	58.1	50.0	116%	1.9%
1,2,4-Trimethylbenzene	57.8	50.0	116%	57.9	50.0	116%	0.2%
Hexachlorobutadiene	54.5	50.0	109%	54.5	50.0	109%	0.0%
1,2-Dibromoethane	50.9	50.0	102%	50.1	50.0	100%	1.6%
Bromochloromethane	50.0	50.0	100%	48.7	50.0	97.4%	2.6%
2,2-Dichloropropane	53.3	50.0	107%	52.4	50.0	105%	1.7%
1,3-Dichloropropane	51.6	50.0	103%	51.1	50.0	102%	1.0%
Isopropylbenzene	57.2	50.0	114%	58.4	50.0	117%	2.1%
n-Propylbenzene	57.1	50.0	114%	58.1	50.0	116%	1.7%
Bromobenzene	51.0	50.0	102%	51.7	50.0	103%	1.4%
2-Chlorotoluene	55.3	50.0	111%	55.7	50.0	111%	0.7%
4-Chlorotoluene	55.8	50.0	112%	56.0	50.0	112%	0.4%
tert-Butylbenzene	56.4	50.0	113%	57.4	50.0	115%	1.8%
sec-Butylbenzene	58.2	50.0	116%	59.2	50.0	118%	1.7%
4-Isopropyltoluene	60.0	50.0	120%	60.3	50.0	121%	0.5%
n-Butylbenzene	59.8	50.0	120%	60.2	50.0	120%	0.7%
1,2,4-Trichlorobenzene	55.7	50.0	111%	53.2	50.0	106%	4.6%
Naphthalene	53.1	50.0	106%	53.3	50.0	107%	0.4%
1,2,3-Trichlorobenzene	53.0	50.0	106%	50.9	50.0	102%	4.0%

Reported in  $\mu\text{g}/\text{kg}$  (ppb)

RPD calculated using sample concentrations per SW846.

**Volatile Surrogate Recovery**

	LCS	LCSD
d4-1,2-Dichloroethane	102%	99.9%
d8-Toluene	99.7%	99.9%
Bromofluorobenzene	101%	99.4%
d4-1,2-Dichlorobenzene	100%	99.3%

**ORGANICS ANALYSIS DATA SHEET**

**Volatiles by Purge & Trap GC/MS-Method SW8260C**  
Page 1 of 2

Lab Sample ID: MB-040113A  
LIMS ID: 13-6314  
Matrix: Concrete  
Data Release Authorized: *MW*  
Reported: 04/03/13

Instrument/Analyst: NT5/PAB  
Date Analyzed: 04/01/13 18:14

**Sample ID: MB-040113A  
METHOD BLANK**

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

Date Sampled: NA  
Date Received: NA

Sample Amount: 5.00 g-dry-wt  
Purge Volume: 5.0 mL  
Moisture: NA

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.0	< 1.0	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-00-3	Chloroethane	1.0	< 1.0	U
75-09-2	Methylene Chloride	2.0	< 2.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
75-34-3	1,1-Dichloroethane	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
56-23-5	Carbon Tetrachloride	1.0	< 1.0	U
108-05-4	Vinyl Acetate	5.0	< 5.0	U
75-27-4	Bromodichloromethane	1.0	< 1.0	U
78-87-5	1,2-Dichloropropane	1.0	< 1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
124-48-1	Dibromochloromethane	1.0	< 1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0	U
110-75-8	2-Chloroethylvinylether	5.0	< 5.0	U
75-25-2	Bromoform	1.0	< 1.0	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
108-90-7	Chlorobenzene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
100-42-5	Styrene	1.0	< 1.0	U
75-69-4	Trichlorofluoromethane	1.0	< 1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	< 2.0	U
179601-23-1	m,p-Xylene	1.0	< 1.0	U
95-47-6	o-Xylene	1.0	< 1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
107-02-8	Acrolein	50	< 50	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	2.0	< 2.0	U
107-13-1	Acrylonitrile	5.0	< 5.0	U
563-58-6	1,1-Dichloropropene	1.0	< 1.0	U
74-95-3	Dibromomethane	1.0	< 1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0	U
96-18-4	1,2,3-Trichloropropane	2.0	< 2.0	U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0	U

## ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge &amp; Trap GC/MS-Method SW8260C

Page 2 of 2

**ANALYTICAL  
RESOURCES  
INCORPORATED**


Sample ID: MB-040113A

METHOD BLANK

Lab Sample ID: MB-040113A

LIMS ID: 13-6314

Matrix: Concrete

Date Analyzed: 04/01/13 18:14

QC Report No: WJ08-Aspect Consulting LLC

Project: Kimberly Clark Haz Waste Cage  
110207

CAS Number	Analyte	RL	Result	Q
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0	U
87-68-3	Hexachlorobutadiene	5.0	< 5.0	U
106-93-4	1,2-Dibromoethane	1.0	< 1.0	U
74-97-5	Bromochloromethane	1.0	< 1.0	U
594-20-7	2,2-Dichloropropane	1.0	< 1.0	U
142-28-9	1,3-Dichloropropane	1.0	< 1.0	U
98-82-8	Isopropylbenzene	1.0	< 1.0	U
103-65-1	n-Propylbenzene	1.0	< 1.0	U
108-86-1	Bromobenzene	1.0	< 1.0	U
95-49-8	2-Chlorotoluene	1.0	< 1.0	U
106-43-4	4-Chlorotoluene	1.0	< 1.0	U
98-06-6	tert-Butylbenzene	1.0	< 1.0	U
135-98-8	sec-Butylbenzene	1.0	< 1.0	U
99-87-6	4-Isopropyltoluene	1.0	< 1.0	U
104-51-8	n-Butylbenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
91-20-3	Naphthalene	5.0	< 5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	100%
Bromofluorobenzene	100%
d4-1,2-Dichlorobenzene	102%

**ORGANICS ANALYSIS DATA SHEET**

**Volatiles by Purge & Trap GC/MS-Method SW8260C**  
Page 1 of 2

**Sample ID: W-1  
SAMPLE**

Lab Sample ID: WJ08E

LIMS ID: 13-6318

Matrix: Water

Data Release Authorized: *[Signature]*

Reported: 04/05/13

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

Date Sampled: 03/26/13

Date Received: 03/26/13

Instrument/Analyst: NT3/PAB

Date Analyzed: 04/03/13 12:09

Sample Amount: 10.0 mL

Purge Volume: 10.0 mL

<b>CAS Number</b>	<b>Analyte</b>	<b>LOQ</b>	<b>Result</b>	<b>Q</b>
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
<b>67-66-3</b>	<b>Chloroform</b>	<b>0.20</b>	<b>0.20</b>	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

## ORGANICS ANALYSIS DATA SHEET

Volatile by Purge &amp; Trap GC/MS-Method SW8260C

Page 2 of 2

**ANALYTICAL  
RESOURCES  
INCORPORATED**

Sample ID: W-1  
**SAMPLE**

Lab Sample ID: WJ08E

QC Report No: WJ08-Aspect Consulting LLC

LIMS ID: 13-6318

Project: Kimberly Clark Haz Waste Cage

Matrix: Water

110207

Date Analyzed: 04/03/13 12:09

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
<b>99-87-6</b>	<b>4-Isopropyltoluene</b>	<b>0.20</b>	<b>5.0</b>	
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

**Volatile Surrogate Recovery**

d4-1,2-Dichloroethane	92.5%
d8-Toluene	94.5%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	98.1%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

**VOA SURROGATE RECOVERY SUMMARY**

Matrix: Water

 QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

<b>ARI ID</b>	<b>Client ID</b>	<b>PV</b>	<b>DCE</b>	<b>TOL</b>	<b>BFB</b>	<b>DCB</b>	<b>TOT OUT</b>
MB-040313A	Method Blank	10	91.4%	99.5%	101%	94.7%	0
LCS-040313A	Lab Control	10	93.9%	99.1%	105%	102%	0
LCSD-040313A	Lab Control Dup	10	92.2%	98.1%	101%	99.3%	0
WJ08E	W-1	10	92.5%	94.5%	101%	98.1%	0

**LCS/MB LIMITS**
**QC LIMITS**
**SW8260C**

(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-130)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

 Prep Method: SW5030B  
 Log Number Range: 13-6318 to 13-6318

**ORGANICS ANALYSIS DATA SHEET**

**Volatiles by Purge & Trap GC/MS-Method SW8260C**  
Page 1 of 2

**Sample ID: LCS-040313A  
LAB CONTROL SAMPLE**

Lab Sample ID: LCS-040313A

LIMS ID: 13-6318

Matrix: Water

Data Release Authorized: *P*

Reported: 04/05/13

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

Date Sampled: NA

Date Received: NA

Instrument/Analyst LCS: NT3/PAB

LCSD: NT3/PAB

Date Analyzed LCS: 04/03/13 09:51

LCSD: 04/03/13 10:17

Sample Amount LCS: 10.0 mL

LCSD: 10.0 mL

Purge Volume LCS: 10.0 mL

LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	8.77	10.0	87.7%	8.44	10.0	84.4%	3.8%
Bromomethane	9.64	10.0	96.4%	9.47	10.0	94.7%	1.8%
Vinyl Chloride	8.78	10.0	87.8%	8.53	10.0	85.3%	2.9%
Chloroethane	8.71	10.0	87.1%	8.14	10.0	81.4%	6.8%
Methylene Chloride	10.2	10.0	102%	10.0	10.0	100%	2.0%
Acetone	78.6	50.0	157%	70.2	50.0	140%	11.3%
Carbon Disulfide	8.42	10.0	84.2%	8.30	10.0	83.0%	1.4%
1,1-Dichloroethene	8.23	10.0	82.3%	8.59	10.0	85.9%	4.3%
1,1-Dichloroethane	8.74	10.0	87.4%	8.67	10.0	86.7%	0.8%
trans-1,2-Dichloroethene	8.94	10.0	89.4%	8.80	10.0	88.0%	1.6%
cis-1,2-Dichloroethene	9.04	10.0	90.4%	8.86	10.0	88.6%	2.0%
Chloroform	9.10	10.0	91.0%	9.12	10.0	91.2%	0.2%
1,2-Dichloroethane	10.3	10.0	103%	10.0	10.0	100%	3.0%
2-Butanone	66.6	50.0	133%	62.2	50.0	124%	6.8%
1,1,1-Trichloroethane	9.05	10.0	90.5%	8.92	10.0	89.2%	1.4%
Carbon Tetrachloride	9.90	10.0	99.0%	9.52	10.0	95.2%	3.9%
Vinyl Acetate	9.39	10.0	93.9%	9.81	10.0	98.1%	4.4%
Bromodichloromethane	10.3	10.0	103%	10.0	10.0	100%	3.0%
1,2-Dichloropropane	9.48	10.0	94.8%	9.49	10.0	94.9%	0.1%
cis-1,3-Dichloropropene	10.4	10.0	104%	10.4	10.0	104%	0.0%
Trichloroethene	10.2	10.0	102%	10.1	10.0	101%	1.0%
Dibromochloromethane	9.92	10.0	99.2%	10.1	10.0	101%	1.8%
1,1,2-Trichloroethane	10.0	10.0	100%	9.78	10.0	97.8%	2.2%
Benzene	9.57	10.0	95.7%	9.40	10.0	94.0%	1.8%
trans-1,3-Dichloropropene	10.4	10.0	104%	10.5	10.0	105%	1.0%
2-Chloroethylvinylether	10.8	10.0	108%	10.8	10.0	108%	0.0%
Bromoform	10.5	10.0	105%	10.8	10.0	108%	2.8%
4-Methyl-2-Pentanone (MIBK)	53.0	50.0	106%	52.4	50.0	105%	1.1%
2-Hexanone	51.5	50.0	103%	51.6	50.0	103%	0.2%
Tetrachloroethene	10.7	10.0	107%	10.4	10.0	104%	2.8%
1,1,2,2-Tetrachloroethane	8.58	10.0	85.8%	8.66	10.0	86.6%	0.9%
Toluene	10.2	10.0	102%	10.1	10.0	101%	1.0%
Chlorobenzene	10.3	10.0	103%	10.5	10.0	105%	1.9%
Ethylbenzene	11.1	10.0	111%	10.9	10.0	109%	1.8%
Styrene	11.1	10.0	111%	10.9	10.0	109%	1.8%
Trichlorofluoromethane	10.1	10.0	101%	9.94	10.0	99.4%	1.6%
1,1,2-Trichloro-1,2,2-trifluoroethane	9.06	10.0	90.6%	7.94	10.0	79.4%	13.2%
m,p-Xylene	22.4	20.0	112%	21.8	20.0	109%	2.7%

**ORGANICS ANALYSIS DATA SHEET**

Volatiles by Purge & Trap GC/MS-Method SW8260C  
Page 2 of 2

Sample ID: LCS-040313A  
**LAB CONTROL SAMPLE**

Lab Sample ID: LCS-040313A  
LIMS ID: 13-6318  
Matrix: Water

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	11.2	10.0	112%	10.6	10.0	106%	5.5%
1,2-Dichlorobenzene	10.3	10.0	103%	9.84	10.0	98.4%	4.6%
1,3-Dichlorobenzene	10.3	10.0	103%	10.2	10.0	102%	1.0%
1,4-Dichlorobenzene	10.3	10.0	103%	10.2	10.0	102%	1.0%
Acrolein	46.8	50.0	93.6%	46.4	50.0	92.8%	0.9%
Iodomethane	9.06	10.0	90.6%	9.40	10.0	94.0%	3.7%
Bromoethane	8.99	10.0	89.9%	8.89	10.0	88.9%	1.1%
Acrylonitrile	14.0	10.0	140%	13.8	10.0	138%	1.4%
1,1-Dichloropropene	9.97	10.0	99.7%	9.70	10.0	97.0%	2.7%
Dibromomethane	9.84	10.0	98.4%	9.90	10.0	99.0%	0.6%
1,1,1,2-Tetrachloroethane	10.3	10.0	103%	9.98	10.0	99.8%	3.2%
1,2-Dibromo-3-chloropropane	10.4	10.0	104%	10.1	10.0	101%	2.9%
1,2,3-Trichloropropane	10.1	10.0	101%	10.6	10.0	106%	4.8%
trans-1,4-Dichloro-2-butene	9.22	10.0	92.2%	9.38	10.0	93.8%	1.7%
1,3,5-Trimethylbenzene	11.3	10.0	113%	11.2	10.0	112%	0.9%
1,2,4-Trimethylbenzene	11.4	10.0	114%	11.2	10.0	112%	1.8%
Hexachlorobutadiene	11.2	10.0	112%	10.4	10.0	104%	7.4%
1,2-Dibromoethane	10.5	10.0	105%	10.3	10.0	103%	1.9%
Bromochloromethane	9.06	10.0	90.6%	9.07	10.0	90.7%	0.1%
2,2-Dichloropropane	8.74	10.0	87.4%	8.62	10.0	86.2%	1.4%
1,3-Dichloropropane	10.1	10.0	101%	10.1	10.0	101%	0.0%
Isopropylbenzene	11.2	10.0	112%	11.4	10.0	114%	1.8%
n-Propylbenzene	11.0	10.0	110%	11.1	10.0	111%	0.9%
Bromobenzene	10.1	10.0	101%	10.1	10.0	101%	0.0%
2-Chlorotoluene	10.5	10.0	105%	10.5	10.0	105%	0.0%
4-Chlorotoluene	10.4	10.0	104%	10.6	10.0	106%	1.9%
tert-Butylbenzene	11.4	10.0	114%	11.3	10.0	113%	0.9%
sec-Butylbenzene	11.4	10.0	114%	11.2	10.0	112%	1.8%
4-Isopropyltoluene	11.8	10.0	118%	11.6	10.0	116%	1.7%
n-Butylbenzene	11.3	10.0	113%	10.9	10.0	109%	3.6%
1,2,4-Trichlorobenzene	11.5	10.0	115%	10.8	10.0	108%	6.3%
Naphthalene	12.0	10.0	120%	11.2	10.0	112%	6.9%
1,2,3-Trichlorobenzene	10.7	10.0	107%	9.81	10.0	98.1%	8.7%

Reported in  $\mu\text{g/L}$  (ppb)

RPD calculated using sample concentrations per SW846.

**Volatile Surrogate Recovery**

	LCS	LCSD
d4-1,2-Dichloroethane	93.9%	92.2%
d8-Toluene	99.1%	98.1%
Bromofluorobenzene	105%	101%
d4-1,2-Dichlorobenzene	102%	99.3%

**ORGANICS ANALYSIS DATA SHEET**

**Volatiles by Purge & Trap GC/MS-Method SW8260C**  
Page 1 of 2

**Sample ID: MB-040313A**  
**METHOD BLANK**

Lab Sample ID: MB-040313A

LIMS ID: 13-6318

Matrix: Water

Data Release Authorized: *AB*

Reported: 04/05/13

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

Date Sampled: NA

Date Received: NA

Instrument/Analyst: NT3/PAB

Date Analyzed: 04/03/13 10:44

Sample Amount: 10.0 mL

Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

## ORGANICS ANALYSIS DATA SHEET

Volatile &amp; Trap GC/MS-Method SW8260C

Page 2 of 2

**ANALYTICAL  
RESOURCES  
INCORPORATED**


Sample ID: MB-040313A

METHOD BLANK

Lab Sample ID: MB-040313A

QC Report No: WJ08-Aspect Consulting LLC

LIMS ID: 13-6318

Project: Kimberly Clark Haz Waste Cage

Matrix: Water

110207

Date Analyzed: 04/03/13 10:44

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

**Volatile Surrogate Recovery**

d4-1,2-Dichloroethane	91.4%
d8-Toluene	99.5%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	94.7%

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3546**

Page 1 of 2

Lab Sample ID: WJ08A  
 LIMS ID: 13-6314  
 Matrix: Concrete  
 Data Release Authorized: *[Signature]*  
 Reported: 04/17/13

Date Extracted: 04/12/13  
 Date Analyzed: 04/15/13 18:30  
 Instrument/Analyst: NT6/JZ  
 GPC Cleanup: No



**Sample ID: S-1**  
**SAMPLE**

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207  
 Date Sampled: 03/26/13  
 Date Received: 03/26/13

Sample Amount: 1.93 g-dry-wt  
 Final Extract Volume: 0.5 mL  
 Dilution Factor: 1.00  
 Percent Moisture: 4.1%

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
<b>108-95-2</b>	<b>Phenol</b>	<b>260</b>	<b>310 M</b>
111-44-4	Bis-(2-Chloroethyl) Ether	260	< 260 U
95-57-8	2-Chlorophenol	260	< 260 U
541-73-1	1,3-Dichlorobenzene	260	< 260 U
106-46-7	1,4-Dichlorobenzene	260	< 260 U
100-51-6	Benzyl Alcohol	1,300	< 1,300 U
95-50-1	1,2-Dichlorobenzene	260	< 260 U
95-48-7	2-Methylphenol	260	< 260 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	260	< 260 U
106-44-5	4-Methylphenol	260	< 260 U
621-64-7	N-Nitroso-Di-N-Propylamine	260	< 260 U
67-72-1	Hexachloroethane	260	< 260 U
98-95-3	Nitrobenzene	260	< 260 U
<b>78-59-1</b>	<b>Isophorone</b>	<b>260</b>	<b>61,000 ES</b>
88-75-5	2-Nitrophenol	260	< 260 U
105-67-9	2,4-Dimethylphenol	260	< 260 U
65-85-0	Benzoic Acid	2,600	< 2,600 U
111-91-1	bis(2-Chloroethoxy) Methane	260	< 260 U
120-83-2	2,4-Dichlorophenol	1,300	< 1,300 U
120-82-1	1,2,4-Trichlorobenzene	260	< 260 U
91-20-3	Naphthalene	260	< 260 U
106-47-8	4-Chloroaniline	1,300	< 1,300 U
87-68-3	Hexachlorobutadiene	260	< 260 U
59-50-7	4-Chloro-3-methylphenol	1,300	< 1,300 U
91-57-6	2-Methylnaphthalene	260	< 260 U
77-47-4	Hexachlorocyclopentadiene	1,300	< 1,300 U
88-06-2	2,4,6-Trichlorophenol	1,300	< 1,300 U
95-95-4	2,4,5-Trichlorophenol	1,300	< 1,300 U
91-58-7	2-Chloronaphthalene	260	< 260 U
88-74-4	2-Nitroaniline	1,300	< 1,300 U
131-11-3	Dimethylphthalate	260	< 260 U
208-96-8	Acenaphthylene	260	< 260 U
99-09-2	3-Nitroaniline	1,300	< 1,300 U
83-32-9	Acenaphthene	260	< 260 U
51-28-5	2,4-Dinitrophenol	2,600	< 2,600 U
100-02-7	4-Nitrophenol	1,300	< 1,300 U
132-64-9	Dibenzofuran	260	< 260 U

**ORGANICS ANALYSIS DATA SHEET  
Semivolatiles by SW8270D GC/MS  
Extraction Method: SW3546**

Page 2 of 2

Lab Sample ID: WJ08A  
LIMS ID: 13-6314  
Matrix: Concrete  
Date Analyzed: 04/15/13 18:30

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

**Sample ID: S-1  
SAMPLE**

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
606-20-2	2,6-Dinitrotoluene	1,300	< 1,300 U
121-14-2	2,4-Dinitrotoluene	1,300	< 1,300 U
84-66-2	Diethylphthalate	260	< 260 U
7005-72-3	4-Chlorophenyl-phenylether	260	< 260 U
86-73-7	Fluorene	260	< 260 U
100-01-6	4-Nitroaniline	1,300	< 1,300 U
534-52-1	4,6-Dinitro-2-Methylphenol	2,600	< 2,600 U
86-30-6	N-Nitrosodiphenylamine	260	< 260 U
101-55-3	4-Bromophenyl-phenylether	260	< 260 U
118-74-1	Hexachlorobenzene	260	< 260 U
87-86-5	Pentachlorophenol	1,300	< 1,300 U
85-01-8	Phenanthrene	260	< 260 U
86-74-8	Carbazole	260	< 260 U
120-12-7	Anthracene	260	< 260 U
84-74-2	Di-n-Butylphthalate	260	< 260 U
206-44-0	Fluoranthene	260	< 260 U
129-00-0	Pyrene	260	< 260 U
85-68-7	Butylbenzylphthalate	260	< 260 U
91-94-1	3,3'-Dichlorobenzidine	1,300	< 1,300 U
56-55-3	Benzo(a)anthracene	260	< 260 U
117-81-7	bis(2-Ethylhexyl)phthalate	260	< 260 U
218-01-9	Chrysene	260	< 260 U
117-84-0	Di-n-Octyl phthalate	260	< 260 U
50-32-8	Benzo(a)pyrene	260	< 260 U
193-39-5	Indeno(1,2,3-cd)pyrene	260	< 260 U
53-70-3	Dibenz(a,h)anthracene	260	< 260 U
191-24-2	Benzo(g,h,i)perylene	260	< 260 U
90-12-0	1-Methylnaphthalene	260	< 260 U
TOTBFA	Total Benzofluoranthenes	260	< 260 U

Reported in  $\mu\text{g}/\text{kg}$  (ppb)

**Semivolatile Surrogate Recovery**

d5-Nitrobenzene	46.0%	2-Fluorobiphenyl	56.8%
d14-p-Terphenyl	57.6%	d4-1,2-Dichlorobenzene	57.2%
d5-Phenol	39.2%	2-Fluorophenol	20.4%
2,4,6-Tribromophenol	5.7%	d4-2-Chlorophenol	30.7%

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3546**

Page 1 of 2

Lab Sample ID: WJ08A

LIMS ID: 13-6314

Matrix: Concrete

Data Release Authorized: *[Signature]*

Reported: 04/17/13

Date Extracted: 04/12/13

Date Analyzed: 04/15/13 21:57

Instrument/Analyst: NT6/JZ

GPC Cleanup: No

**Sample ID: S-1**  
**DILUTION**

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207  
 Date Sampled: 03/26/13  
 Date Received: 03/26/13

Sample Amount: 1.93 g-dry-wt  
 Final Extract Volume: 0.5 mL  
 Dilution Factor: 10.0  
 Percent Moisture: 4.1%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	2,600	< 2,600 U
111-44-4	Bis-(2-Chloroethyl) Ether	2,600	< 2,600 U
95-57-8	2-Chlorophenol	2,600	< 2,600 U
541-73-1	1,3-Dichlorobenzene	2,600	< 2,600 U
106-46-7	1,4-Dichlorobenzene	2,600	< 2,600 U
100-51-6	Benzyl Alcohol	13,000	< 13,000 U
95-50-1	1,2-Dichlorobenzene	2,600	< 2,600 U
95-48-7	2-Methylphenol	2,600	< 2,600 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	2,600	< 2,600 U
106-44-5	4-Methylphenol	2,600	< 2,600 U
621-64-7	N-Nitroso-Di-N-Propylamine	2,600	< 2,600 U
67-72-1	Hexachloroethane	2,600	< 2,600 U
98-95-3	Nitrobenzene	2,600	< 2,600 U
<b>78-59-1</b>	<b>Isophorone</b>	<b>2,600</b>	<b>95,000</b>
88-75-5	2-Nitrophenol	2,600	< 2,600 U
105-67-9	2,4-Dimethylphenol	2,600	< 2,600 U
65-85-0	Benzoic Acid	26,000	< 26,000 U
111-91-1	bis(2-Chloroethoxy) Methane	2,600	< 2,600 U
120-83-2	2,4-Dichlorophenol	13,000	< 13,000 U
120-82-1	1,2,4-Trichlorobenzene	2,600	< 2,600 U
91-20-3	Naphthalene	2,600	< 2,600 U
106-47-8	4-Chloroaniline	13,000	< 13,000 U
87-68-3	Hexachlorobutadiene	2,600	< 2,600 U
59-50-7	4-Chloro-3-methylphenol	13,000	< 13,000 U
91-57-6	2-Methylnaphthalene	2,600	< 2,600 U
77-47-4	Hexachlorocyclopentadiene	13,000	< 13,000 U
88-06-2	2,4,6-Trichlorophenol	13,000	< 13,000 U
95-95-4	2,4,5-Trichlorophenol	13,000	< 13,000 U
91-58-7	2-Chloronaphthalene	2,600	< 2,600 U
88-74-4	2-Nitroaniline	13,000	< 13,000 U
131-11-3	Dimethylphthalate	2,600	< 2,600 U
208-96-8	Acenaphthylene	2,600	< 2,600 U
99-09-2	3-Nitroaniline	13,000	< 13,000 U
83-32-9	Acenaphthene	2,600	< 2,600 U
51-28-5	2,4-Dinitrophenol	26,000	< 26,000 U
100-02-7	4-Nitrophenol	13,000	< 13,000 U
132-64-9	Dibenzofuran	2,600	< 2,600 U

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3546**

Page 2 of 2

Lab Sample ID: WJ08A  
 LIMS ID: 13-6314  
 Matrix: Concrete  
 Date Analyzed: 04/15/13 21:57

**Sample ID: S-1**  
**DILUTION**

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
606-20-2	2,6-Dinitrotoluene	13,000	< 13,000 U
121-14-2	2,4-Dinitrotoluene	13,000	< 13,000 U
84-66-2	Diethylphthalate	2,600	< 2,600 U
7005-72-3	4-Chlorophenyl-phenylether	2,600	< 2,600 U
86-73-7	Fluorene	2,600	< 2,600 U
100-01-6	4-Nitroaniline	13,000	< 13,000 U
534-52-1	4,6-Dinitro-2-Methylphenol	26,000	< 26,000 U
86-30-6	N-Nitrosodiphenylamine	2,600	< 2,600 U
101-55-3	4-Bromophenyl-phenylether	2,600	< 2,600 U
118-74-1	Hexachlorobenzene	2,600	< 2,600 U
87-86-5	Pentachlorophenol	13,000	< 13,000 U
85-01-8	Phenanthrene	2,600	< 2,600 U
86-74-8	Carbazole	2,600	< 2,600 U
120-12-7	Anthracene	2,600	< 2,600 U
84-74-2	Di-n-Butylphthalate	2,600	< 2,600 U
206-44-0	Fluoranthene	2,600	< 2,600 U
129-00-0	Pyrene	2,600	< 2,600 U
85-68-7	Butylbenzylphthalate	2,600	< 2,600 U
91-94-1	3,3'-Dichlorobenzidine	13,000	< 13,000 U
56-55-3	Benzo(a)anthracene	2,600	< 2,600 U
117-81-7	bis(2-Ethylhexyl)phthalate	2,600	< 2,600 U
218-01-9	Chrysene	2,600	< 2,600 U
117-84-0	Di-n-Octyl phthalate	2,600	< 2,600 U
50-32-8	Benzo(a)pyrene	2,600	< 2,600 U
193-39-5	Indeno(1,2,3-cd)pyrene	2,600	< 2,600 U
53-70-3	Dibenz(a,h)anthracene	2,600	< 2,600 U
191-24-2	Benzo(g,h,i)perylene	2,600	< 2,600 U
90-12-0	1-Methylnaphthalene	2,600	< 2,600 U
TOTBFA	Total Benzofluoranthenes	2,600	< 2,600 U

Reported in  $\mu\text{g}/\text{kg}$  (ppb)

**Semivolatile Surrogate Recovery**

d5-Nitrobenzene	54.0%	2-Fluorobiphenyl	63.2%
d14-p-Terphenyl	62.4%	d4-1,2-Dichlorobenzene	61.6%
d5-Phenol	47.2%	2-Fluorophenol	26.7%
2,4,6-Tribromophenol	0.0%	d4-2-Chlorophenol	30.7%

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3546**

Page 1 of 2

Lab Sample ID: WJ08B  
 LIMS ID: 13-6315  
 Matrix: Concrete  
 Data Release Authorized: *[Signature]*  
 Reported: 04/17/13

Date Extracted: 04/12/13  
 Date Analyzed: 04/15/13 19:05  
 Instrument/Analyst: NT6/JZ  
 GPC Cleanup: No

**Sample ID: S-2  
 SAMPLE**

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207  
 Date Sampled: 03/26/13  
 Date Received: 03/26/13

Sample Amount: 1.93 g-dry-wt  
 Final Extract Volume: 0.5 mL  
 Dilution Factor: 1.00  
 Percent Moisture: 3.6%

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
108-95-2	Phenol	260	< 260 U
111-44-4	Bis-(2-Chloroethyl) Ether	260	< 260 U
95-57-8	2-Chlorophenol	260	< 260 U
541-73-1	1,3-Dichlorobenzene	260	< 260 U
106-46-7	1,4-Dichlorobenzene	260	< 260 U
100-51-6	Benzyl Alcohol	1,300	< 1,300 U
95-50-1	1,2-Dichlorobenzene	260	< 260 U
95-48-7	2-Methylphenol	260	< 260 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	260	< 260 U
106-44-5	4-Methylphenol	260	< 260 U
621-64-7	N-Nitroso-Di-N-Propylamine	260	< 260 U
67-72-1	Hexachloroethane	260	< 260 U
98-95-3	Nitrobenzene	260	< 260 U
<b>78-59-1</b>	<b>Isophorone</b>	<b>260</b>	<b>54,000 ES</b>
88-75-5	2-Nitrophenol	260	< 260 U
105-67-9	2,4-Dimethylphenol	260	< 260 U
65-85-0	Benzoic Acid	2,600	< 2,600 U
111-91-1	bis(2-Chloroethoxy) Methane	260	< 260 U
120-83-2	2,4-Dichlorophenol	1,300	< 1,300 U
120-82-1	1,2,4-Trichlorobenzene	260	< 260 U
91-20-3	Naphthalene	260	< 260 U
106-47-8	4-Chloroaniline	1,300	< 1,300 U
87-68-3	Hexachlorobutadiene	260	< 260 U
59-50-7	4-Chloro-3-methylphenol	1,300	< 1,300 U
91-57-6	2-Methylnaphthalene	260	< 260 U
77-47-4	Hexachlorocyclopentadiene	1,300	< 1,300 U
88-06-2	2,4,6-Trichlorophenol	1,300	< 1,300 U
95-95-4	2,4,5-Trichlorophenol	1,300	< 1,300 U
91-58-7	2-Chloronaphthalene	260	< 260 U
88-74-4	2-Nitroaniline	1,300	< 1,300 U
131-11-3	Dimethylphthalate	260	< 260 U
208-96-8	Acenaphthylene	260	< 260 U
99-09-2	3-Nitroaniline	1,300	< 1,300 U
83-32-9	Acenaphthene	260	< 260 U
51-28-5	2,4-Dinitrophenol	2,600	< 2,600 U
100-02-7	4-Nitrophenol	1,300	< 1,300 U
132-64-9	Dibenzofuran	260	< 260 U

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3546**

Page 2 of 2

Lab, Sample ID: WJ08B  
 LIMS ID: 13-6315  
 Matrix: Concrete  
 Date Analyzed: 04/15/13 19:05

Sample ID: S-2  
**SAMPLE**  
 QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
606-20-2	2,6-Dinitrotoluene	1,300	< 1,300 U
121-14-2	2,4-Dinitrotoluene	1,300	< 1,300 U
84-66-2	Diethylphthalate	260	< 260 U
7005-72-3	4-Chlorophenyl-phenylether	260	< 260 U
86-73-7	Fluorene	260	< 260 U
100-01-6	4-Nitroaniline	1,300	< 1,300 U
534-52-1	4,6-Dinitro-2-Methylphenol	2,600	< 2,600 U
86-30-6	N-Nitrosodiphenylamine	260	< 260 U
101-55-3	4-Bromophenyl-phenylether	260	< 260 U
118-74-1	Hexachlorobenzene	260	< 260 U
87-86-5	Pentachlorophenol	1,300	< 1,300 U
85-01-8	Phenanthrene	260	< 260 U
86-74-8	Carbazole	260	< 260 U
120-12-7	Anthracene	260	< 260 U
84-74-2	Di-n-Butylphthalate	260	< 260 U
206-44-0	Fluoranthene	260	< 260 U
129-00-0	Pyrene	260	< 260 U
85-68-7	Butylbenzylphthalate	260	< 260 U
91-94-1	3,3'-Dichlorobenzidine	1,300	< 1,300 U
56-55-3	Benzo(a)anthracene	260	< 260 U
117-81-7	bis(2-Ethylhexyl)phthalate	260	< 260 U
218-01-9	Chrysene	260	< 260 U
117-84-0	Di-n-Octyl phthalate	260	< 260 U
50-32-8	Benzo(a)pyrene	260	< 260 U
193-39-5	Indeno(1,2,3-cd)pyrene	260	< 260 U
53-70-3	Dibenz(a,h)anthracene	260	< 260 U
191-24-2	Benzo(g,h,i)perylene	260	< 260 U
90-12-0	1-Methylnaphthalene	260	< 260 U
TOTBFA	Total Benzofluoranthenes	260	< 260 U

Reported in  $\mu\text{g}/\text{kg}$  (ppb)

**Semivolatile Surrogate Recovery**

d5-Nitrobenzene	38.6%	2-Fluorobiphenyl	54.4%
d14-p-Terphenyl	50.0%	d4-1,2-Dichlorobenzene	52.4%
d5-Phenol	21.6%	2-Fluorophenol	14.9%
2,4,6-Tribromophenol	3.1%	d4-2-Chlorophenol	22.8%

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3546**

Page 1 of 2

Lab Sample ID: WJ08B

LIMS ID: 13-6315

Matrix: Concrete

Data Release Authorized: *[Signature]*

Reported: 04/17/13

Date Extracted: 04/12/13

Date Analyzed: 04/15/13 22:31

Instrument/Analyst: NT6/JZ

GPC Cleanup: No

**Sample ID: S-2**  
**DILUTION**

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207  
 Date Sampled: 03/26/13  
 Date Received: 03/26/13

Sample Amount: 1.93 g-dry-wt  
 Final Extract Volume: 0.5 mL  
 Dilution Factor: 10.0  
 Percent Moisture: 3.6%

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
108-95-2	Phenol	2,600	< 2,600 U
111-44-4	Bis-(2-Chloroethyl) Ether	2,600	< 2,600 U
95-57-8	2-Chlorophenol	2,600	< 2,600 U
541-73-1	1,3-Dichlorobenzene	2,600	< 2,600 U
106-46-7	1,4-Dichlorobenzene	2,600	< 2,600 U
100-51-6	Benzyl Alcohol	13,000	< 13,000 U
95-50-1	1,2-Dichlorobenzene	2,600	< 2,600 U
95-48-7	2-Methylphenol	2,600	< 2,600 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	2,600	< 2,600 U
106-44-5	4-Methylphenol	2,600	< 2,600 U
621-64-7	N-Nitroso-Di-N-Propylamine	2,600	< 2,600 U
67-72-1	Hexachloroethane	2,600	< 2,600 U
98-95-3	Nitrobenzene	2,600	< 2,600 U
<b>78-59-1</b>	<b>Isophorone</b>	<b>2,600</b>	<b>69,000</b>
88-75-5	2-Nitrophenol	2,600	< 2,600 U
105-67-9	2,4-Dimethylphenol	2,600	< 2,600 U
65-85-0	Benzoic Acid	26,000	< 26,000 U
111-91-1	bis(2-Chloroethoxy) Methane	2,600	< 2,600 U
120-83-2	2,4-Dichlorophenol	13,000	< 13,000 U
120-82-1	1,2,4-Trichlorobenzene	2,600	< 2,600 U
91-20-3	Naphthalene	2,600	< 2,600 U
106-47-8	4-Chloroaniline	13,000	< 13,000 U
87-68-3	Hexachlorobutadiene	2,600	< 2,600 U
59-50-7	4-Chloro-3-methylphenol	13,000	< 13,000 U
91-57-6	2-Methylnaphthalene	2,600	< 2,600 U
77-47-4	Hexachlorocyclopentadiene	13,000	< 13,000 U
88-06-2	2,4,6-Trichlorophenol	13,000	< 13,000 U
95-95-4	2,4,5-Trichlorophenol	13,000	< 13,000 U
91-58-7	2-Chloronaphthalene	2,600	< 2,600 U
88-74-4	2-Nitroaniline	13,000	< 13,000 U
131-11-3	Dimethylphthalate	2,600	< 2,600 U
208-96-8	Acenaphthylene	2,600	< 2,600 U
99-09-2	3-Nitroaniline	13,000	< 13,000 U
83-32-9	Acenaphthene	2,600	< 2,600 U
51-28-5	2,4-Dinitrophenol	26,000	< 26,000 U
100-02-7	4-Nitrophenol	13,000	< 13,000 U
132-64-9	Dibenzofuran	2,600	< 2,600 U

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3546**

Page 2 of 2

Lab Sample ID: WJ08B

LIMS ID: 13-6315

Matrix: Concrete

Date Analyzed: 04/15/13 22:31

**Sample ID: S-2**  
**DILUTION**

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
606-20-2	2,6-Dinitrotoluene	13,000	< 13,000 U
121-14-2	2,4-Dinitrotoluene	13,000	< 13,000 U
84-66-2	Diethylphthalate	2,600	< 2,600 U
7005-72-3	4-Chlorophenyl-phenylether	2,600	< 2,600 U
86-73-7	Fluorene	2,600	< 2,600 U
100-01-6	4-Nitroaniline	13,000	< 13,000 U
534-52-1	4,6-Dinitro-2-Methylphenol	26,000	< 26,000 U
86-30-6	N-Nitrosodiphenylamine	2,600	< 2,600 U
101-55-3	4-Bromophenyl-phenylether	2,600	< 2,600 U
118-74-1	Hexachlorobenzene	2,600	< 2,600 U
87-86-5	Pentachlorophenol	13,000	< 13,000 U
85-01-8	Phenanthrene	2,600	< 2,600 U
86-74-8	Carbazole	2,600	< 2,600 U
120-12-7	Anthracene	2,600	< 2,600 U
84-74-2	Di-n-Butylphthalate	2,600	< 2,600 U
206-44-0	Fluoranthene	2,600	< 2,600 U
129-00-0	Pyrene	2,600	< 2,600 U
85-68-7	Butylbenzylphthalate	2,600	< 2,600 U
91-94-1	3,3'-Dichlorobenzidine	13,000	< 13,000 U
56-55-3	Benzo(a)anthracene	2,600	< 2,600 U
117-81-7	bis(2-Ethylhexyl)phthalate	2,600	< 2,600 U
218-01-9	Chrysene	2,600	< 2,600 U
117-84-0	Di-n-Octyl phthalate	2,600	< 2,600 U
50-32-8	Benzo(a)pyrene	2,600	< 2,600 U
193-39-5	Indeno(1,2,3-cd)pyrene	2,600	< 2,600 U
53-70-3	Dibenz(a,h)anthracene	2,600	< 2,600 U
191-24-2	Benzo(g,h,i)perylene	2,600	< 2,600 U
90-12-0	1-Methylnaphthalene	2,600	< 2,600 U
TOTBFA	Total Benzofluoranthenes	2,600	< 2,600 U

Reported in µg/kg (ppb)

**Semivolatile Surrogate Recovery**

d5-Nitrobenzene	48.0%	2-Fluorobiphenyl	55.2%
d14-p-Terphenyl	52.0%	d4-1,2-Dichlorobenzene	54.0%
d5-Phenol	35.7%	2-Fluorophenol	17.9%
2,4,6-Tribromophenol	0.0%	d4-2-Chlorophenol	21.9%

**ORGANICS ANALYSIS DATA SHEET  
Semivolatiles by SW8270D GC/MS  
Extraction Method: SW3546**

Page 1 of 2

Lab Sample ID: WJ08C

LIMS ID: 13-6316

Matrix: Concrete

Data Release Authorized: *[Signature]*

Reported: 04/17/13

Date Extracted: 04/12/13

Date Analyzed: 04/15/13 19:40

Instrument/Analyst: NT6/JZ

GPC Cleanup: No

**Sample ID: S-3  
SAMPLE**

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

Date Sampled: 03/26/13

Date Received: 03/26/13

Sample Amount: 1.93 g-dry-wt  
Final Extract Volume: 0.5 mL  
Dilution Factor: 1.00  
Percent Moisture: 3.7%

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
<b>108-95-2</b>	<b>Phenol</b>	<b>260</b>	<b>600 M</b>
111-44-4	Bis-(2-Chloroethyl) Ether	260	< 260 U
95-57-8	2-Chlorophenol	260	< 260 U
541-73-1	1,3-Dichlorobenzene	260	< 260 U
106-46-7	1,4-Dichlorobenzene	260	< 260 U
100-51-6	Benzyl Alcohol	1,300	< 1,300 U
95-50-1	1,2-Dichlorobenzene	260	< 260 U
95-48-7	2-Methylphenol	260	< 260 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	260	< 260 U
106-44-5	4-Methylphenol	260	< 260 U
621-64-7	N-Nitroso-Di-N-Propylamine	260	< 260 U
67-72-1	Hexachloroethane	260	< 260 U
98-95-3	Nitrobenzene	260	< 260 U
<b>78-59-1</b>	<b>Isophorone</b>	<b>260</b>	<b>130,000 ES</b>
88-75-5	2-Nitrophenol	260	< 260 U
105-67-9	2,4-Dimethylphenol	260	< 260 U
65-85-0	Benzoic Acid	2,600	< 2,600 U
111-91-1	bis(2-Chloroethoxy) Methane	260	< 260 U
120-83-2	2,4-Dichlorophenol	1,300	< 1,300 U
120-82-1	1,2,4-Trichlorobenzene	260	< 260 U
91-20-3	Naphthalene	260	< 260 U
106-47-8	4-Chloroaniline	1,300	< 1,300 U
87-68-3	Hexachlorobutadiene	260	< 260 U
59-50-7	4-Chloro-3-methylphenol	1,300	< 1,300 U
91-57-6	2-Methylnaphthalene	260	< 260 U
77-47-4	Hexachlorocyclopentadiene	1,300	< 1,300 U
88-06-2	2,4,6-Trichlorophenol	1,300	< 1,300 U
95-95-4	2,4,5-Trichlorophenol	1,300	< 1,300 U
91-58-7	2-Chloronaphthalene	260	< 260 U
88-74-4	2-Nitroaniline	1,300	< 1,300 U
131-11-3	Dimethylphthalate	260	< 260 U
208-96-8	Acenaphthylene	260	< 260 U
99-09-2	3-Nitroaniline	1,300	< 1,300 U
83-32-9	Acenaphthene	260	< 260 U
51-28-5	2,4-Dinitrophenol	2,600	< 2,600 U
100-02-7	4-Nitrophenol	1,300	< 1,300 U
132-64-9	Dibenzofuran	260	< 260 U

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3546**

Page 2 of 2

Lab Sample ID: WJ08C  
 LIMS ID: 13-6316  
 Matrix: Concrete  
 Date Analyzed: 04/15/13 19:40

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

**Sample ID: S-3  
 SAMPLE**

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
606-20-2	2,6-Dinitrotoluene	1,300	< 1,300 U
121-14-2	2,4-Dinitrotoluene	1,300	< 1,300 U
84-66-2	Diethylphthalate	260	< 260 U
7005-72-3	4-Chlorophenyl-phenylether	260	< 260 U
86-73-7	Fluorene	260	< 260 U
100-01-6	4-Nitroaniline	1,300	< 1,300 U
534-52-1	4,6-Dinitro-2-Methylphenol	2,600	< 2,600 U
86-30-6	N-Nitrosodiphenylamine	260	< 260 U
101-55-3	4-Bromophenyl-phenylether	260	< 260 U
118-74-1	Hexachlorobenzene	260	< 260 U
87-86-5	Pentachlorophenol	1,300	< 1,300 U
85-01-8	Phenanthrene	260	< 260 U
86-74-8	Carbazole	260	< 260 U
120-12-7	Anthracene	260	< 260 U
84-74-2	Di-n-Butylphthalate	260	< 260 U
206-44-0	Fluoranthene	260	< 260 U
129-00-0	Pyrene	260	< 260 U
85-68-7	Butylbenzylphthalate	260	< 260 U
91-94-1	3,3'-Dichlorobenzidine	1,300	< 1,300 U
56-55-3	Benzo(a)anthracene	260	< 260 U
117-81-7	bis(2-Ethylhexyl)phthalate	260	< 260 U
218-01-9	Chrysene	260	< 260 U
117-84-0	Di-n-Octyl phthalate	260	< 260 U
50-32-8	Benzo(a)pyrene	260	< 260 U
193-39-5	Indeno(1,2,3-cd)pyrene	260	< 260 U
53-70-3	Dibenz(a,h)anthracene	260	< 260 U
191-24-2	Benzo(g,h,i)perylene	260	< 260 U
90-12-0	1-Methylnaphthalene	260	< 260 U
TOTBFA	Total Benzofluoranthenes	260	< 260 U

Reported in  $\mu\text{g}/\text{kg}$  (ppb)

**Semivolatile Surrogate Recovery**

d5-Nitrobenzene	42.0%	2-Fluorobiphenyl	63.2%
d14-p-Terphenyl	62.0%	d4-1,2-Dichlorobenzene	62.8%
d5-Phenol	39.2%	2-Fluorophenol	21.3%
2,4,6-Tribromophenol	13.1%	d4-2-Chlorophenol	36.8%

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3546**

Page 1 of 2

Lab Sample ID: WJ08C  
 LIMS ID: 13-6316  
 Matrix: Concrete  
 Data Release Authorized: *BB*  
 Reported: 04/17/13

Date Extracted: 04/12/13  
 Date Analyzed: 04/15/13 23:05  
 Instrument/Analyst: NT6/JZ  
 GPC Cleanup: No

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207  
 Date Sampled: 03/26/13  
 Date Received: 03/26/13

Sample Amount: 1.93 g-dry-wt  
 Final Extract Volume: 0.5 mL  
 Dilution Factor: 10.0  
 Percent Moisture: 3.7%

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
108-95-2	Phenol	2,600	< 2,600 U
111-44-4	Bis-(2-Chloroethyl) Ether	2,600	< 2,600 U
95-57-8	2-Chlorophenol	2,600	< 2,600 U
541-73-1	1,3-Dichlorobenzene	2,600	< 2,600 U
106-46-7	1,4-Dichlorobenzene	2,600	< 2,600 U
100-51-6	Benzyl Alcohol	13,000	< 13,000 U
95-50-1	1,2-Dichlorobenzene	2,600	< 2,600 U
95-48-7	2-Methylphenol	2,600	< 2,600 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	2,600	< 2,600 U
106-44-5	4-Methylphenol	2,600	< 2,600 U
621-64-7	N-Nitroso-Di-N-Propylamine	2,600	< 2,600 U
67-72-1	Hexachloroethane	2,600	< 2,600 U
98-95-3	Nitrobenzene	2,600	< 2,600 U
<b>78-59-1</b>	<b>Isophorone</b>	<b>2,600</b>	<b>200,000</b>
88-75-5	2-Nitrophenol	2,600	< 2,600 U
105-67-9	2,4-Dimethylphenol	2,600	< 2,600 U
65-85-0	Benzoic Acid	26,000	< 26,000 U
111-91-1	bis(2-Chloroethoxy) Methane	2,600	< 2,600 U
120-83-2	2,4-Dichlorophenol	13,000	< 13,000 U
120-82-1	1,2,4-Trichlorobenzene	2,600	< 2,600 U
91-20-3	Naphthalene	2,600	< 2,600 U
106-47-8	4-Chloroaniline	13,000	< 13,000 U
87-68-3	Hexachlorobutadiene	2,600	< 2,600 U
59-50-7	4-Chloro-3-methylphenol	13,000	< 13,000 U
91-57-6	2-Methylnaphthalene	2,600	< 2,600 U
77-47-4	Hexachlorocyclopentadiene	13,000	< 13,000 U
88-06-2	2,4,6-Trichlorophenol	13,000	< 13,000 U
95-95-4	2,4,5-Trichlorophenol	13,000	< 13,000 U
91-58-7	2-Chloronaphthalene	2,600	< 2,600 U
88-74-4	2-Nitroaniline	13,000	< 13,000 U
131-11-3	Dimethylphthalate	2,600	< 2,600 U
208-96-8	Acenaphthylene	2,600	< 2,600 U
99-09-2	3-Nitroaniline	13,000	< 13,000 U
83-32-9	Acenaphthene	2,600	< 2,600 U
51-28-5	2,4-Dinitrophenol	26,000	< 26,000 U
100-02-7	4-Nitrophenol	13,000	< 13,000 U
132-64-9	Dibenzofuran	2,600	< 2,600 U

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3546**

Page 2 of 2

Lab Sample ID: WJ08C  
 LIMS ID: 13-6316  
 Matrix: Concrete  
 Date Analyzed: 04/15/13 23:05

**Sample ID: S-3**  
**DILUTION**

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
606-20-2	2,6-Dinitrotoluene	13,000	< 13,000 U
121-14-2	2,4-Dinitrotoluene	13,000	< 13,000 U
84-66-2	Diethylphthalate	2,600	< 2,600 U
7005-72-3	4-Chlorophenyl-phenylether	2,600	< 2,600 U
86-73-7	Fluorene	2,600	< 2,600 U
100-01-6	4-Nitroaniline	13,000	< 13,000 U
534-52-1	4,6-Dinitro-2-Methylphenol	26,000	< 26,000 U
86-30-6	N-Nitrosodiphenylamine	2,600	< 2,600 U
101-55-3	4-Bromophenyl-phenylether	2,600	< 2,600 U
118-74-1	Hexachlorobenzene	2,600	< 2,600 U
87-86-5	Pentachlorophenol	13,000	< 13,000 U
85-01-8	Phenanthrene	2,600	< 2,600 U
86-74-8	Carbazole	2,600	< 2,600 U
120-12-7	Anthracene	2,600	< 2,600 U
84-74-2	Di-n-Butylphthalate	2,600	< 2,600 U
206-44-0	Fluoranthene	2,600	< 2,600 U
129-00-0	Pyrene	2,600	< 2,600 U
85-68-7	Butylbenzylphthalate	2,600	< 2,600 U
91-94-1	3,3'-Dichlorobenzidine	13,000	< 13,000 U
56-55-3	Benzo(a)anthracene	2,600	< 2,600 U
117-81-7	bis(2-Ethylhexyl)phthalate	2,600	< 2,600 U
218-01-9	Chrysene	2,600	< 2,600 U
117-84-0	Di-n-Octyl phthalate	2,600	< 2,600 U
50-32-8	Benzo(a)pyrene	2,600	< 2,600 U
193-39-5	Indeno(1,2,3-cd)pyrene	2,600	< 2,600 U
53-70-3	Dibenz(a,h)anthracene	2,600	< 2,600 U
191-24-2	Benzo(g,h,i)perylene	2,600	< 2,600 U
90-12-0	1-Methylnaphthalene	2,600	< 2,600 U
TOTBFA	Total Benzofluoranthenes	2,600	< 2,600 U

Reported in  $\mu\text{g}/\text{kg}$  (ppb)

**Semivolatile Surrogate Recovery**

d5-Nitrobenzene	52.4%	2-Fluorobiphenyl	60.4%
d14-p-Terphenyl	56.0%	d4-1,2-Dichlorobenzene	56.0%
d5-Phenol	41.6%	2-Fluorophenol	26.7%
2,4,6-Tribromophenol	0.0%	d4-2-Chlorophenol	31.7%

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3546**

Page 1 of 2

Lab Sample ID: WJ08D  
 LIMS ID: 13-6317  
 Matrix: Concrete  
 Data Release Authorized: *[Signature]*  
 Reported: 04/17/13

Date Extracted: 04/12/13  
 Date Analyzed: 04/15/13 21:23  
 Instrument/Analyst: NT6/JZ  
 GPC Cleanup: No

**Sample ID: S-4**  
**SAMPLE**

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207  
 Date Sampled: 03/26/13  
 Date Received: 03/26/13

Sample Amount: 1.94 g-dry-wt  
 Final Extract Volume: 0.5 mL  
 Dilution Factor: 1.00  
 Percent Moisture: 3.9%

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
<b>108-95-2</b>	<b>Phenol</b>	<b>260</b>	<b>270 M</b>
111-44-4	Bis-(2-Chloroethyl) Ether	260	< 260 U
95-57-8	2-Chlorophenol	260	< 260 U
541-73-1	1,3-Dichlorobenzene	260	< 260 U
106-46-7	1,4-Dichlorobenzene	260	< 260 U
100-51-6	Benzyl Alcohol	1,300	< 1,300 U
95-50-1	1,2-Dichlorobenzene	260	< 260 U
95-48-7	2-Methylphenol	260	< 260 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	260	< 260 U
106-44-5	4-Methylphenol	260	< 260 U
621-64-7	N-Nitroso-Di-N-Propylamine	260	< 260 U
67-72-1	Hexachloroethane	260	< 260 U
98-95-3	Nitrobenzene	260	< 260 U
<b>78-59-1</b>	<b>Isophorone</b>	<b>260</b>	<b>57,000 ES</b>
88-75-5	2-Nitrophenol	260	< 260 U
105-67-9	2,4-Dimethylphenol	260	< 260 U
65-85-0	Benzoic Acid	2,600	< 2,600 U
111-91-1	bis(2-Chloroethoxy) Methane	260	< 260 U
120-83-2	2,4-Dichlorophenol	1,300	< 1,300 U
120-82-1	1,2,4-Trichlorobenzene	260	< 260 U
91-20-3	Naphthalene	260	< 260 U
106-47-8	4-Chloroaniline	1,300	< 1,300 U
87-68-3	Hexachlorobutadiene	260	< 260 U
59-50-7	4-Chloro-3-methylphenol	1,300	< 1,300 U
91-57-6	2-Methylnaphthalene	260	< 260 U
77-47-4	Hexachlorocyclopentadiene	1,300	< 1,300 U
88-06-2	2,4,6-Trichlorophenol	1,300	< 1,300 U
95-95-4	2,4,5-Trichlorophenol	1,300	< 1,300 U
91-58-7	2-Chloronaphthalene	260	< 260 U
88-74-4	2-Nitroaniline	1,300	< 1,300 U
131-11-3	Dimethylphthalate	260	< 260 U
208-96-8	Acenaphthylene	260	< 260 U
99-09-2	3-Nitroaniline	1,300	< 1,300 U
83-32-9	Acenaphthene	260	< 260 U
51-28-5	2,4-Dinitrophenol	2,600	< 2,600 U
100-02-7	4-Nitrophenol	1,300	< 1,300 U
132-64-9	Dibenzofuran	260	< 260 U

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3546**

Page 2 of 2

Lab Sample ID: WJ08D  
 LIMS ID: 13-6317  
 Matrix: Concrete  
 Date Analyzed: 04/15/13 21:23

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

**Sample ID: S-4  
 SAMPLE**

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
606-20-2	2,6-Dinitrotoluene	1,300	< 1,300 U
121-14-2	2,4-Dinitrotoluene	1,300	< 1,300 U
84-66-2	Diethylphthalate	260	< 260 U
7005-72-3	4-Chlorophenyl-phenylether	260	< 260 U
86-73-7	Fluorene	260	< 260 U
100-01-6	4-Nitroaniline	1,300	< 1,300 U
534-52-1	4,6-Dinitro-2-Methylphenol	2,600	< 2,600 U
86-30-6	N-Nitrosodiphenylamine	260	< 260 U
101-55-3	4-Bromophenyl-phenylether	260	< 260 U
118-74-1	Hexachlorobenzene	260	< 260 U
87-86-5	Pentachlorophenol	1,300	< 1,300 U
85-01-8	Phenanthrene	260	< 260 U
86-74-8	Carbazole	260	< 260 U
120-12-7	Anthracene	260	< 260 U
84-74-2	Di-n-Butylphthalate	260	< 260 U
206-44-0	Fluoranthene	260	< 260 U
129-00-0	Pyrene	260	< 260 U
85-68-7	Butylbenzylphthalate	260	< 260 U
91-94-1	3,3'-Dichlorobenzidine	1,300	< 1,300 U
56-55-3	Benzo(a)anthracene	260	< 260 U
117-81-7	bis(2-Ethylhexyl)phthalate	260	< 260 U
218-01-9	Chrysene	260	< 260 U
117-84-0	Di-n-Octyl phthalate	260	< 260 U
50-32-8	Benzo(a)pyrene	260	< 260 U
193-39-5	Indeno(1,2,3-cd)pyrene	260	< 260 U
53-70-3	Dibenz(a,h)anthracene	260	< 260 U
191-24-2	Benzo(g,h,i)perylene	260	< 260 U
90-12-0	1-Methylnaphthalene	260	< 260 U
TOTBFA	Total Benzofluoranthenes	260	< 260 U

Reported in  $\mu\text{g}/\text{kg}$  (ppb)

**Semivolatile Surrogate Recovery**

d5-Nitrobenzene	46.8%	2-Fluorobiphenyl	56.0%
d14-p-Terphenyl	55.2%	d4-1,2-Dichlorobenzene	53.6%
d5-Phenol	31.5%	2-Fluorophenol	7.7%
2,4,6-Tribromophenol	3.8%	d4-2-Chlorophenol	17.7%

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3546**

Page 1 of 2

Lab Sample ID: WJ08D  
 LIMS ID: 13-6317  
 Matrix: Concrete  
 Data Release Authorized: *[Signature]*  
 Reported: 04/17/13

Date Extracted: 04/12/13  
 Date Analyzed: 04/15/13 23:39  
 Instrument/Analyst: NT6/JZ  
 GPC Cleanup: No

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207  
 Date Sampled: 03/26/13  
 Date Received: 03/26/13

Sample Amount: 1.94 g-dry-wt  
 Final Extract Volume: 0.5 mL  
 Dilution Factor: 10.0  
 Percent Moisture: 3.9%

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
108-95-2	Phenol	2,600	< 2,600 U
111-44-4	Bis-(2-Chloroethyl) Ether	2,600	< 2,600 U
95-57-8	2-Chlorophenol	2,600	< 2,600 U
541-73-1	1,3-Dichlorobenzene	2,600	< 2,600 U
106-46-7	1,4-Dichlorobenzene	2,600	< 2,600 U
100-51-6	Benzyl Alcohol	13,000	< 13,000 U
95-50-1	1,2-Dichlorobenzene	2,600	< 2,600 U
95-48-7	2-Methylphenol	2,600	< 2,600 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	2,600	< 2,600 U
106-44-5	4-Methylphenol	2,600	< 2,600 U
621-64-7	N-Nitroso-Di-N-Propylamine	2,600	< 2,600 U
67-72-1	Hexachloroethane	2,600	< 2,600 U
98-95-3	Nitrobenzene	2,600	< 2,600 U
<b>78-59-1</b>	<b>Isophorone</b>	<b>2,600</b>	<b>78,000</b>
88-75-5	2-Nitrophenol	2,600	< 2,600 U
105-67-9	2,4-Dimethylphenol	2,600	< 2,600 U
65-85-0	Benzoic Acid	26,000	< 26,000 U
111-91-1	bis(2-Chloroethoxy) Methane	2,600	< 2,600 U
120-83-2	2,4-Dichlorophenol	13,000	< 13,000 U
120-82-1	1,2,4-Trichlorobenzene	2,600	< 2,600 U
91-20-3	Naphthalene	2,600	< 2,600 U
106-47-8	4-Chloroaniline	13,000	< 13,000 U
87-68-3	Hexachlorobutadiene	2,600	< 2,600 U
59-50-7	4-Chloro-3-methylphenol	13,000	< 13,000 U
91-57-6	2-Methylnaphthalene	2,600	< 2,600 U
77-47-4	Hexachlorocyclopentadiene	13,000	< 13,000 U
88-06-2	2,4,6-Trichlorophenol	13,000	< 13,000 U
95-95-4	2,4,5-Trichlorophenol	13,000	< 13,000 U
91-58-7	2-Chloronaphthalene	2,600	< 2,600 U
88-74-4	2-Nitroaniline	13,000	< 13,000 U
131-11-3	Dimethylphthalate	2,600	< 2,600 U
208-96-8	Acenaphthylene	2,600	< 2,600 U
99-09-2	3-Nitroaniline	13,000	< 13,000 U
83-32-9	Acenaphthene	2,600	< 2,600 U
51-28-5	2,4-Dinitrophenol	26,000	< 26,000 U
100-02-7	4-Nitrophenol	13,000	< 13,000 U
132-64-9	Dibenzofuran	2,600	< 2,600 U

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3546**

Page 2 of 2

Lab Sample ID: WJ08D  
 LIMS ID: 13-6317  
 Matrix: Concrete  
 Date Analyzed: 04/15/13 23:39

**Sample ID: S-4**  
**DILUTION**

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
606-20-2	2,6-Dinitrotoluene	13,000	< 13,000 U
121-14-2	2,4-Dinitrotoluene	13,000	< 13,000 U
84-66-2	Diethylphthalate	2,600	< 2,600 U
7005-72-3	4-Chlorophenyl-phenylether	2,600	< 2,600 U
86-73-7	Fluorene	2,600	< 2,600 U
100-01-6	4-Nitroaniline	13,000	< 13,000 U
534-52-1	4,6-Dinitro-2-Methylphenol	26,000	< 26,000 U
86-30-6	N-Nitrosodiphenylamine	2,600	< 2,600 U
101-55-3	4-Bromophenyl-phenylether	2,600	< 2,600 U
118-74-1	Hexachlorobenzene	2,600	< 2,600 U
87-86-5	Pentachlorophenol	13,000	< 13,000 U
85-01-8	Phenanthrene	2,600	< 2,600 U
86-74-8	Carbazole	2,600	< 2,600 U
120-12-7	Anthracene	2,600	< 2,600 U
84-74-2	Di-n-Butylphthalate	2,600	< 2,600 U
206-44-0	Fluoranthene	2,600	< 2,600 U
129-00-0	Pyrene	2,600	< 2,600 U
85-68-7	Butylbenzylphthalate	2,600	< 2,600 U
91-94-1	3,3'-Dichlorobenzidine	13,000	< 13,000 U
56-55-3	Benzo(a)anthracene	2,600	< 2,600 U
117-81-7	bis(2-Ethylhexyl)phthalate	2,600	< 2,600 U
218-01-9	Chrysene	2,600	< 2,600 U
117-84-0	Di-n-Octyl phthalate	2,600	< 2,600 U
50-32-8	Benzo(a)pyrene	2,600	< 2,600 U
193-39-5	Indeno(1,2,3-cd)pyrene	2,600	< 2,600 U
53-70-3	Dibenz(a,h)anthracene	2,600	< 2,600 U
191-24-2	Benzo(g,h,i)perylene	2,600	< 2,600 U
90-12-0	1-Methylnaphthalene	2,600	< 2,600 U
TOTBFA	Total Benzofluoranthenes	2,600	< 2,600 U

Reported in  $\mu\text{g}/\text{kg}$  (ppb)

**Semivolatile Surrogate Recovery**

d5-Nitrobenzene	52.4%	2-Fluorobiphenyl	59.2%
d14-p-Terphenyl	55.6%	d4-1,2-Dichlorobenzene	55.6%
d5-Phenol	37.1%	2-Fluorophenol	13.9%
2,4,6-Tribromophenol	0.0%	d4-2-Chlorophenol	17.6%

**SW8270 SEMIVOLATILES SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY**

Matrix: Concrete

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT	OUT
S-1	46.0%	56.8%	57.6%	57.2%	39.2%	20.4%*	5.7%*	30.7%*	3	
S-1 DL	54.0%	63.2%	62.4%	61.6%	47.2%	26.7%	0.0%*	30.7%*	2	
S-2	38.6%	54.4%	50.0%	52.4%	21.6%*	14.9%*	3.1%*	22.8%*	4	
S-2 DL	48.0%	55.2%	52.0%	54.0%	35.7%	17.9%*	0.0%*	21.9%*	3	
MB-041213	52.0%	54.4%	80.8%	54.4%	58.1%	48.0%	71.5%	55.2%	0	
LCS-041213	52.4%	62.0%	70.8%	49.2%	61.6%	51.2%	86.1%	55.7%	0	
S-3	42.0%	63.2%	62.0%	62.8%	39.2%	21.3%*	13.1%*	36.8%	2	
S-3 DL	52.4%	60.4%	56.0%	56.0%	41.6%	26.7%	0.0%*	31.7%*	2	
S-3 MS	53.2%	57.6%	58.0%	55.2%	49.9%	19.8%*	29.3%*	33.6%*	3	
S-3 MSD	46.8%	52.8%	55.2%	50.4%	40.5%	21.2%*	29.1%*	32.3%*	3	
S-4	46.8%	56.0%	55.2%	53.6%	31.5%	7.7%*	3.8%*	17.7%*	3	
S-4 DL	52.4%	59.2%	55.6%	55.6%	37.1%	13.9%*	0.0%*	17.6%*	3	

LCS/MB LIMITS	QC LIMITS
(46-102)	(32-106)
(51-105)	(39-107)
(55-124)	(31-130)
(48-104)	(38-102)
(44-110)	(27-112)
(38-112)	(22-108)
(54-120)	(31-131)
(50-103)	(36-104)

Prep Method: SW3546  
Log Number Range: 13-6314 to 13-6317

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
Page 1 of 2

Lab Sample ID: WJ08C

LIMS ID: 13-6316

Matrix: Concrete

Data Release Authorized: *BS*

Reported: 04/17/13

Date Extracted MS/MSD: 04/12/13

Date Analyzed MS: 04/15/13 20:14  
MSD: 04/15/13 20:49

Instrument/Analyst MS: NT6/JZ  
MSD: NT6/JZ

GPC Cleanup: No

Sample ID: S-3

MS/MSD

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

Date Sampled: 03/26/13

Date Received: 03/26/13

Sample Amount MS: 1.93 g-dry-wt  
MSD: 1.93 g-dry-wt

Final Extract Volume MS: 0.5 mL  
MSD: 0.5 mL

Dilution Factor MS: 1.00  
MSD: 1.00

Percent Moisture: 3.7 %

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	MSD RPD
Phenol	600 M	870	6480	4.2%	1190	6480	9.1%	31.1%
Bis-(2-Chloroethyl) Ether	< 260 U	3310	6480	51.1%	2930	6480	45.2%	12.2%
2-Chlorophenol	< 260 U	2080	6480	32.1%	2160	6480	33.3%	3.8%
1,3-Dichlorobenzene	< 260 U	3230	6480	49.8%	3090	6480	47.7%	4.4%
1,4-Dichlorobenzene	< 260 U	3420	6480	52.8%	3250	6480	50.2%	5.1%
Benzyl Alcohol	< 1300 U	3400	6480	52.5%	2620	6480	40.4%	25.9%
1,2-Dichlorobenzene	< 260 U	3420	6480	52.8%	3250	6480	50.2%	5.1%
2-Methylphenol	< 260 U	2420	6480	37.3%	2390	6480	36.9%	1.2%
2,2'-Oxybis(1-Chloropropane)	< 260 U	2500	6480	38.6%	2170	6480	33.5%	14.1%
4-Methylphenol	< 260 U	6230	13000	47.9%	5230	13000	40.2%	17.5%
N-Nitroso-Di-N-Propylamine	< 260 U	3130	6480	48.3%	3050	6480	47.1%	2.6%
Hexachloroethane	< 260 U	2640	6480	40.7%	2610	6480	40.3%	1.1%
Nitrobenzene	< 260 U	3370	6480	52.0%	2930	6480	45.2%	14.0%
Isophorone	130000 ES	79500 ES	6480	NA	98100 ES	6480	NA	20.9%
2-Nitrophenol	< 260 U	1620	6480	25.0%	1560	6480	24.1%	3.8%
2,4-Dimethylphenol	< 260 U	8580	19400	44.2%	8650	19400	44.6%	0.8%
Benzoic Acid	< 2600 U	< 2590 U	35600	NA	< 2590 U	35600	NA	NA
bis(2-Chloroethoxy) Methane	< 260 U	3230	6480	49.8%	2790	6480	43.1%	14.6%
2,4-Dichlorophenol	< 1300 U	7050	19400	36.3%	6190	19400	31.9%	13.0%
1,2,4-Trichlorobenzene	< 260 U	3890	6480	60.0%	3590	6480	55.4%	8.0%
Naphthalene	< 260 U	3390	6480	52.3%	3300	6480	50.9%	2.7%
4-Chloroaniline	< 1300 U	21400 E	19400	110%	16100	19400	83.0%	28.3%
Hexachlorobutadiene	< 260 U	3930	6480	60.6%	3740	6480	57.7%	5.0%
4-Chloro-3-methylphenol	< 1300 U	8900	19400	45.9%	7490	19400	38.6%	17.2%
2-Methylnaphthalene	< 260 U	4330	6480	66.8%	4080	6480	63.0%	5.9%
Hexachlorocyclopentadiene	< 1300 U	6420	19400	33.1%	5810	19400	29.9%	10.0%
2,4,6-Trichlorophenol	< 1300 U	5240	19400	27.0%	5090	19400	26.2%	2.9%
2,4,5-Trichlorophenol	< 1300 U	5920	19400	30.5%	5040	19400	26.0%	16.1%
2-Chloronaphthalene	< 260 U	4340	6480	67.0%	4100	6480	63.3%	5.7%
2-Nitroaniline	< 1300 U	12000	19400	61.9%	9550	19400	49.2%	22.7%
Dimethylphthalate	< 260 U	3510	6480	54.2%	3180	6480	49.1%	9.9%
Acenaphthylene	< 260 U	4020	6480	62.0%	3830	6480	59.1%	4.8%
3-Nitroaniline	< 1300 U	23300 E	19400	120%	17600	19400	90.7%	27.9%
Acenaphthene	< 260 U	3800	6480	58.6%	3570	6480	55.1%	6.2%
2,4-Dinitrophenol	< 2600 U	< 2590 U	35600	NA	< 2590 U	35600	NA	NA
4-Nitrophenol	< 1300 U	5840	19400	30.1%	4780	19400	24.6%	20.0%
Dibenzofuran	< 260 U	4320	6480	66.7%	4090	6480	63.1%	5.5%
2,6-Dinitrotoluene	< 1300 U	12000	19400	61.9%	10700	19400	55.2%	11.5%
2,4-Dinitrotoluene	< 1300 U	11600	19400	59.8%	10100	19400	52.1%	13.8%
Diethylphthalate	< 260 U	3890	6480	60.0%	3600	6480	55.6%	7.7%
4-Chlorophenyl-phenylether	< 260 U	4170	6480	64.4%	3890	6480	60.0%	6.9%
Fluorene	< 260 U	4560	6480	70.4%	4300	6480	66.4%	5.9%
4-Nitroaniline	< 1300 U	16600 Q	19400	85.6%	13100 Q	19400	67.5%	23.6%
4,6-Dinitro-2-Methylphenol	< 2600 U	3370	35600	9.5%	< 2590 U	35600	NA	NA
N-Nitrosodiphenylamine	< 260 U	3640	6480	56.2%	3430	6480	52.9%	5.9%

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
 Page 2 of 2

**Sample ID: S-3**  
**MS/MSD**

Lab Sample ID: WJ08C  
 LIMS ID: 13-6316  
 Matrix: Concrete  
 Date Analyzed MS: 04/15/13 20:14  
 MSD: 04/15/13 20:49

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

<b>Analyte</b>	<b>Sample</b>	<b>MS</b>	<b>Spike</b>	<b>MS</b>	<b>Spike</b>	<b>MSD</b>	<b>MSD Recovery</b>	<b>RPD</b>
			<b>Added-MS</b>	<b>Recovery</b>	<b>Added-MSD</b>			
4-Bromophenyl-phenylether	< 260 U	3650	6480	56.3%	3620	6480	55.9%	0.8%
Hexachlorobenzene	< 260 U	3490	6480	53.9%	3440	6480	53.1%	1.4%
Pentachlorophenol	< 1300 U	2540	19400	13.1%	3150	19400	16.2%	21.4%
Phenanthrene	< 260 U	3730	6480	57.6%	3870	6480	59.7%	3.7%
Carbazole	< 260 U	5090	6480	78.5%	4520	6480	69.8%	11.9%
Anthracene	< 260 U	3820	6480	59.0%	3460	6480	53.4%	9.9%
Di-n-Butylphthalate	< 260 U	3340	6480	51.5%	3280	6480	50.6%	1.8%
Fluoranthene	< 260 U	4100	6480	63.3%	4060	6480	62.7%	1.0%
Pyrene	< 260 U	3870	6480	59.7%	3800	6480	58.6%	1.8%
Butylbenzylphthalate	< 260 U	3250	6480	50.2%	3090	6480	47.7%	5.0%
3,3'-Dichlorobenzidine	< 1300 U	12600	19400	64.9%	12500	19400	64.4%	0.8%
Benzo(a)anthracene	< 260 U	4240	6480	65.4%	4130	6480	63.7%	2.6%
bis(2-Ethylhexyl)phthalate	< 260 U	3580	6480	55.2%	3500	6480	54.0%	2.3%
Chrysene	< 260 U	3900	6480	60.2%	3910	6480	60.3%	0.3%
Di-n-Octyl phthalate	< 260 U	3820	6480	59.0%	3740	6480	57.7%	2.1%
Benzo(a)pyrene	< 260 U	4090	6480	63.1%	4020	6480	62.0%	1.7%
Indeno(1,2,3-cd)pyrene	< 260 U	4170	6480	64.4%	4080	6480	63.0%	2.2%
Dibenz(a,h)anthracene	< 260 U	4220	6480	65.1%	4140	6480	63.9%	1.9%
Benzo(g,h,i)perylene	< 260 U	3950	6480	61.0%	3920	6480	60.5%	0.8%
1-Methylnaphthalene	< 260 U	4280	6480	66.0%	4050	6480	62.5%	5.5%
Total Benzofluoranthenes	< 260 U	7790	13000	59.9%	7620	13000	58.6%	2.2%

Reported in  $\mu\text{g}/\text{kg}$  (ppb)

RPD calculated using sample concentrations per SW846.

NA-No recovery due to high concentration of analyte in original sample and/or calculated negative recovery.

**ORGANICS ANALYSIS DATA SHEET  
Semivolatiles by SW8270D GC/MS  
Extraction Method: SW3546**

Page 1 of 2

Lab Sample ID: WJ08C

LIMS ID: 13-6316

Matrix: Concrete

Data Release Authorized: *[Signature]*

Reported: 04/17/13

Date Extracted: 04/12/13

Date Analyzed: 04/15/13 20:14

Instrument/Analyst: NT6/JZ

GPC Cleanup: No

**Sample ID: S-3  
MATRIX SPIKE**

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

Date Sampled: 03/26/13

Date Received: 03/26/13

Sample Amount: 1.93 g-dry-wt  
Final Extract Volume: 0.5 mL  
Dilution Factor: 1.00  
Percent Moisture: 3.7%

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
108-95-2	Phenol	260	---
111-44-4	Bis-(2-Chloroethyl) Ether	260	---
95-57-8	2-Chlorophenol	260	---
541-73-1	1,3-Dichlorobenzene	260	---
106-46-7	1,4-Dichlorobenzene	260	---
100-51-6	Benzyl Alcohol	1,300	---
95-50-1	1,2-Dichlorobenzene	260	---
95-48-7	2-Methylphenol	260	---
108-60-1	2,2'-Oxybis(1-Chloropropane)	260	---
106-44-5	4-Methylphenol	260	---
621-64-7	N-Nitroso-Di-N-Propylamine	260	---
67-72-1	Hexachloroethane	260	---
98-95-3	Nitrobenzene	260	---
78-59-1	Isophorone	260	---
88-75-5	2-Nitrophenol	260	---
105-67-9	2,4-Dimethylphenol	260	---
65-85-0	Benzoic Acid	2,600	---
111-91-1	bis(2-Chloroethoxy) Methane	260	---
120-83-2	2,4-Dichlorophenol	1,300	---
120-82-1	1,2,4-Trichlorobenzene	260	---
91-20-3	Naphthalene	260	---
106-47-8	4-Chloroaniline	1,300	---
87-68-3	Hexachlorobutadiene	260	---
59-50-7	4-Chloro-3-methylphenol	1,300	---
91-57-6	2-Methylnaphthalene	260	---
77-47-4	Hexachlorocyclopentadiene	1,300	---
88-06-2	2,4,6-Trichlorophenol	1,300	---
95-95-4	2,4,5-Trichlorophenol	1,300	---
91-58-7	2-Chloronaphthalene	260	---
88-74-4	2-Nitroaniline	1,300	---
131-11-3	Dimethylphthalate	260	---
208-96-8	Acenaphthylene	260	---
99-09-2	3-Nitroaniline	1,300	---
83-32-9	Acenaphthene	260	---
51-28-5	2,4-Dinitrophenol	2,600	---
100-02-7	4-Nitrophenol	1,300	---
132-64-9	Dibenzofuran	260	---

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3546**  
 Page 2 of 2

**Sample ID: S-3**  
**MATRIX SPIKE**

Lab Sample ID: WJ08C  
 LIMS ID: 13-6316  
 Matrix: Concrete  
 Date Analyzed: 04/15/13 20:14

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
606-20-2	2,6-Dinitrotoluene	1,300	---
121-14-2	2,4-Dinitrotoluene	1,300	---
84-66-2	Diethylphthalate	260	---
7005-72-3	4-Chlorophenyl-phenylether	260	---
86-73-7	Fluorene	260	---
100-01-6	4-Nitroaniline	1,300	---
534-52-1	4,6-Dinitro-2-Methylphenol	2,600	---
86-30-6	N-Nitrosodiphenylamine	260	---
101-55-3	4-Bromophenyl-phenylether	260	---
118-74-1	Hexachlorobenzene	260	---
87-86-5	Pentachlorophenol	1,300	---
85-01-8	Phenanthrene	260	---
86-74-8	Carbazole	260	---
120-12-7	Anthracene	260	---
84-74-2	Di-n-Butylphthalate	260	---
206-44-0	Fluoranthene	260	---
129-00-0	Pyrene	260	---
85-68-7	Butylbenzylphthalate	260	---
91-94-1	3,3'-Dichlorobenzidine	1,300	---
56-55-3	Benzo(a)anthracene	260	---
117-81-7	bis(2-Ethylhexyl)phthalate	260	---
218-01-9	Chrysene	260	---
117-84-0	Di-n-Octyl phthalate	260	---
50-32-8	Benzo(a)pyrene	260	---
193-39-5	Indeno(1,2,3-cd)pyrene	260	---
53-70-3	Dibenz(a,h)anthracene	260	---
191-24-2	Benzo(g,h,i)perylene	260	---
90-12-0	1-Methylnaphthalene	260	---
TOTBFA	Total Benzofluoranthenes	260	---

Reported in  $\mu\text{g}/\text{kg}$  (ppb)

**Semivolatile Surrogate Recovery**

d5-Nitrobenzene	53.2%	2-Fluorobiphenyl	57.6%
d14-p-Terphenyl	58.0%	d4-1,2-Dichlorobenzene	55.2%
d5-Phenol	49.9%	2-Fluorophenol	19.8%
2,4,6-Tribromophenol	29.3%	d4-2-Chlorophenol	33.6%

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3546**

Page 1 of 2

Lab Sample ID: WJ08C  
LIMS ID: 13-6316  
Matrix: Concrete  
Data Release Authorized: *BB*  
Reported: 04/17/13

Date Extracted: 04/12/13  
Date Analyzed: 04/15/13 20:49  
Instrument/Analyst: NT6/JZ  
GPC Cleanup: No



**Sample ID: S-3**  
**MATRIX SPIKE DUPLICATE**

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207  
Date Sampled: 03/26/13  
Date Received: 03/26/13

Sample Amount: 1.93 g-dry-wt  
Final Extract Volume: 0.5 mL  
Dilution Factor: 1.00  
Percent Moisture: 3.7%

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
108-95-2	Phenol	260	---
111-44-4	Bis-(2-Chloroethyl) Ether	260	---
95-57-8	2-Chlorophenol	260	---
541-73-1	1,3-Dichlorobenzene	260	---
106-46-7	1,4-Dichlorobenzene	260	---
100-51-6	Benzyl Alcohol	1,300	---
95-50-1	1,2-Dichlorobenzene	260	---
95-48-7	2-Methylphenol	260	---
108-60-1	2,2'-Oxybis(1-Chloropropane)	260	---
106-44-5	4-Methylphenol	260	---
621-64-7	N-Nitroso-Di-N-Propylamine	260	---
67-72-1	Hexachloroethane	260	---
98-95-3	Nitrobenzene	260	---
78-59-1	Isophorone	260	---
88-75-5	2-Nitrophenol	260	---
105-67-9	2,4-Dimethylphenol	260	---
65-85-0	Benzoic Acid	2,600	---
111-91-1	bis(2-Chloroethoxy) Methane	260	---
120-83-2	2,4-Dichlorophenol	1,300	---
120-82-1	1,2,4-Trichlorobenzene	260	---
91-20-3	Naphthalene	260	---
106-47-8	4-Chloroaniline	1,300	---
87-68-3	Hexachlorobutadiene	260	---
59-50-7	4-Chloro-3-methylphenol	1,300	---
91-57-6	2-Methylnaphthalene	260	---
77-47-4	Hexachlorocyclopentadiene	1,300	---
88-06-2	2,4,6-Trichlorophenol	1,300	---
95-95-4	2,4,5-Trichlorophenol	1,300	---
91-58-7	2-Chloronaphthalene	260	---
88-74-4	2-Nitroaniline	1,300	---
131-11-3	Dimethylphthalate	260	---
208-96-8	Acenaphthylene	260	---
99-09-2	3-Nitroaniline	1,300	---
83-32-9	Acenaphthene	260	---
51-28-5	2,4-Dinitrophenol	2,600	---
100-02-7	4-Nitrophenol	1,300	---
132-64-9	Dibenzofuran	260	---

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3546**

Page 2 of 2

Lab Sample ID: WJ08C  
 LIMS ID: 13-6316  
 Matrix: Concrete  
 Date Analyzed: 04/15/13 20:49

Sample ID: S-3  
**MATRIX SPIKE DUPLICATE**



QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

CAS Number	Analyte	RL	Result
606-20-2	2,6-Dinitrotoluene	1,300	---
121-14-2	2,4-Dinitrotoluene	1,300	---
84-66-2	Diethylphthalate	260	---
7005-72-3	4-Chlorophenyl-phenylether	260	---
86-73-7	Fluorene	260	---
100-01-6	4-Nitroaniline	1,300	---
534-52-1	4,6-Dinitro-2-Methylphenol	2,600	---
86-30-6	N-Nitrosodiphenylamine	260	---
101-55-3	4-Bromophenyl-phenylether	260	---
118-74-1	Hexachlorobenzene	260	---
87-86-5	Pentachlorophenol	1,300	---
85-01-8	Phenanthrene	260	---
86-74-8	Carbazole	260	---
120-12-7	Anthracene	260	---
84-74-2	Di-n-Butylphthalate	260	---
206-44-0	Fluoranthene	260	---
129-00-0	Pyrene	260	---
85-68-7	Butylbenzylphthalate	260	---
91-94-1	3,3'-Dichlorobenzidine	1,300	---
56-55-3	Benzo(a)anthracene	260	---
117-81-7	bis(2-Ethylhexyl)phthalate	260	---
218-01-9	Chrysene	260	---
117-84-0	Di-n-Octyl phthalate	260	---
50-32-8	Benzo(a)pyrene	260	---
193-39-5	Indeno(1,2,3-cd)pyrene	260	---
53-70-3	Dibenz(a,h)anthracene	260	---
191-24-2	Benzo(g,h,i)perylene	260	---
90-12-0	1-Methylnaphthalene	260	---
TOTBFA	Total Benzofluoranthenes	260	---

Reported in  $\mu\text{g}/\text{kg}$  (ppb)

**Semivolatile Surrogate Recovery**

d5-Nitrobenzene	46.8%	2-Fluorobiphenyl	52.8%
d14-p-Terphenyl	55.2%	d4-1,2-Dichlorobenzene	50.4%
d5-Phenol	40.5%	2-Fluorophenol	21.2%
2,4,6-Tribromophenol	29.1%	d4-2-Chlorophenol	32.3%

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
 Page 1 of 2

Lab Sample ID: LCS-041213  
 LIMS ID: 13-6316  
 Matrix: Concrete  
 Data Release Authorized: *[Signature]*  
 Reported: 04/17/13

Date Extracted: 04/12/13  
 Date Analyzed: 04/15/13 17:56  
 Instrument/Analyst: NT6/JZ  
 GPC Cleanup: No



**Sample ID: LCS-041213**  
**LAB CONTROL**

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207  
 Date Sampled: 03/26/13  
 Date Received: 03/26/13

Sample Amount: 7.50 g  
 Final Extract Volume: 0.5 mL  
 Dilution Factor: 1.00  
 Percent Moisture: NA

Analyte	Lab Control	Spike Added	Recovery
Phenol	983	1670	58.9%
Bis-(2-Chloroethyl) Ether	770	1670	46.1%
2-Chlorophenol	968	1670	58.0%
1,3-Dichlorobenzene	781	1670	46.8%
1,4-Dichlorobenzene	809	1670	48.4%
Benzyl Alcohol	929	1670	55.6%
1,2-Dichlorobenzene	817	1670	48.9%
2-Methylphenol	955	1670	57.2%
2,2'-Oxybis(1-Chloropropane)	746	1670	44.7%
4-Methylphenol	2090	3330	62.8%
N-Nitroso-Di-N-Propylamine	858	1670	51.4%
Hexachloroethane	695	1670	41.6%
Nitrobenzene	892	1670	53.4%
Isophorone	957	1670	57.3%
2-Nitrophenol	1010	1670	60.5%
2,4-Dimethylphenol	2610	5000	52.2%
Benzoic Acid	4570	9170	49.8%
bis(2-Chloroethoxy) Methane	864	1670	51.7%
2,4-Dichlorophenol	3160	5000	63.2%
1,2,4-Trichlorobenzene	882	1670	52.8%
Naphthalene	877	1670	52.5%
4-Chloroaniline	4640	5000	92.8%
Hexachlorobutadiene	886	1670	53.1%
4-Chloro-3-methylphenol	3380	5000	67.6%
2-Methylnaphthalene	1040	1670	62.3%
Hexachlorocyclopentadiene	1870	5000	37.4%
2,4,6-Trichlorophenol	3470	5000	69.4%
2,4,5-Trichlorophenol	3800	5000	76.0%
2-Chloronaphthalene	1220	1670	73.1%
2-Nitroaniline	3830	5000	76.6%
Dimethylphthalate	1140	1670	68.3%
Acenaphthylene	1170	1670	70.1%
3-Nitroaniline	5730	5000	115%
Acenaphthene	1110	1670	66.5%

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
 Page 2 of 2

**Sample ID: LCS-041213**  
**LAB CONTROL**

Lab Sample ID: LCS-041213  
 LIMS ID: 13-6316  
 Matrix: Concrete  
 Date Analyzed: 04/15/13 17:56

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

<b>Analyte</b>	<b>Lab Control</b>	<b>Spike Added</b>	<b>Recovery</b>
2,4-Dinitrophenol	5450	9170	59.4%
4-Nitrophenol	4350	5000	87.0%
Dibenzofuran	1200	1670	71.9%
2,6-Dinitrotoluene	3570	5000	71.4%
2,4-Dinitrotoluene	3560	5000	71.2%
Diethylphthalate	1300	1670	77.8%
4-Chlorophenyl-phenylether	1170	1670	70.1%
Fluorene	1360	1670	81.4%
4-Nitroaniline	4630 Q	5000	92.6%
4,6-Dinitro-2-Methylphenol	5310	9170	57.9%
N-Nitrosodiphenylamine	1100	1670	65.9%
4-Bromophenyl-phenylether	1090	1670	65.3%
Hexachlorobenzene	1010	1670	60.5%
Pentachlorophenol	3760	5000	75.2%
Phenanthrene	1110	1670	66.5%
Carbazole	1500	1670	89.8%
Anthracene	1110	1670	66.5%
Di-n-Butylphthalate	1060	1670	63.5%
Fluoranthene	1240	1670	74.3%
Pyrene	1220	1670	73.1%
Butylbenzylphthalate	1110	1670	66.5%
3,3'-Dichlorobenzidine	3800	5000	76.0%
Benzo(a)anthracene	1250	1670	74.9%
bis(2-Ethylhexyl)phthalate	1090	1670	65.3%
Chrysene	1240	1670	74.3%
Di-n-Octyl phthalate	1130	1670	67.7%
Benzo(a)pyrene	1230	1670	73.7%
Indeno(1,2,3-cd)pyrene	1260	1670	75.4%
Dibenz(a,h)anthracene	1270	1670	76.0%
Benzo(g,h,i)perylene	1230	1670	73.7%
1-Methylnaphthalene	1050	1670	62.9%
Total Benzofluoranthenes	2340	3330	70.3%

**Semivolatile Surrogate Recovery**

d5-Nitrobenzene	52.4%
2-Fluorobiphenyl	62.0%
d14-p-Terphenyl	70.8%
d4-1,2-Dichlorobenzene	49.2%
d5-Phenol	61.6%
2-Fluorophenol	51.2%
2,4,6-Tribromophenol	86.1%
d4-2-Chlorophenol	55.7%

Reported in µg/kg (ppb)

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3546**

Page 1 of 2

Lab Sample ID: MB-041213  
 LIMS ID: 13-6316  
 Matrix: Concrete  
 Data Release Authorized: *[Signature]*  
 Reported: 04/17/13

Date Extracted: 04/12/13  
 Date Analyzed: 04/17/13 14:06  
 Instrument/Analyst: NT6/JZ  
 GPC Cleanup: No

**Sample ID: MB-041213**  
**METHOD BLANK**

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

Date Sampled: NA  
 Date Received: NA

Sample Amount: 7.50 g-dry-wt  
 Final Extract Volume: 0.5 mL  
 Dilution Factor: 1.00  
 Percent Moisture: NA

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
108-95-2	Phenol	67	< 67 U
111-44-4	Bis-(2-Chloroethyl) Ether	67	< 67 U
95-57-8	2-Chlorophenol	67	< 67 U
541-73-1	1,3-Dichlorobenzene	67	< 67 U
106-46-7	1,4-Dichlorobenzene	67	< 67 U
100-51-6	Benzyl Alcohol	330	< 330 U
95-50-1	1,2-Dichlorobenzene	67	< 67 U
95-48-7	2-Methylphenol	67	< 67 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	67	< 67 U
106-44-5	4-Methylphenol	67	< 67 U
621-64-7	N-Nitroso-Di-N-Propylamine	67	< 67 U
67-72-1	Hexachloroethane	67	< 67 U
98-95-3	Nitrobenzene	67	< 67 U
78-59-1	Isophorone	67	< 67 U
88-75-5	2-Nitrophenol	67	< 67 U
105-67-9	2,4-Dimethylphenol	67	< 67 U
65-85-0	Benzoic Acid	670	< 670 U
111-91-1	bis(2-Chloroethoxy) Methane	67	< 67 U
120-83-2	2,4-Dichlorophenol	330	< 330 U
120-82-1	1,2,4-Trichlorobenzene	67	< 67 U
91-20-3	Naphthalene	67	< 67 U
106-47-8	4-Chloroaniline	330	< 330 U
87-68-3	Hexachlorobutadiene	67	< 67 U
59-50-7	4-Chloro-3-methylphenol	330	< 330 U
91-57-6	2-Methylnaphthalene	67	< 67 U
77-47-4	Hexachlorocyclopentadiene	330	< 330 U
88-06-2	2,4,6-Trichlorophenol	330	< 330 U
95-95-4	2,4,5-Trichlorophenol	330	< 330 U
91-58-7	2-Chloronaphthalene	67	< 67 U
88-74-4	2-Nitroaniline	330	< 330 U
131-11-3	Dimethylphthalate	67	< 67 U
208-96-8	Acenaphthylene	67	< 67 U
99-09-2	3-Nitroaniline	330	< 330 U
83-32-9	Acenaphthene	67	< 67 U
51-28-5	2,4-Dinitrophenol	670	< 670 U
100-02-7	4-Nitrophenol	330	< 330 U
132-64-9	Dibenzofuran	67	< 67 U

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3546**

Page 2 of 2

**Sample ID: MB-041213**  
**METHOD BLANK**

Lab, Sample ID: MB-041213  
LIMS ID: 13-6316  
Matrix: Concrete  
Date Analyzed: 04/17/13 14:06

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
606-20-2	2,6-Dinitrotoluene	330	< 330 U
121-14-2	2,4-Dinitrotoluene	330	< 330 U
84-66-2	Diethylphthalate	67	< 67 U
7005-72-3	4-Chlorophenyl-phenylether	67	< 67 U
86-73-7	Fluorene	67	< 67 U
100-01-6	4-Nitroaniline	330	< 330 U
534-52-1	4,6-Dinitro-2-Methylphenol	670	< 670 U
86-30-6	N-Nitrosodiphenylamine	67	< 67 U
101-55-3	4-Bromophenyl-phenylether	67	< 67 U
118-74-1	Hexachlorobenzene	67	< 67 U
87-86-5	Pentachlorophenol	330	< 330 U
85-01-8	Phenanthrene	67	< 67 U
86-74-8	Carbazole	67	< 67 U
120-12-7	Anthracene	67	< 67 U
84-74-2	Di-n-Butylphthalate	67	< 67 U
206-44-0	Fluoranthene	67	< 67 U
129-00-0	Pyrene	67	< 67 U
85-68-7	Butylbenzylphthalate	67	< 67 U
91-94-1	3,3'-Dichlorobenzidine	330	< 330 U
56-55-3	Benzo(a)anthracene	67	< 67 U
117-81-7	bis(2-Ethylhexyl)phthalate	67	< 67 U
218-01-9	Chrysene	67	< 67 U
117-84-0	Di-n-Octyl phthalate	67	< 67 U
50-32-8	Benzo(a)pyrene	67	< 67 U
193-39-5	Indeno(1,2,3-cd)pyrene	67	< 67 U
53-70-3	Dibenz(a,h)anthracene	67	< 67 U
191-24-2	Benzo(g,h,i)perylene	67	< 67 U
90-12-0	1-Methylnaphthalene	67	< 67 U
TOTBFA	Total Benzofluoranthenes	67	< 67 U

Reported in  $\mu\text{g}/\text{kg}$  (ppb)

**Semivolatile Surrogate Recovery**

d5-Nitrobenzene	52.0%	2-Fluorobiphenyl	54.4%
d14-p-Terphenyl	80.8%	d4-1,2-Dichlorobenzene	54.4%
d5-Phenol	58.1%	2-Fluorophenol	48.0%
2,4,6-Tribromophenol	71.5%	d4-2-Chlorophenol	55.2%

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3520C**

Page 1 of 2

Lab Sample ID: WJ08E  
 LIMS ID: 13-6318  
 Matrix: Water  
 Data Release Authorized: *BR*  
 Reported: 04/05/13

Date Extracted: 04/01/13  
 Date Analyzed: 04/03/13 17:51  
 Instrument/Analyst: NT6/JZ

**Sample ID: W-1**  
**SAMPLE**

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207  
 Date Sampled: 03/26/13  
 Date Received: 03/26/13

Sample Amount: 500 mL  
 Final Extract Volume: 0.50 mL  
 Dilution Factor: 1.00

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	2.0	< 2.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	2.0	< 2.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	1.0	< 1.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	3.0	< 3.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	20	< 20 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	3.0	< 3.0 U
59-50-7	4-Chloro-3-methylphenol	3.0	< 3.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	3.0	< 3.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	3.0	< 3.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	3.0	< 3.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	20	< 20 U
100-02-7	4-Nitrophenol	10	< 10 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	3.0	< 3.0 U
121-14-2	2,4-Dinitrotoluene	3.0	< 3.0 U

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3520C**

Page 2 of 2

Lab Sample ID: WJ08E  
 LIMS ID: 13-6318  
 Matrix: Water  
 Date Analyzed: 04/03/13 17:51

**Sample ID: W-1  
 SAMPLE**

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	1.0	< 1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	3.0	< 3.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	10	< 10 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U
TOTBFA	Total Benzofluoranthenes	5.0	< 5.0 U

Reported in  $\mu\text{g/L}$  (ppb)

**Semivolatile Surrogate Recovery**

d5-Nitrobenzene	77.2%	2-Fluorobiphenyl	74.8%
d14-p-Terphenyl	82.0%	d4-1,2-Dichlorobenzene	76.8%
d5-Phenol	77.6%	2-Fluorophenol	71.5%
2,4,6-Tribromophenol	89.3%	d4-2-Chlorophenol	76.0%

**SW8270 SEMIVOLATILES WATER SURROGATE RECOVERY SUMMARY**

Matrix: Water

 QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

<b>Client ID</b>	<b>NBZ</b>	<b>FBP</b>	<b>TPH</b>	<b>DCB</b>	<b>PHL</b>	<b>2FP</b>	<b>TBP</b>	<b>2CP</b>	<b>TOT</b>	<b>OUT</b>
MB-040113	71.6%	65.6%	78.0%	70.0%	70.7%	67.2%	66.9%	71.5%	0	
LCS-040113	68.8%	74.0%	92.8%	62.0%	71.2%	62.9%	101%	68.5%	0	
LCSD-040113	74.0%	79.6%	90.8%	67.6%	75.7%	69.6%	102%	74.7%	0	
W-1	77.2%	74.8%	82.0%	76.8%	77.6%	71.5%	89.3%	76.0%	0	

(NBZ) = d5-Nitrobenzene  
 (FBP) = 2-Fluorobiphenyl  
 (TPH) = d14-p-Terphenyl  
 (DCB) = d4-1,2-Dichlorobenzene  
 (PHL) = d5-Phenol  
 (2FP) = 2-Fluorophenol  
 (TBP) = 2,4,6-Tribromophenol  
 (2CP) = d4-2-Chlorophenol

<b>LCS/MB LIMITS</b>	<b>QC LIMITS</b>
(50-100)	(34-101)
(51-100)	(38-100)
(54-117)	(27-122)
(40-100)	(27-100)
(15-121)	(16-106)
(33-100)	(23-100)
(46-125)	(31-128)
(46-102)	(33-100)

 Prep Method: SW3520C  
 Log Number Range: 13-6318 to 13-6318

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
 Page 1 of 2



**Sample ID: LCS-040113**  
**LCS/LCSD**

Lab Sample ID: LCS-040113

LIMS ID: 13-6318

Matrix: Water

Data Release Authorized: *[Signature]*

Reported: 04/05/13

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

Date Sampled: 03/26/13

Date Received: 03/26/13

Date Extracted LCS/LCSD: 04/01/13

Sample Amount LCS: 500 mL

LCSD: 500 mL

Final Extract Volume LCS: 0.50 mL

LCSD: 0.50 mL

Dilution Factor LCS: 1.00

LCSD: 1.00

Date Analyzed LCS: 04/03/13 16:07

LCSD: 04/03/13 16:41

Instrument/Analyst LCS: NT6/JZ

LCSD: NT6/JZ

GPC Cleanup: NO

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Phenol	17.1	25.0	68.4%	18.8	25.0	75.2%	9.5%
Bis-(2-Chloroethyl) Ether	16.5	25.0	66.0%	18.2	25.0	72.8%	9.8%
2-Chlorophenol	18.3	25.0	73.2%	20.4	25.0	81.6%	10.9%
1,3-Dichlorobenzene	15.9	25.0	63.6%	18.1	25.0	72.4%	12.9%
1,4-Dichlorobenzene	16.3	25.0	65.2%	18.6	25.0	74.4%	13.2%
Benzyl Alcohol	18.8	25.0	75.2%	19.4	25.0	77.6%	3.1%
1,2-Dichlorobenzene	16.3	25.0	65.2%	18.4	25.0	73.6%	12.1%
2-Methylphenol	17.4	25.0	69.6%	18.6	25.0	74.4%	6.7%
2,2'-Oxybis(1-Chloropropane)	14.9	25.0	59.6%	16.3	25.0	65.2%	9.0%
4-Methylphenol	36.3	50.0	72.6%	38.6	50.0	77.2%	6.1%
N-Nitroso-Di-N-Propylamine	16.1	25.0	64.4%	16.5	25.0	66.0%	2.5%
Hexachloroethane	16.1	25.0	64.4%	18.4	25.0	73.6%	13.3%
Nitrobenzene	17.8	25.0	71.2%	19.8	25.0	79.2%	10.6%
Isophorone	19.1	25.0	76.4%	19.8	25.0	79.2%	3.6%
2-Nitrophenol	20.1	25.0	80.4%	22.2	25.0	88.8%	9.9%
2,4-Dimethylphenol	45.7	75.0	60.9%	46.0	75.0	61.3%	0.7%
Benzoic Acid	96.3	138	69.8%	101	138	73.2%	4.8%
bis(2-Chloroethoxy) Methane	17.0	25.0	68.0%	18.0	25.0	72.0%	5.7%
2,4-Dichlorophenol	50.6	75.0	67.5%	54.4	75.0	72.5%	7.2%
1,2,4-Trichlorobenzene	16.9	25.0	67.6%	18.9	25.0	75.6%	11.2%
Naphthalene	17.9	25.0	71.6%	20.1	25.0	80.4%	11.6%
4-Chloroaniline	126	75.0	168%	124	75.0	165%	1.6%
Hexachlorobutadiene	16.4	25.0	65.6%	18.6	25.0	74.4%	12.6%
4-Chloro-3-methylphenol	56.0	75.0	74.7%	57.3	75.0	76.4%	2.3%
2-Methylnaphthalene	19.2	25.0	76.8%	20.8	25.0	83.2%	8.0%
Hexachlorocyclopentadiene	40.2	75.0	53.6%	45.9	75.0	61.2%	13.2%
2,4,6-Trichlorophenol	58.4	75.0	77.9%	62.8	75.0	83.7%	7.3%
2,4,5-Trichlorophenol	63.6	75.0	84.8%	66.9	75.0	89.2%	5.1%
2-Chloronaphthalene	23.6	25.0	94.4%	26.0	25.0	104%	9.7%
2-Nitroaniline	71.3	75.0	95.1%	73.6	75.0	98.1%	3.2%
Dimethylphthalate	21.1	25.0	84.4%	21.6	25.0	86.4%	2.3%
Acenaphthylene	20.9	25.0	83.6%	22.3	25.0	89.2%	6.5%
3-Nitroaniline	165	75.0	220%	161	75.0	215%	2.5%
Acenaphthene	20.5	25.0	82.0%	22.3	25.0	89.2%	8.4%
2,4-Dinitrophenol	112	138	81.2%	117	138	84.8%	4.4%
4-Nitrophenol	84.2	75.0	112%	84.0	75.0	112%	0.2%
Dibenzofuran	21.3	25.0	85.2%	22.9	25.0	91.6%	7.2%
2,6-Dinitrotoluene	63.9	75.0	85.2%	65.8	75.0	87.7%	2.9%
2,4-Dinitrotoluene	64.8	75.0	86.4%	65.3	75.0	87.1%	0.8%
Diethylphthalate	23.1	25.0	92.4%	23.4	25.0	93.6%	1.3%
4-Chlorophenyl-phenylether	21.2	25.0	84.8%	22.1	25.0	88.4%	4.2%
Fluorene	24.9	25.0	99.6%	26.3	25.0	105%	5.5%
4-Nitroaniline	83.4	75.0	111%	86.3	75.0	115%	3.4%
4,6-Dinitro-2-Methylphenol	99.9	138	72.4%	102	138	73.9%	2.1%
N-Nitrosodiphenylamine	17.3	25.0	69.2%	18.2	25.0	72.8%	5.1%

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
 Page 2 of 2



**Sample ID: LCS-040113**  
**LCS/LCSD**

Lab Sample ID: LCS-040113  
 LIMS ID: 13-6318  
 Matrix: Water  
 Date Analyzed LCS: 04/03/13 16:07  
 LCSD: 04/03/13 16:41

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
4-Bromophenyl-phenylether	19.9	25.0	79.6%	21.1	25.0	84.4%	5.9%
Hexachlorobenzene	18.2	25.0	72.8%	19.7	25.0	78.8%	7.9%
Pentachlorophenol	60.7	75.0	80.9%	61.8	75.0	82.4%	1.8%
Phenanthrene	19.5	25.0	78.0%	20.8	25.0	83.2%	6.5%
Carbazole	23.5	25.0	94.0%	23.9	25.0	95.6%	1.7%
Anthracene	19.5	25.0	78.0%	20.4	25.0	81.6%	4.5%
Di-n-Butylphthalate	19.2	25.0	76.8%	19.2	25.0	76.8%	0.0%
Fluoranthene	21.5	25.0	86.0%	21.7	25.0	86.8%	0.9%
Pyrene	23.9	25.0	95.6%	23.9	25.0	95.6%	0.0%
Butylbenzylphthalate	22.4	25.0	89.6%	21.8	25.0	87.2%	2.7%
3,3'-Dichlorobenzidine	53.2	75.0	70.9%	51.8	75.0	69.1%	2.7%
Benzo(a)anthracene	22.3	25.0	89.2%	22.3	25.0	89.2%	0.0%
bis(2-Ethylhexyl)phthalate	21.5	25.0	86.0%	21.6	25.0	86.4%	0.5%
Chrysene	22.0	25.0	88.0%	22.0	25.0	88.0%	0.0%
Di-n-Octyl phthalate	20.5	25.0	82.0%	20.7	25.0	82.8%	1.0%
Benzo(a)pyrene	20.5	25.0	82.0%	20.6	25.0	82.4%	0.5%
Indeno(1,2,3-cd)pyrene	22.0	25.0	88.0%	22.4	25.0	89.6%	1.8%
Dibenz(a,h)anthracene	22.3	25.0	89.2%	23.0	25.0	92.0%	3.1%
Benzo(g,h,i)perylene	22.7	25.0	90.8%	23.4	25.0	93.6%	3.0%
1-Methylnaphthalene	19.2	25.0	76.8%	20.7	25.0	82.8%	7.5%
Total Benzofluoranthenes	42.2	50.0	84.4%	41.6	50.0	83.2%	1.4%

**Semivolatile Surrogate Recovery**

	LCS	LCSD
d5-Nitrobenzene	68.8%	74.0%
2-Fluorobiphenyl	74.0%	79.6%
d14-p-Terphenyl	92.8%	90.8%
d4-1,2-Dichlorobenzene	62.0%	67.6%
d5-Phenol	71.2%	75.7%
2-Fluorophenol	62.9%	69.6%
2,4,6-Tribromophenol	101%	102%
d4-2-Chlorophenol	68.5%	74.7%

Results reported in µg/L  
 RPD calculated using sample concentrations per SW846.

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3520C**

Page 1 of 2

Lab Sample ID: MB-040113  
 LIMS ID: 13-6318  
 Matrix: Water  
 Data Release Authorized: *[Signature]*  
 Reported: 04/05/13

Date Extracted: 04/01/13  
 Date Analyzed: 04/03/13 15:32  
 Instrument/Analyst: NT6/JZ

Sample ID: MB-040113  
**METHOD BLANK**

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207  
 Date Sampled: NA  
 Date Received: NA

Sample Amount: 500 mL  
 Final Extract Volume: 0.50 mL  
 Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	2.0	< 2.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	2.0	< 2.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	1.0	< 1.0 U
67-72-1	Hexachloroethane	2.0	< 2.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	3.0	< 3.0 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	20	< 20 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	3.0	< 3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	3.0	< 3.0 U
59-50-7	4-Chloro-3-methylphenol	3.0	< 3.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	3.0	< 3.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	3.0	< 3.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	3.0	< 3.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	20	< 20 U
100-02-7	4-Nitrophenol	10	< 10 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	3.0	< 3.0 U
121-14-2	2,4-Dinitrotoluene	3.0	< 3.0 U

**ORGANICS ANALYSIS DATA SHEET**  
**Semivolatiles by SW8270D GC/MS**  
**Extraction Method: SW3520C**  
 Page 2 of 2

**Sample ID: MB-040113**  
**METHOD BLANK**

Lab Sample ID: MB-040113  
 LIMS ID: 13-6318  
 Matrix: Water  
 Date Analyzed: 04/03/13 15:32

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
84-66-2	Diethylphthalate	1.0	< 1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	3.0	< 3.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	10	< 10 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U
TOTBFA	Total Benzofluoranthenes	5.0	< 5.0 U

Reported in  $\mu\text{g/L}$  (ppb)

**Semivolatile Surrogate Recovery**

d5-Nitrobenzene	71.6%	2-Fluorobiphenyl	65.6%
d14-p-Terphenyl	78.0%	d4-1,2-Dichlorobenzene	70.0%
d5-Phenol	70.7%	2-Fluorophenol	67.2%
2,4,6-Tribromophenol	66.9%	d4-2-Chlorophenol	71.5%

**ORGANICS ANALYSIS DATA SHEET  
PCB by GC/ECD Method SW8082A  
Extraction Method: SW3580A**

Page 1 of 1

Lab Sample ID: WJ08A

LIMS ID: 13-6314

Matrix: Concrete

Data Release Authorized: *[Signature]*

Reported: 04/05/13

Date Extracted: 04/04/13

Date Analyzed: 04/05/13 09:45

Instrument/Analyst: ECD7/JGR

GPC Cleanup: No

Sulfur Cleanup: Yes

Acid Cleanup: Yes

Florisil Cleanup: No

**Sample ID: S-1  
SAMPLE**

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

Date Sampled: 03/26/13

Date Received: 03/26/13

Sample Amount: 5.76 g-dry-wt  
Final Extract Volume: 40.0 mL  
Dilution Factor: 1.00  
Silica Gel: No

Percent Moisture: 4.1%

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
12674-11-2	Aroclor 1016	690	< 690 U
53469-21-9	Aroclor 1242	690	< 690 U
12672-29-6	Aroclor 1248	690	< 690 U
11097-69-1	Aroclor 1254	690	< 690 U
11096-82-5	Aroclor 1260	690	< 690 U
11104-28-2	Aroclor 1221	690	< 690 U
11141-16-5	Aroclor 1232	690	< 690 U

Reported in µg/kg (ppb)

**PCB Surrogate Recovery**

Decachlorobiphenyl	81.5%
Tetrachlorometaxylene	90.0%

**ORGANICS ANALYSIS DATA SHEET  
PCB by GC/ECD Method SW8082A  
Extraction Method: SW3580A**

Page 1 of 1

Lab Sample ID: WJ08B

LIMS ID: 13-6315

Matrix: Concrete

Data Release Authorized: *B*

Reported: 04/05/13

Date Extracted: 04/04/13

Date Analyzed: 04/05/13 10:06

Instrument/Analyst: ECD7/JGR

GPC Cleanup: No

Sulfur Cleanup: Yes

Acid Cleanup: Yes

Florisil Cleanup: No

**Sample ID: S-2  
SAMPLE**

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage

110207

Date Sampled: 03/26/13

Date Received: 03/26/13

Sample Amount: 5.80 g-dry-wt  
Final Extract Volume: 40.0 mL  
Dilution Factor: 1.00  
Silica Gel: No

Percent Moisture: 3.6%

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
12674-11-2	Aroclor 1016	690	< 690 U
53469-21-9	Aroclor 1242	690	< 690 U
12672-29-6	Aroclor 1248	690	< 690 U
11097-69-1	Aroclor 1254	690	< 690 U
11096-82-5	Aroclor 1260	690	< 690 U
11104-28-2	Aroclor 1221	690	< 690 U
11141-16-5	Aroclor 1232	690	< 690 U

Reported in µg/kg (ppb)

**PCB Surrogate Recovery**

Decachlorobiphenyl	82.5%
Tetrachlorometaxylene	91.8%

**ORGANICS ANALYSIS DATA SHEET  
PCB by GC/ECD Method SW8082A  
Extraction Method: SW3580A**

Page 1 of 1

Lab Sample ID: WJ08C

LIMS ID: 13-6316

Matrix: Concrete

Data Release Authorized: *[Signature]*

Reported: 04/05/13

Date Extracted: 04/04/13

Date Analyzed: 04/05/13 11:06

Instrument/Analyst: ECD7/JGR

GPC Cleanup: No

Sulfur Cleanup: Yes

Acid Cleanup: Yes

Florisil Cleanup: No

**Sample ID: S-3  
SAMPLE**

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage

110207

Date Sampled: 03/26/13

Date Received: 03/26/13

Sample Amount: 5.80 g-dry-wt

Final Extract Volume: 40.0 mL

Dilution Factor: 1.00

Silica Gel: No

Percent Moisture: 3.7%

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
12674-11-2	Aroclor 1016	690	< 690 U
53469-21-9	Aroclor 1242	690	< 690 U
12672-29-6	Aroclor 1248	690	< 690 U
11097-69-1	Aroclor 1254	690	< 690 U
11096-82-5	Aroclor 1260	690	< 690 U
11104-28-2	Aroclor 1221	690	< 690 U
11141-16-5	Aroclor 1232	690	< 690 U

Reported in µg/kg (ppb)

**PCB Surrogate Recovery**

Decachlorobiphenyl	83.2%
Tetrachlorometaxylene	92.5%

**ORGANICS ANALYSIS DATA SHEET  
PCB by GC/ECD Method SW8082A  
Extraction Method: SW3580A**

Page 1 of 1

Lab Sample ID: WJ08D

LIMS ID: 13-6317

Matrix: Concrete

Data Release Authorized: *[Signature]*

Reported: 04/05/13

Date Extracted: 04/04/13

Date Analyzed: 04/05/13 11:27

Instrument/Analyst: ECD7/JGR

GPC Cleanup: No

Sulfur Cleanup: Yes

Acid Cleanup: Yes

Florisil Cleanup: No

**Sample ID: S-4  
SAMPLE**

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

Date Sampled: 03/26/13

Date Received: 03/26/13

Sample Amount: 5.77 g-dry-wt  
Final Extract Volume: 40.0 mL  
Dilution Factor: 1.00  
Silica Gel: No

Percent Moisture: 3.9%

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
12674-11-2	Aroclor 1016	690	< 690 U
53469-21-9	Aroclor 1242	690	< 690 U
12672-29-6	Aroclor 1248	690	< 690 U
11097-69-1	Aroclor 1254	690	< 690 U
11096-82-5	Aroclor 1260	690	< 690 U
11104-28-2	Aroclor 1221	690	< 690 U
11141-16-5	Aroclor 1232	690	< 690 U

Reported in µg/kg (ppb)

**PCB Surrogate Recovery**

Decachlorobiphenyl	85.0%
Tetrachlorometaxylene	95.0%

**SW8082/PCB SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY**

Matrix: Concrete

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

<b>Client ID</b>	<b>DCBP</b>	<b>DCBP</b>	<b>TCMX</b>	<b>TCMX</b>	<b>TOT OUT</b>
	<b>% REC</b>	<b>LCL-UCL</b>	<b>% REC</b>	<b>LCL-UCL</b>	
S-1	81.5%	22-168	90.0%	28-106	0
MB-040413	88.2%	51-127	98.8%	49-110	0
LCS-040413	88.5%	51-127	95.0%	49-110	0
S-2	82.5%	22-168	91.8%	28-106	0
S-2 MS	83.0%	22-168	94.5%	28-106	0
S-2 MSD	86.0%	22-168	97.2%	28-106	0
S-3	83.2%	22-168	92.5%	28-106	0
S-4	85.0%	22-168	95.0%	28-106	0

Medium Level Control Limits  
 Prep Method: SW3580A  
 Log Number Range: 13-6314 to 13-6317

**ORGANICS ANALYSIS DATA SHEET  
PCB by GC/ECD Method SW8082A**  
Page 1 of 1

Lab Sample ID: WJ08B  
LIMS ID: 13-6315  
Matrix: Concrete  
Data Release Authorized: *[Signature]*  
Reported: 04/05/13

Date Extracted MS/MSD: 04/04/13

Date Analyzed MS: 04/05/13 10:26  
MSD: 04/05/13 10:46

Instrument/Analyst MS: ECD7/JGR  
MSD: ECD7/JGR

GPC Cleanup: No

Sulfur Cleanup: Yes

Acid Cleanup: Yes

Florisil Cleanup: No

**Sample ID: S-2  
MS/MSD**

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207  
Date Sampled: 03/26/13  
Date Received: 03/26/13

Sample Amount MS: 5.81 g-dry-wt  
MSD: 5.85 g-dry-wt

Final Extract Volume MS: 40 mL  
MSD: 40 mL

Dilution Factor MS: 1.00  
MSD: 1.00

Silica Gel: No

Percent Moisture: 3.6%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Aroclor 1016	< 690 U	3130	3440	91.0%	3200	3420	93.6%	2.2%
Aroclor 1260	< 690 U	3120	3440	90.7%	3190	3420	93.3%	2.2%

Results reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

**ORGANICS ANALYSIS DATA SHEET  
PCB by GC/ECD Method SW8082A  
Extraction Method: SW3580A**

Page 1 of 1

Lab Sample ID: WJ08B

LIMS ID: 13-6315

Matrix: Concrete

Data Release Authorized: *B*

Reported: 04/05/13

Date Extracted: 04/04/13

Date Analyzed: 04/05/13 10:26

Instrument/Analyst: ECD7/JGR

GPC Cleanup: No

Sulfur Cleanup: Yes

Acid Cleanup: Yes

Florisil Cleanup: No

**Sample ID: S-2  
MATRIX SPIKE**

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage

110207

Date Sampled: 03/26/13

Date Received: 03/26/13

Sample Amount: 5.81 g-dry-wt  
Final Extract Volume: 40.0 mL  
Dilution Factor: 1.00  
Silica Gel: No

Percent Moisture: 3.6%

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
12674-11-2	Aroclor 1016	690	---
53469-21-9	Aroclor 1242	690	< 690 U
12672-29-6	Aroclor 1248	690	< 690 U
11097-69-1	Aroclor 1254	690	< 690 U
11096-82-5	Aroclor 1260	690	---
11104-28-2	Aroclor 1221	690	< 690 U
11141-16-5	Aroclor 1232	690	< 690 U

Reported in µg/kg (ppb)

**PCB Surrogate Recovery**

Decachlorobiphenyl	83.0%
Tetrachlorometaxylene	94.5%

**ORGANICS ANALYSIS DATA SHEET  
PCB by GC/ECD Method SW8082A  
Extraction Method: SW3580A**

Page 1 of 1

Lab Sample ID: WJ08B  
 LIMS ID: 13-6315  
 Matrix: Concrete  
 Data Release Authorized: *BB*  
 Reported: 04/05/13

Date Extracted: 04/04/13  
 Date Analyzed: 04/05/13 10:46  
 Instrument/Analyst: ECD7/JGR  
 GPC Cleanup: No  
 Sulfur Cleanup: Yes  
 Acid Cleanup: Yes  
 Florisil Cleanup: No

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207  
 Date Sampled: 03/26/13  
 Date Received: 03/26/13

Sample Amount: 5.85 g-dry-wt  
 Final Extract Volume: 40.0 mL  
 Dilution Factor: 1.00  
 Silica Gel: No

Percent Moisture: 3.6%

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
12674-11-2	Aroclor 1016	680	---
53469-21-9	Aroclor 1242	680	< 680 U
12672-29-6	Aroclor 1248	680	< 680 U
11097-69-1	Aroclor 1254	680	< 680 U
11096-82-5	Aroclor 1260	680	---
11104-28-2	Aroclor 1221	680	< 680 U
11141-16-5	Aroclor 1232	680	< 680 U

Reported in  $\mu\text{g}/\text{kg}$  (ppb)

**PCB Surrogate Recovery**

Decachlorobiphenyl	86.0%
Tetrachlorometaxylene	97.2%

**ORGANICS ANALYSIS DATA SHEET  
PCB by GC/ECD Method SW8082A**  
Page 1 of 1

Lab Sample ID: LCS-040413

LIMS ID: 13-6315

Matrix: Concrete

Data Release Authorized: *[Signature]*

Reported: 04/05/13

Date Extracted: 04/04/13

Date Analyzed: 04/05/13 09:05

Instrument/Analyst: ECD7/JGR

GPC Cleanup: No

Sulfur Cleanup: Yes

Acid Cleanup: Yes

Florisil Cleanup: No

Sample ID: LCS-040413

**LAB CONTROL**

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

Date Sampled: NA

Date Received: NA

Sample Amount: 5.00 g-dry-wt

Final Extract Volume: 40.0 mL

Dilution Factor: 1.00

Silica Gel: No

Percent Moisture: NA

**Analyte**

	<b>Lab Control</b>	<b>Spike Added</b>	<b>Recovery</b>
Aroclor 1016	3760	4000	94.0%
Aroclor 1260	3900	4000	97.5%

**PCB Surrogate Recovery**

Decachlorobiphenyl	88.5%
Tetrachloromethylene	95.0%

Results reported in µg/kg (ppb)

**ORGANICS ANALYSIS DATA SHEET  
PCB by GC/ECD Method SW8082A  
Extraction Method: SW3580A**

Page 1 of 1

Lab Sample ID: MB-040413  
LIMS ID: 13-6315  
Matrix: Concrete  
Data Release Authorized: *[Signature]*  
Reported: 04/05/13

Date Extracted: 04/04/13  
Date Analyzed: 04/05/13 08:44  
Instrument/Analyst: ECD7/JGR  
GPC Cleanup: No  
Sulfur Cleanup: Yes  
Acid Cleanup: Yes  
Florisil Cleanup: No

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207  
Date Sampled: NA  
Date Received: NA

Sample Amount: 5.00 g  
Final Extract Volume: 40.0 mL  
Dilution Factor: 1.00  
Silica Gel: No

Percent Moisture: NA

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	800	< 800 U
53469-21-9	Aroclor 1242	800	< 800 U
12672-29-6	Aroclor 1248	800	< 800 U
11097-69-1	Aroclor 1254	800	< 800 U
11096-82-5	Aroclor 1260	800	< 800 U
11104-28-2	Aroclor 1221	800	< 800 U
11141-16-5	Aroclor 1232	800	< 800 U

Reported in µg/kg (ppb)

**PCB Surrogate Recovery**

Decachlorobiphenyl	88.2%
Tetrachlorometaxylene	98.8%

**ORGANICS ANALYSIS DATA SHEET  
PCB by GC/ECD Method SW8082A  
Extraction Method: SW3510C**

Page 1 of 1

Lab Sample ID: WJ08E

LIMS ID: 13-6318

Matrix: Water

Data Release Authorized: *[Signature]*

Reported: 04/05/13

Date Extracted: 04/01/13

Date Analyzed: 04/04/13 16:31

Instrument/Analyst: ECD7/JGR

GPC Cleanup: No

Sulfur Cleanup: Yes

**Sample ID: W-1  
SAMPLE**

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

Date Sampled: 03/26/13

Date Received: 03/26/13

Sample Amount: 500 mL  
Final Extract Volume: 5.0 mL  
Dilution Factor: 1.00  
Silica Gel: No  
Acid Cleanup: Yes

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
12674-11-2	Aroclor 1016	1.0	< 1.0 U
53469-21-9	Aroclor 1242	1.0	< 1.0 U
12672-29-6	Aroclor 1248	1.0	< 1.0 U
11097-69-1	Aroclor 1254	1.0	< 1.0 U
11096-82-5	Aroclor 1260	1.0	< 1.0 U
11104-28-2	Aroclor 1221	1.0	< 1.0 U
11141-16-5	Aroclor 1232	1.0	< 1.0 U

Reported in µg/L (ppb)

**PCB Surrogate Recovery**

Decachlorobiphenyl	85.0%
Tetrachlorometaxylene	93.8%

**SW8082/PCB WATER SURROGATE RECOVERY SUMMARY**

Matrix: Water

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

<b>Client ID</b>	<b>DCBP</b>	<b>DCBP</b>	<b>TCMX</b>	<b>TCMX</b>		
	<b>% REC</b>	<b>LCL-UCL</b>	<b>% REC</b>	<b>LCL-UCL</b>	<b>TOT</b>	<b>OUT</b>
MB-040113	53.2%	41-111	82.0%	40-118	0	
LCS-040113	67.2%	41-111	88.5%	40-118	0	
LCSD-040113	62.5%	41-111	85.0%	40-118	0	
W-1	85.0%	29-118	93.8%	38-118	0	

Prep Method: SW3510C  
 Log Number Range: 13-6318 to 13-6318

**ORGANICS ANALYSIS DATA SHEET**  
**PCB by GC/ECD Method SW8082A**  
 Page 1 of 1



**Sample ID: LCS-040113**  
**LCS/LCSD**

Lab Sample ID: LCS-040113  
 LIMS ID: 13-6318  
 Matrix: Water  
 Data Release Authorized: *[Signature]*  
 Reported: 04/05/13

Date Extracted LCS/LCSD: 04/01/13

Date Analyzed LCS: 04/04/13 15:30  
 LCSD: 04/04/13 15:51

Instrument/Analyst LCS: ECD7/JGR  
 LCSD: ECD7/JGR

GPC Cleanup: No

Sulfur Cleanup: Yes

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

Date Sampled: NA

Date Received: NA

Sample Amount LCS: 500 mL  
 LCSD: 500 mL

Final Extract Volume LCS: 5.0 mL  
 LCSD: 5.0 mL

Dilution Factor LCS: 1.00  
 LCSD: 1.00

Silica Gel: No

Acid Cleanup: Yes

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Aroclor 1016	4.46	5.00	89.2%	4.25	5.00	85.0%	4.8%
Aroclor 1260	4.66	5.00	93.2%	4.42	5.00	88.4%	5.3%

**PCB Surrogate Recovery**

	LCS	LCSD
Decachlorobiphenyl	67.2%	62.5%
Tetrachlorometaylene	88.5%	85.0%

Results reported in µg/L

RPD calculated using sample concentrations per SW846.

**ORGANICS ANALYSIS DATA SHEET**  
**PCB by GC/ECD Method SW8082A**  
**Extraction Method: SW3510C**

Page 1 of 1

Lab Sample ID: MB-040113

LIMS ID: 13-6318

Matrix: Water

Data Release Authorized: *BB*

Reported: 04/05/13

Date Extracted: 04/01/13

Date Analyzed: 04/04/13 15:10

Instrument/Analyst: ECD7/JGR

GPC Cleanup: No

Sulfur Cleanup: Yes

**Sample ID: MB-040113**  
**METHOD BLANK**

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

Date Sampled: NA

Date Received: NA

Sample Amount: 500 mL

Final Extract Volume: 5.0 mL

Dilution Factor: 1.00

Silica Gel: No

Acid Cleanup: Yes

<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>Result</b>
12674-11-2	Aroclor 1016	1.0	< 1.0 U
53469-21-9	Aroclor 1242	1.0	< 1.0 U
12672-29-6	Aroclor 1248	1.0	< 1.0 U
11097-69-1	Aroclor 1254	1.0	< 1.0 U
11096-82-5	Aroclor 1260	1.0	< 1.0 U
11104-28-2	Aroclor 1221	1.0	< 1.0 U
11141-16-5	Aroclor 1232	1.0	< 1.0 U

Reported in µg/L (ppb)

**PCB Surrogate Recovery**

Decachlorobiphenyl	53.2%
Tetrachlorometaxylene	82.0%

**ORGANICS ANALYSIS DATA SHEET**  
**TOTAL DIESEL RANGE HYDROCARBONS**  
NWTPHD by GC/FID  
Extraction Method: SW3546  
Page 1 of 1

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

Matrix: Concrete

Date Received: 03/26/13

Data Release Authorized: *MW*  
Reported: 04/04/13

ARI ID	Sample ID	Extraction	Analysis	EFV	Range/Surrogate	RL	Result
		Date	Date	DL			
WJ08A 13-6314	S-1 HC ID: DRO/MOTOR OIL	04/02/13	04/03/13 FID9	1.00 1.0	Diesel Range Motor Oil Range o-Terphenyl	5.2 10	13 15 67.8%
WJ08B 13-6315	S-2 HC ID: ---	04/02/13	04/03/13 FID9	1.00 1.0	Diesel Range Motor Oil Range o-Terphenyl	5.2 10	< 5.2 U < 10 U 77.8%
WJ08C 13-6316	S-3 HC ID: ---	04/02/13	04/03/13 FID9	1.00 1.0	Diesel Range Motor Oil Range o-Terphenyl	5.2 10	< 5.2 U < 10 U 77.7%
MB-040213 13-6317	Method Blank HC ID: ---	04/02/13	04/03/13 FID9	1.00 1.0	Diesel Range Motor Oil Range o-Terphenyl	5.0 10	< 5.0 U < 10 U 81.1%
WJ08D 13-6317	S-4 HC ID: ---	04/02/13	04/03/13 FID9	1.00 1.0	Diesel Range Motor Oil Range o-Terphenyl	5.2 10	< 5.2 U < 10 U 76.2%

Reported in mg/kg (ppm)

EFV=Effective Final Volume in mL.

DL=Dilution of extract prior to analysis.

RL=Reporting limit.

Diesel range quantitation on total peaks in the range from C12 to C24.  
Motor Oil range quantitation on total peaks in the range from C24 to C38.  
HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.

Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20130403.b/0403a013.d  
 Method: /chem2/fid9.i/20130403.b/ftpffid9a.m  
 Instrument: fid9.i  
 Operator: JW  
 Report Date: 04/04/2013

ARI ID: WJ08MBS1  
 Client ID:  
 Injection: 03-APR-2013 14:40  
 Dilution Factor: 1  
 Macro: 30-JAN-2013

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	---				GAS (Tol-C12)	67639	2
C8	1.132	0.029	2437	1520	DIESEL (C12-C24)	78751	3.87
C10	2.870	-0.001	346	496	M.OIL (C24-C38)	110847	6.96
C12	3.867	0.004	66	19	AK-102 (C10-C25)	86884	3.62
C14	4.555	0.002	112	62	AK-103 (C25-C36)	85265	7.16
C16	5.136	-0.003	299	411			
C18	5.692	-0.007	313	394			
C20	6.262	0.001	208	108			
C22	6.810	0.001	88	104			
C24	7.330	-0.001	92	73			
C25	7.584	0.004	624	815			
C26	7.828	-0.004	66	23			
C28	8.272	-0.006	572	491			
C32	9.052	-0.006	6020	13529			
C34	9.398	-0.004	899	676	BUNKERC (C10-C38)	197394	21.30
Filter Peak	11.492	0.004	2692	1718			
C36	9.725	0.002	1181	608			
C38	10.025	0.003	1582	1557			
C40	10.310	0.005	2433	579			
o-terph	5.838	-0.001	1119894	968817			
Triacon Surr	8.693	-0.008	834546	877680			

M Indicates manual integration within range.

Range Times: NW Diesel(3.862 - 7.331) AK102(2.87 - 7.58) Jet A(2.87 - 5.70)  
 NW M.Oil(7.33 - 10.02) AK103(7.58 - 9.72) OR Diesel(2.87 - 8.28)

Surrogate	Area	Amount	%Rec
o-Terphenyl	968817	36.5	81.1
Triacontane	877680	42.1	93.7

JW  
4/4/13

Analyte	RF	Curve Date
o-Terph Surr	26543.3	24-JAN-2013
Triacon Surr	20825.0	24-JAN-2013
Gas	34297.9	11-FEB-2013
Diesel	20355.8	24-JAN-2013
Motor Oil	15930.3	24-JAN-2013
AK102	24012.1	24-JAN-2013
AK103	11909.0	30-JAN-2013
Bunker C	9266.7	25-MAR-2013

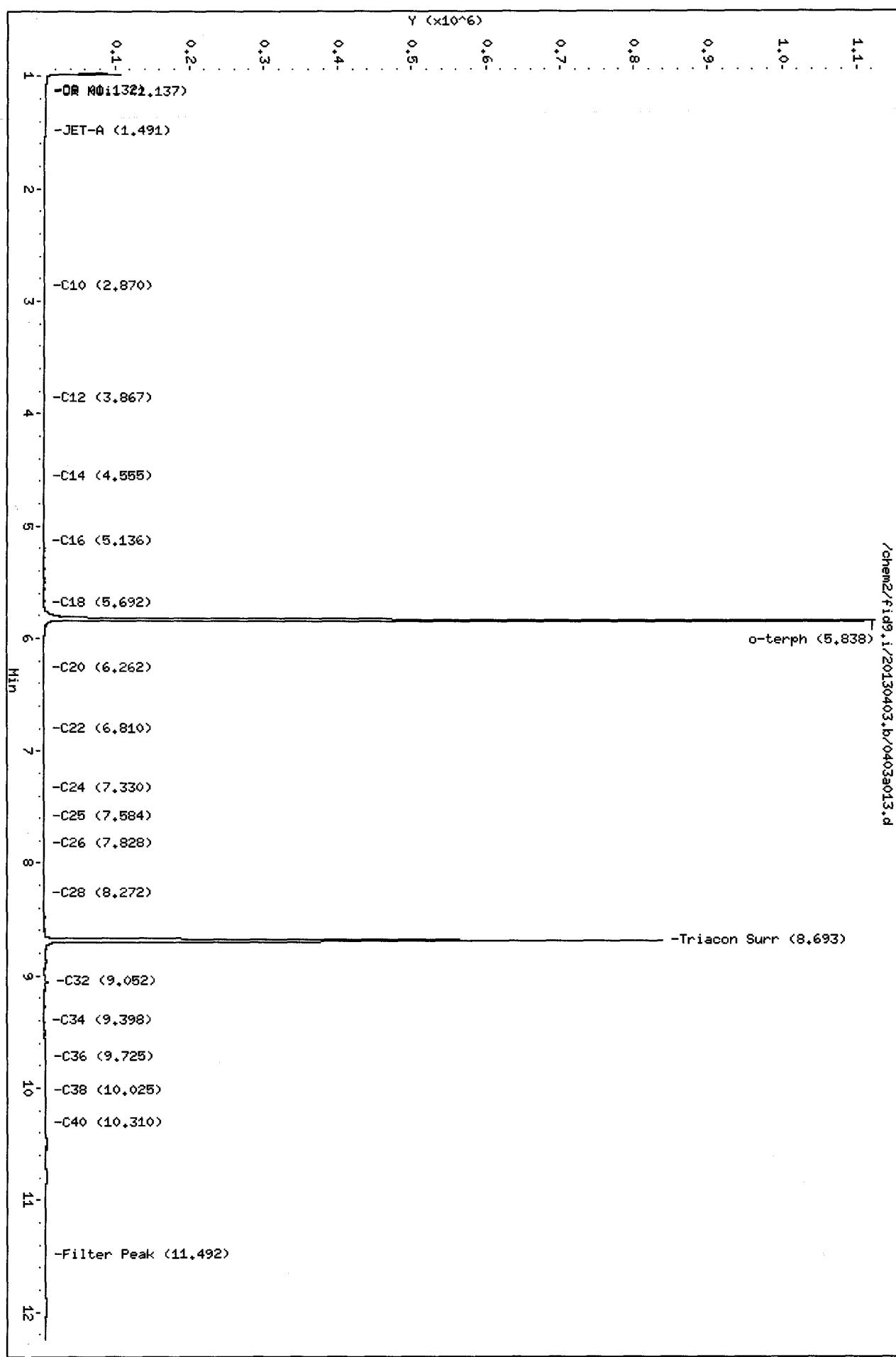
Client ID:

Sample Info: WJ08MB51

Column phase: RTX-1

Instrument: fid9.i  
Operator: JW  
Column diameter: 0.25

/chem2/fid9.i/20130403.b/0403a013.d



Analytical Resources Inc.  
NWTPH Quantitation Report

Data file: /chem2/fid9.i/20130403.b/0403a015.d  
 Method: /chem2/fid9.i/20130403.b/ftpffid9a.m  
 Instrument: fid9.i  
 Operator: JW  
 Report Date: 04/04/2013

ARI ID: WJ08A  
 Client ID:  
 Injection: 03-APR-2013 15:24  
 Dilution Factor: 1  
 Macro: 30-JAN-2013

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	---				GAS (Tol-C12)	64834	2
C8	1.100	-0.003	1683	2108	DIESEL (C12-C24)	2474273	121.55
C10	2.873	0.003	587	647	M.OIL (C24-C38)	2345954	147.26
C12	3.859	-0.004	885	1179	AK-102 (C10-C25)	2681463	111.67 M
C14	4.550	-0.003	3845	3043	AK-103 (C25-C36)	2009707	168.76 M
C16	5.132	-0.007	5528	4424			
C18	5.700	0.001	14591	6245			
C20	6.263	0.003	20381	13828			
C22	6.803	-0.006	24178	30418			
C24	7.328	-0.003	20124	7085			
C25	7.577	-0.003	20172	17737			
C26	7.837	0.004	16714	7200			
C28	8.277	-0.001	17194	16226			
C32	9.050	-0.008	23141	40233			
C34	9.394	-0.008	13343	9620	BUNKERC (C10-C38)	4846927	523.05 M
Filter Peak	11.486	-0.002	3086	3707			
C36	9.715	-0.008	10781	9462			
C38	10.018	-0.004	8730	5281			
C40	10.309	0.004	7260	4441			
o-terph	5.837	-0.002	907600	809278			
Triacon Surr	8.691	-0.009	741709	733454			

M Indicates manual integration within range.

Range Times: NW Diesel(3.862 - 7.331) AK102(2.87 - 7.58) Jet A(2.87 - 5.70)  
 NW M.Oil(7.33 - 10.02) AK103(7.58 - 9.72) OR Diesel(2.87 - 8.28)

Surrogate	Area	Amount	%Rec
o-Terphenyl	809278	30.5	67.8
Triacontane	733454	35.2	78.3

Analyte	RF	Curve Date
o-Terph Surr	26543.3	24-JAN-2013
Triacon Surr	20825.0	24-JAN-2013
Gas	34297.9	11-FEB-2013
Diesel	20355.8	24-JAN-2013
Motor Oil	15930.3	24-JAN-2013
AK102	24012.1	24-JAN-2013
AK103	11909.0	30-JAN-2013
Bunker C	9266.7	25-MAR-2013

3W  
4/4/13

Client ID:

Sample Info: WJ08A

Column phase: RTX-1

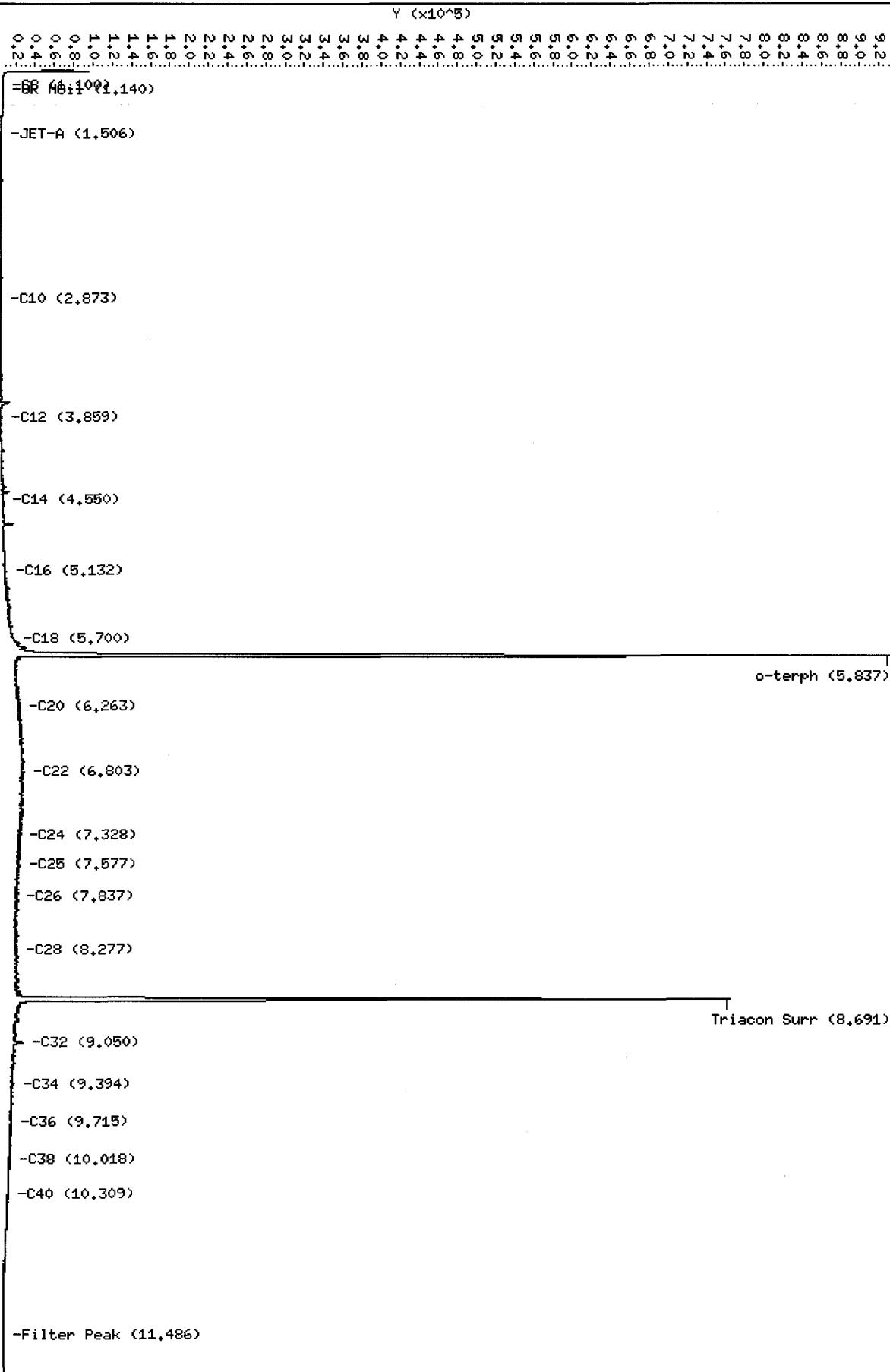
Instrument: fid9.i  
Operator: JWL  
Column diameter: 0.25

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o-terph (5.837)

Triacon Surr (8.691)

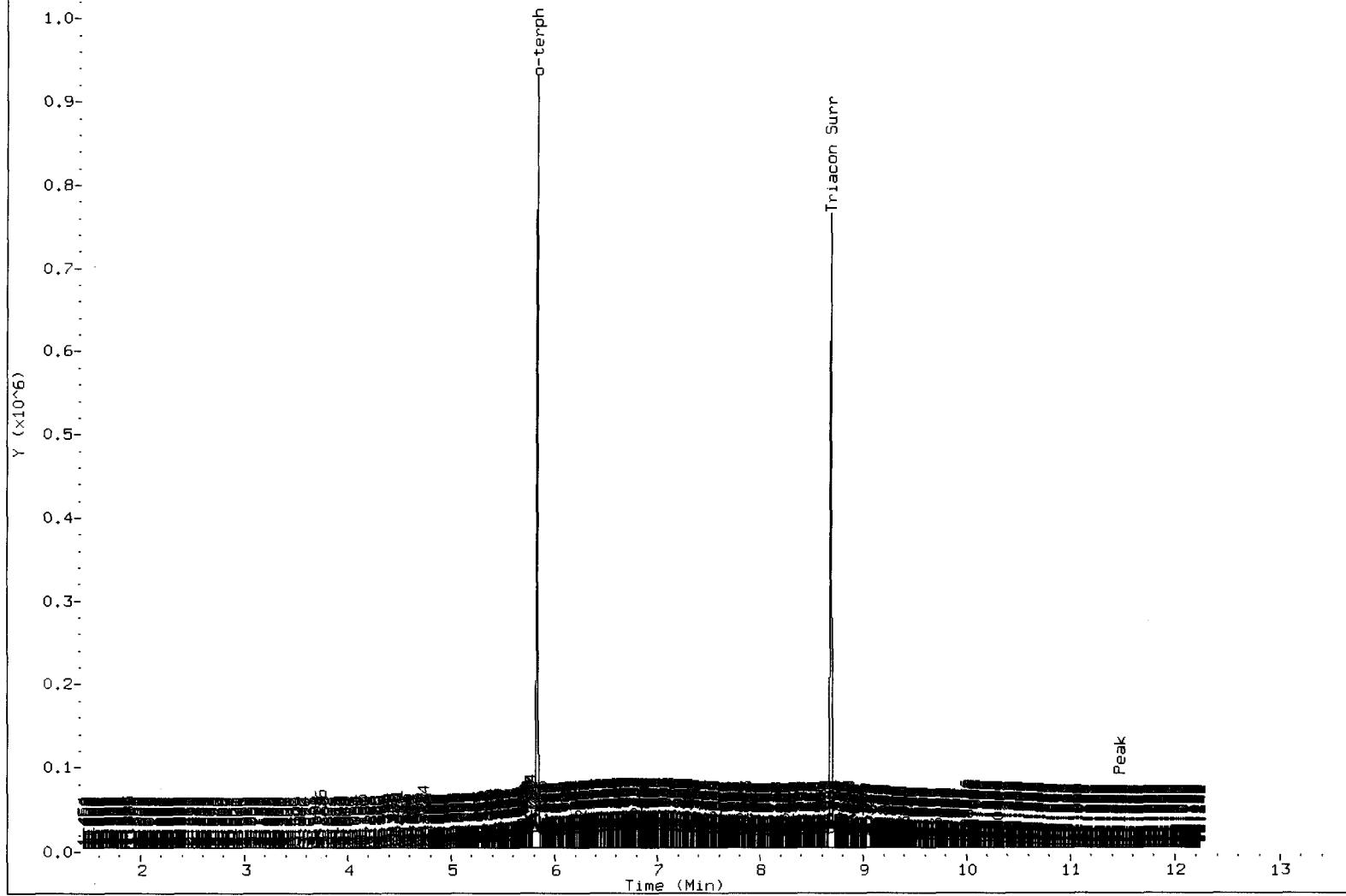
JWL  
4/4/17



FID:9A-2C/RTX-1 WJ08A

FID:9A SIGNAL

HP6890 GC Data, 0403a015.d



#### MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation
5. Surrogate Skimmed

Analyst: JW

Date: 4/4/13



## TPHD SURROGATE RECOVERY SUMMARY

## Matrix: Concrete

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

<b>Client ID</b>	<b>OTER</b>	<b>TOT OUT</b>
S-1	67.8%	0
S-2	77.8%	0
S-3	77.7%	0
040213MBS	81.1%	0
040213LCS	75.0%	0
S-4	76.2%	0
S-4 MS	81.9%	0
S-4 MSD	78.2%	0

### LCS/MB LIMITS                    QC LIMITS

(OTER) = o-Terphenyl (50-150) (50-150)

Prep Method: SW3546  
Log Number Range: 13-6314 to 13-6317

ORGANICS ANALYSIS DATA SHEET  
NWTPHD by GC/FID  
Page 1 of 1

Sample ID: S-4  
MS/MSD

Lab Sample ID: WJ08D  
LIMS ID: 13-6317  
Matrix: Concrete  
Data Release Authorized: *MW*  
Reported: 04/04/13

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207  
Date Sampled: 03/26/13  
Date Received: 03/26/13

Date Extracted MS/MSD: 04/02/13

Sample Amount MS: 9.63 g-dry-wt  
MSD: 9.63 g-dry-wt

Date Analyzed MS: 04/03/13 16:53  
MSD: 04/03/13 17:15

Final Extract Volume MS: 1.0 mL  
MSD: 1.0 mL

Instrument/Analyst MS: FID9/JLW  
MSD: FID9/JLW

Dilution Factor MS: 1.00  
MSD: 1.00

Percent Moisture: 3.9%

Range	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Diesel	< 5.2 U	135	156	86.5%	128	156	82.1%	5.3%

#### TPHD Surrogate Recovery

	MS	MSD
o-Terphenyl	81.9%	78.2%

Results reported in mg/kg

RPD calculated using sample concentrations per SW846.

**ORGANICS ANALYSIS DATA SHEET  
NWTPHD by GC/FID  
Page 1 of 1**

Lab Sample ID: LCS-040213  
 LIMS ID: 13-6317  
 Matrix: Concrete  
 Data Release Authorized: *MW*  
 Reported: 04/04/13

Date Extracted: 04/02/13  
 Date Analyzed: 04/03/13 15:02  
 Instrument/Analyst: FID9/JLW

**Sample ID: LCS-040213  
LAB CONTROL**

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 110207

Date Sampled: NA  
 Date Received: NA

Sample Amount: 10.0 g-dry-wt  
 Final Extract Volume: 1.0 mL  
 Dilution Factor: 1.00

<b>Range</b>	<b>Lab Control</b>	<b>Spike Added</b>	<b>Recovery</b>
Diesel	119	150	79.3%

**TPHD Surrogate Recovery**

o-Terphenyl	75.0%
-------------	-------

Results reported in mg/kg

Analytical Resources Inc.  
NWTPE Quantitation Report

Data file: /chem2/fid9.i/20130403.b/0403a014.d  
 Method: /chem2/fid9.i/20130403.b/ftpfid9a.m  
 Instrument: fid9.i  
 Operator: JW  
 Report Date: 04/04/2013

ARI ID: WJ08LCSS1  
 Client ID:  
 Injection: 03-APR-2013 15:02  
 Dilution Factor: 1  
 Macro: 30-JAN-2013

FID:9 RESULTS							
Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	----				GAS (Tol-C12)	4969722	145
C8	1.107	0.004	8273	16606	DIESEL (C12-C24)	24203585	1189.03
C10	2.870	0.000	119163	111584	M.OIL (C24-C38)	257472	16.16
C12	3.862	0.000	212192	252732	AK-102 (C10-C25)	27704679	1153.78 M
C14	4.554	0.001	468094	393098	AK-103 (C25-C36)	168666	14.16
C16	5.141	0.002	708059	614587			
C18	5.701	0.002	592045	609797			
C20	6.257	-0.003	376466	420953			
C22	6.803	-0.006	194097	231849			
C24	7.321	-0.010	444443	52700			
C25	7.569	-0.011	18152	32761			
C26	7.813	-0.020	7027	11512			
C28	8.282	0.004	1190	1092			
C32	9.050	-0.008	6209	7774			
C34	9.396	-0.006	346	320	BUNKERC (C10-C38)	27892762	3010.00 M
Filter Peak	11.493	0.005	1309	546			
C36	9.706	-0.016	1499	1995			
C38	10.016	-0.005	781	805			
C40	10.310	0.005	1334	1114			
o-terph	5.842	0.003	1014492	896192			
Triacon Surr	8.691	-0.010	907098	835958			

M Indicates manual integration within range.

Range Times: NW Diesel(3.862 - 7.331) AK102(2.87 - 7.58) Jet A(2.87 - 5.70)  
 NW M.Oil(7.33 - 10.02) AK103(7.58 - 9.72) OR Diesel(2.87 - 8.28)

Surrogate	Area	Amount	%Rec
o-Terphenyl	896192	33.8	75.0
Triacontane	835958	40.1	89.2

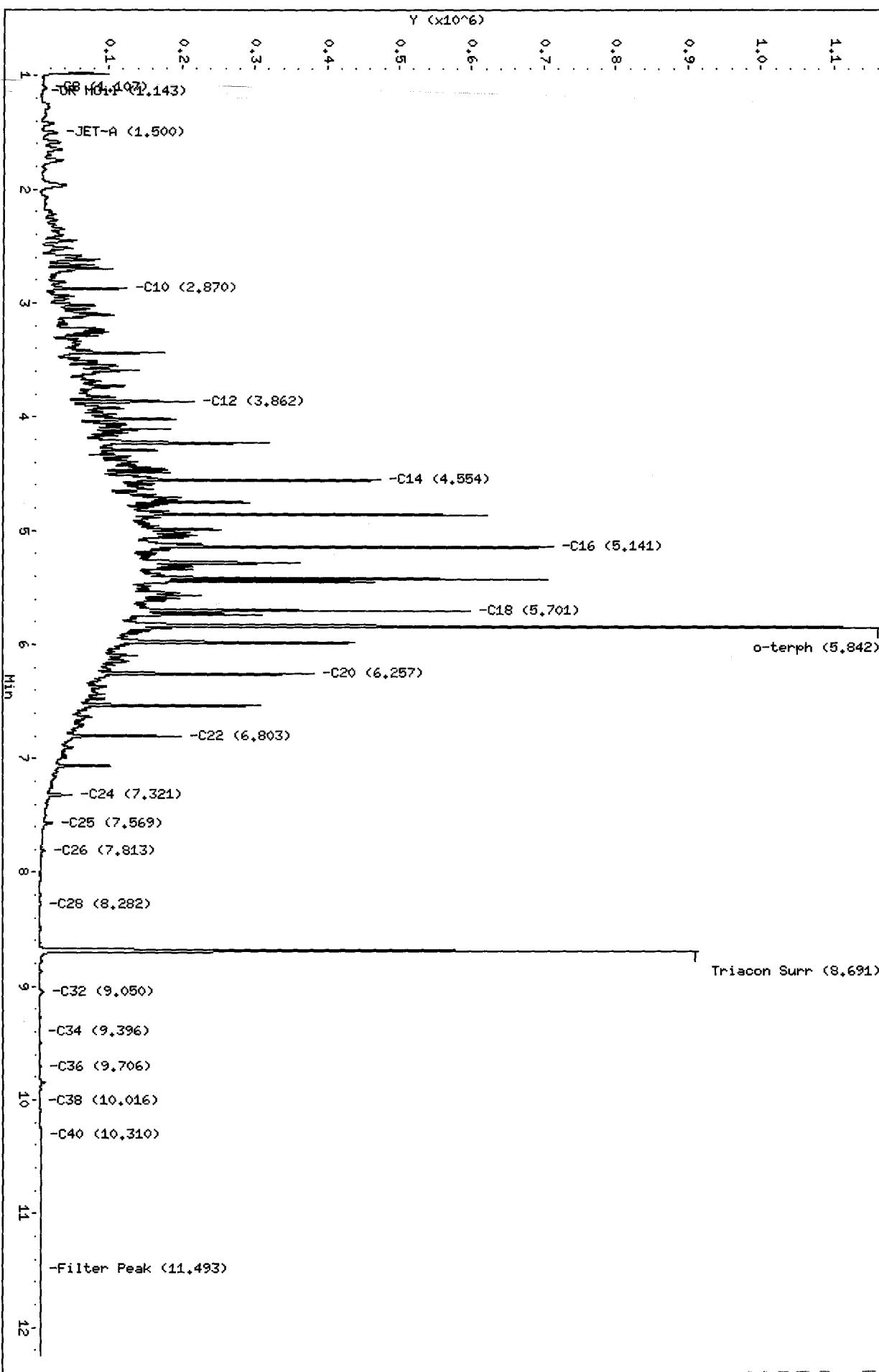
JW  
4/4/13

Analyte	RF	Curve Date
o-Terph Surr	26543.3	24-JAN-2013
Triacon Surr	20825.0	24-JAN-2013
Gas	34297.9	11-FEB-2013
Diesel	20355.8	24-JAN-2013
Motor Oil	15930.3	24-JAN-2013
AK102	24012.1	24-JAN-2013
AK103	11909.0	30-JAN-2013
Bunker C	9266.7	25-MAR-2013

Column phase: RTX-1

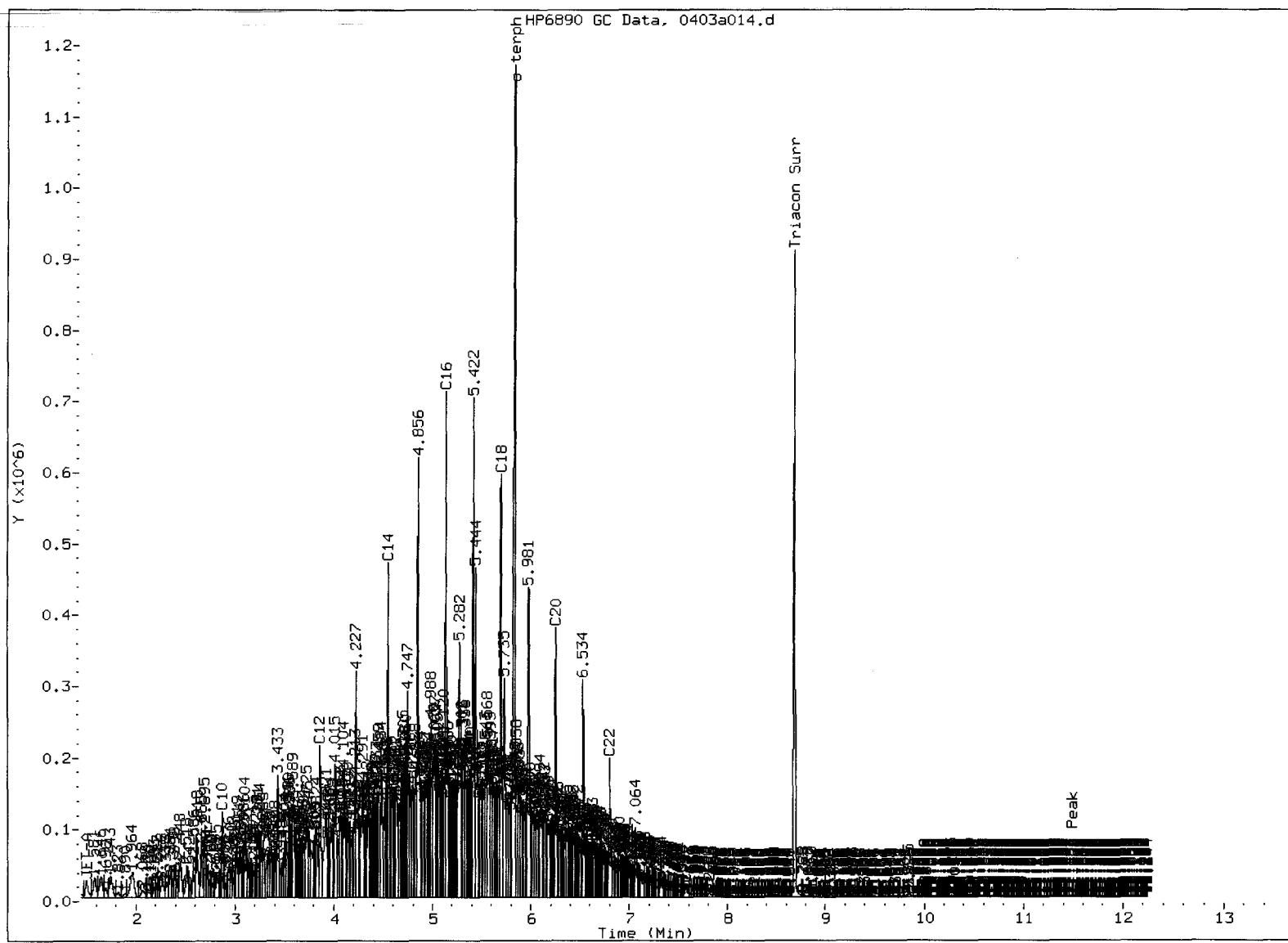
Instrument: fid9.i  
Operator: JH  
Column diameter: 0.25

/chem2/fid9.1/20130403.b/0403a014.d



FID:9A-2C/RTX-1 WJ08LCSS1

FID:9A SIGNAL



**TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT**

Matrix: Concrete  
Date Received: 03/26/13

ARI Job: WJ08  
Project: Kimberly Clark Haz Waste Cage  
110207

ARI ID	Client ID	Client Amt	Final Vol	Basis	Prep Date
13-6314-WJ08A	S-1	9.63 g	1.00 mL	D	04/02/13
13-6315-WJ08B	S-2	9.65 g	1.00 mL	D	04/02/13
13-6316-WJ08C	S-3	9.66 g	1.00 mL	D	04/02/13
13-6317-040213MB1	Method Blank	10.0 g	1.00 mL	-	04/02/13
13-6317-040213LCS1	Lab Control	10.0 g	1.00 mL	-	04/02/13
13-6317-WJ08D	S-4	9.62 g	1.00 mL	D	04/02/13
13-6317-WJ08DMS	S-4	9.63 g	1.00 mL	D	04/02/13
13-6317-WJ08DMSD	S-4	9.63 g	1.00 mL	D	04/02/13

**ORGANICS ANALYSIS DATA SHEET**  
**TOTAL DIESEL RANGE HYDROCARBONS**  
NWTPHD by GC/FID  
Extraction Method: SW3510C  
Page 1 of 1

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

Matrix: Water

Date Received: 03/26/13

Data Release Authorized: *B*  
Reported: 04/03/13

<b>ARI ID</b>	<b>Sample ID</b>	<b>Extraction</b>	<b>Analysis</b>	<b>EFV</b>	<b>Range/Surrogate</b>	<b>RL</b>	<b>Result</b>
		<b>Date</b>	<b>Date</b>	<b>DF</b>			
MB-032913	Method Blank	03/29/13	04/01/13	1.00	Diesel Range	0.10	< 0.10 U
13-6318	HC ID: ---		FID3B	1.0	Motor Oil Range o-Terphenyl	0.20	< 0.20 U 83.5%
WJ08E	W-1	03/29/13	04/01/13	1.00	<b>Diesel Range</b>	<b>0.10</b>	<b>0.44</b>
13-6318	HC ID: DRO/RRO		FID3B	1.0	<b>Motor Oil Range</b> o-Terphenyl	<b>0.20</b>	<b>0.84</b> 75.4%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.

DL-Dilution of extract prior to analysis.

RL-Reporting limit.

Diesel range quantitation on total peaks in the range from C12 to C24.  
Motor Oil range quantitation on total peaks in the range from C24 to C38.  
HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.

Analytical Resources Inc.  
TPH Quantitation Report

Data file: /chem3/fid3b.i/20130401.b/0401b007.d  
 Method: /chem3/fid3b.i/20130401.b/ftpbfid3b.m  
 Instrument: fid3b.i  
 Operator: JW  
 Report Date: 04/03/2013  
 Macro: FID:3B012413

ARI ID: WI97MBW1  
 Client ID: WI97MBW1  
 Injection: 01-APR-2013 12:02  
 Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc
Toluene	----				WATPHG (Tol-C12)		128155	5
C8	0.850	0.011	4717	1128	WATPHD (C12-C24)		48684	4.29
C10	2.254	-0.006	1114	983	WATPHM (C24-C38)		93486	10.58
C12	3.045	-0.001	225	165	AK102 (C10-C25)		73860	5.35
C14	3.625	0.001	358	310	AK103 (C25-C36)		70631	9.65
C16	4.122	0.002	216	241	OR.DIES (C10-C28)		83443	5.42
C18	4.571	0.000	249	192				
C20	4.992	-0.001	329	352				
C22	5.388	-0.002	158	110				
C24	5.760	-0.003	201	151				
C25	5.936	-0.003	153	103				
C26	6.107	-0.008	255	153				
C28	6.431	-0.001	931	703	IT.DIES (C10-C24)		73345	4.01
C32	6.976	-0.004	10974	7124				
C34	7.214	-0.003	1105	1440				
Filter Peak	----							
C36	7.422	-0.013	3567	5207	BUNKERC (C10-C38)		166831	34.01
o-terph	4.684	0.001	756789	545137	JET-A (C10-C18)		41666	2.89
Triacon Surr	6.728	0.001	817462	585678				

Range Times: NW Diesel(3.096 - 5.813) NW Gas(0.612 - 3.096) NW M.Oil(5.813 - 7.691)  
 AK102(2.210 - 5.890) AK103(5.890 - 7.485) Jet A(2.210 - 4.621)

Surrogate	Area	Amount	%Rec
o-Terphenyl	545137	37.6	83.5
Triaccontane	585678	51.0	113.4

JW  
4/3/13

Analyte	RF	Curve Date
o-Terph Surr	14512.5	22-MAR-2013
Triacon Surr	11474.8	22-MAR-2013
Gas	27130.1	19-OCT-2012
Diesel	11340.1	22-MAR-2013
Motor Oil	8840.0	22-MAR-2013
AK102	13793.0	22-MAR-2013
AK103	7317.0	25-SEP-2012
JetA	14399.0	16-FEB-2012
OR Diesel	15382.0	
IT Diesel	18284.0	
Bunker C	4904.8	14-SEP-2012

Data File: /Chem3/fid3b.i/20130401.b/0401b007.d

Date : 01-APR-2013 12:02

Client ID: WI97HBM1

Sample Info: WI97HBM1

Page 1

Instrument: fid3b.i

Column phase: RTX-1

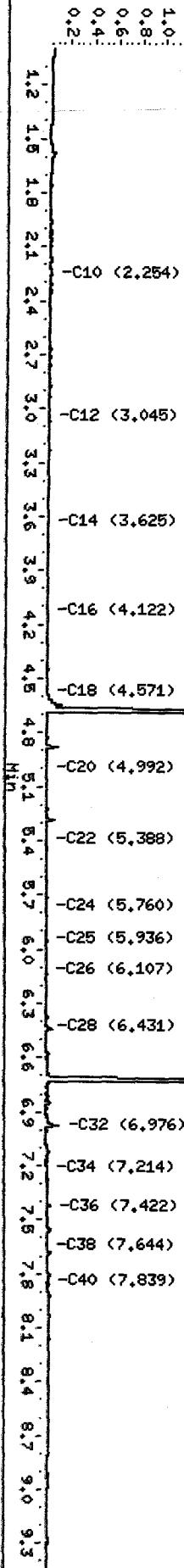
/Chem3/fid3b.i/20130401.b/0401b007.d

Operator: JM  
Column diameter: 0.25

o-terph (4.684)

Triacon Surr (6.728)

Y ( $\times 10^5$ )



Analytical Resources Inc.  
TPH Quantitation Report

Data file: /chem3/fid3b.i/20130401.b/0401b016.d  
 Method: /chem3/fid3b.i/20130401.b/ftpghfid3b.m  
 Instrument: fid3b.i  
 Operator: JW  
 Report Date: 04/03/2013  
 Macro: FID:3B012413

ARI ID: WJ08E  
 Client ID: W-1  
 Injection: 01-APR-2013 15:01  
 Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc
Toluene	---				WATPHG (Tol-C12)		181116	7
C8	0.838	-0.001	6646	3621	WATPHD (C12-C24)		2518188	222.06
C10	2.254	-0.005	1383	766	WATPHM (C24-C38)		3701332	418.70
C12	3.044	-0.002	1081	890	AK102 (C10-C25)		2700253	195.77 M
C14	3.628	0.003	5846	7992	AK103 (C25-C36)		3343704	456.98 M
C16	4.120	-0.001	10751	8915	OR.DIES (C10-C28)		4681504	304.35 M
C18	4.569	-0.002	22972	7500				
C20	4.989	-0.004	20699	6993				
C22	5.391	0.000	25851	8985				
C24	5.767	0.004	27048	13192				
C25	5.941	0.002	56735	61735				
C26	6.110	-0.006	82668	79960				
C28	6.431	-0.001	26227	7258	IT.DIES (C10-C24)		2569464	140.53
C32	6.980	0.000	32744	34430				
C34	7.217	0.000	19768	3499				
Filter Peak	---							
C36	7.433	-0.002	18114	9505	BUNKERC (C10-C38)		6270796	1278.50
o-terph	4.685	0.002	799964	492215	JET-A (C10-C18)		745227	51.76
Triacon Surr	6.732	0.005	886793	596275				

Range Times: NW Diesel(3.096 - 5.813) NW Gas(0.612 - 3.096) NW M.Oil(5.813 - 7.691)  
 AK102(2.210 - 5.890) AK103(5.890 - 7.485) Jet A(2.210 - 4.621)

Surrogate	Area	Amount	%Rec
o-Terphenyl	492215	33.9	75.4
Triacontane	596275	52.0	115.5

3W  
4/3/13

Analyte	RF	Curve Date
o-Terph Surr	14512.5	22-MAR-2013
Triacon Surr	11474.8	22-MAR-2013
Gas	27130.1	19-OCT-2012
Diesel	11340.1	22-MAR-2013
Motor Oil	8840.0	22-MAR-2013
AK102	13793.0	22-MAR-2013
AK103	7317.0	25-SEP-2012
JetA	14399.0	16-FEB-2012
OR Diesel	15382.0	
IT Diesel	18284.0	
Bunker C	4904.8	14-SEP-2012

Data File: /chem3/fid3b.i/20130401.b/0401b016.d

Date : 01-APR-2013 15:01

Client ID: W-1

Sample Info: WJOSE

Page 1

Instrument: fid3b.i

Operator: J.W.

Column diameter: 0.25

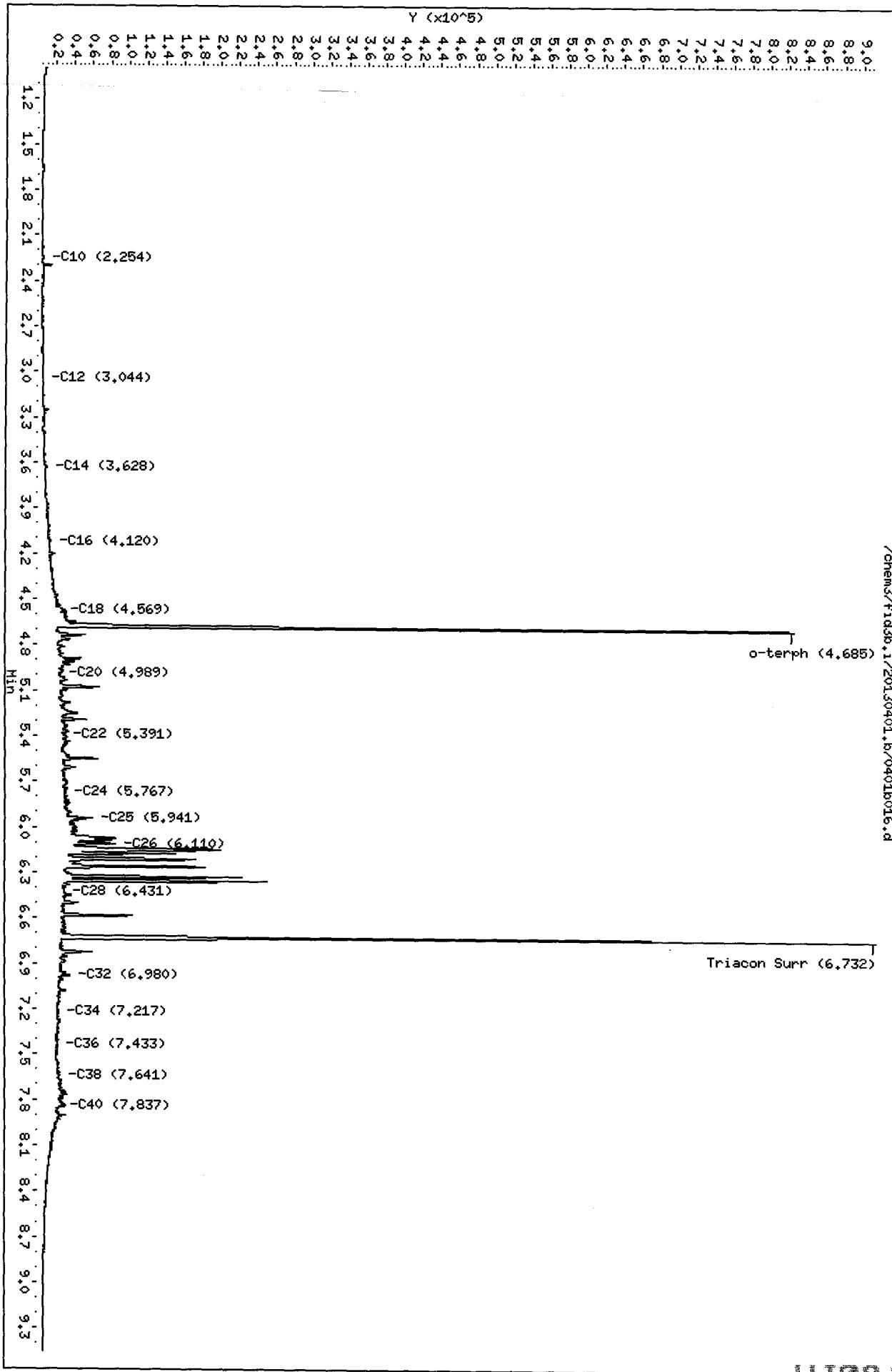
/chem3/fid3b.i/20130401.b/0401b016.d

Y ( $\times 10^5$ )

o-terph (4.685)

Triacon Surr (6.732)

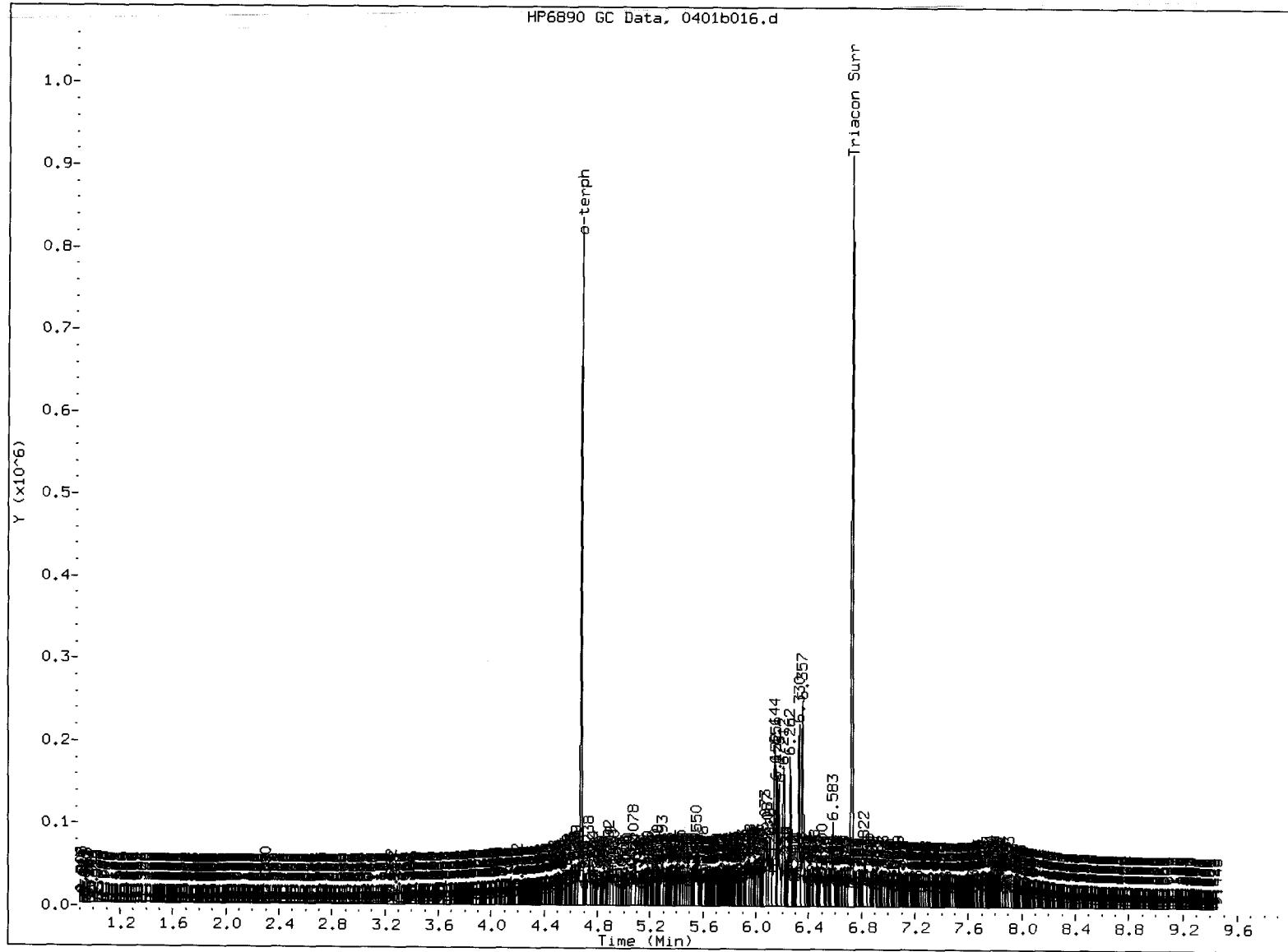
JW  
4/3/13



FID:3B-2C/RTX-1 WJ08E

FID:3B SIGNAL

HP6890 GC Data, 0401b016.d



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
- (5) Skimmed surrogate

Analyst: JW

Date: 4/3/13



## **TPHD SURROGATE RECOVERY SUMMARY**

Matrix: Water

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
110207

<u>Client ID</u>	<u>OTER</u>	<u>TOT OUT</u>
MB-032913	83.5%	0
LCS-032913	76.4%	0
LCSD-032913	78.9%	0
W-1	75.4%	0

### LCS/MB LIMITS                    QC LIMITS

(50-150) (50-150)

Prep Method: SW3510C  
Log Number Range: 13-6318 to 13-6318

**ORGANICS ANALYSIS DATA SHEET**

**NWTPHD by GC/FID**

Page 1 of 1

Lab Sample ID: LCS-032913

LIMS ID: 13-6318

Matrix: Water

Data Release Authorized: *B*

Reported: 04/03/13

**Sample ID: LCS-032913**

**LCS/LCSD**

QC Report No: WJ08-Aspect Consulting LLC

Project: Kimberly Clark Haz Waste Cage

110207

Date Sampled: NA

Date Received: NA

Sample Amount LCS: 500 mL

LCSD: 500 mL

Final Extract Volume LCS: 1.0 mL

LCSD: 1.0 mL

Dilution Factor LCS: 1.00

LCSD: 1.00

Date Extracted LCS/LCSD: 03/29/13

Date Analyzed LCS: 04/01/13 12:21

LCSD: 04/01/13 12:41

Instrument/Analyst LCS: FID3B/JLW

LCSD: FID3B/JLW

Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Diesel	2.55	3.00	85.0%	2.57	3.00	85.7%	0.8%

**TPHD Surrogate Recovery**

	LCS	LCSD
o-Terphenyl	76.4%	78.9%

Results reported in mg/L

RPD calculated using sample concentrations per SW846.

Analytical Resources Inc.  
TPH Quantitation Report

Data file: /chem3/fid3b.i/20130401.b/0401b008.d  
 Method: /chem3/fid3b.i/20130401.b/ftphtfid3b.m  
 Instrument: fid3b.i  
 Operator: JW  
 Report Date: 04/03/2013  
 Macro: FID:3B012413

ARI ID: WI97LCSW1  
 Client ID: WI97LCSW1  
 Injection: 01-APR-2013 12:21  
 Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc
Toluene	---				WATPHG (Tol-C12)		2865468	106
C8	0.848	0.009	7445	17085	WATPHD (C12-C24)		14457259	1274.88 -
C10	2.263	0.003	86935	60210	WATPHM (C24-C38)		184544	20.88 -
C12	3.048	0.002	143518	141687	AK102 (C10-C25)		16574302	1201.64 M
C14	3.628	0.004	304820	250737	AK103 (C25-C36)		132161	18.06
C16	4.126	0.006	460135	401244	OR.DIES (C10-C28)		16659599	1083.06 M
C18	4.576	0.005	383026	363753				
C20	4.997	0.005	258108	256224				
C22	5.393	0.003	144698	123550				
C24	5.763	0.000	41660	34990				
C25	5.938	-0.002	18891	15784				
C26	6.108	-0.008	6991	6700				
C28	6.431	0.000	1868	1433	IT.DIES (C10-C24)		16538235	904.52
C32	6.977	-0.003	9787	6214				
C34	7.215	-0.002	518	410				
Filter Peak	---							
C36	7.449	0.014	550	160	BUNKERC (C10-C38)		16722780	3409.47
o-terph	4.687	0.004	732294	498698	JET-A (C10-C18)		12422341	862.72
Triacan Surr	6.729	0.002	818655	585964				

Range Times: NW Diesel(3.096 - 5.813) NW Gas(0.612 - 3.096) NW M.Oil(5.813 - 7.691)  
 AK102(2.210 - 5.890) AK103(5.890 - 7.485) Jet A(2.210 - 4.621)

Surrogate	Area	Amount	%Rec
o-Terphenyl	498698	34.4	76.4 ✓
Triaccontane	585964	51.1	113.5

Analyte	RF	Curve Date
o-Terph Surr	14512.5	22-MAR-2013
Triacan Surr	11474.8	22-MAR-2013
Gas	27130.1	19-OCT-2012
Diesel	11340.1	22-MAR-2013
Motor Oil	8840.0	22-MAR-2013
AK102	13793.0	22-MAR-2013
AK103	7317.0	25-SEP-2012
JetA	14399.0	16-FEB-2012
OR Diesel	15382.0	
IT Diesel	18284.0	
Bunker C	4904.8	14-SEP-2012

TW  
4/3/13

Data File: /chem3/fid3b.i/20130401.b/0401b008.d

Date : 01-APR-2013 12:21

Client ID: W197LC5M1

Sample Info: W197LC5M1

Page 1

Instrument: fid3b.i

Operator: JH  
Column diameter: 0.25

/chem3/fid3b.i/20130401.b/0401b008.d

Column phase: RTX-1

Y ( $\times 10^5$ )  
8.6  
8.4  
8.2  
8.0  
7.8  
7.6  
7.4  
7.2  
7.0  
6.8  
6.6  
6.4  
6.2  
6.0  
5.8  
5.6  
5.4  
5.2  
5.0  
4.8  
4.6  
4.4  
4.2  
4.0  
3.8  
3.6  
3.4  
3.2  
3.0  
2.8  
2.6  
2.4  
2.2  
2.0  
1.8  
1.6  
1.4  
1.2  
1.0  
0.8  
0.6  
0.4  
0.2  
1.2 1.5 1.8 2.1 2.4 2.7 3.0 3.3 3.6 3.9 4.2 4.5 4.8 5.1 5.4 5.7 6.0 6.3 6.6 6.9 7.2 7.5 7.8 8.1 8.4 8.7 9.0 9.3

o-terph (4.687)

Triacon Surr (6.729)

-C10 (2.263)

-C12 (3.048)

-C14 (3.628)

-C16 (4.126)

-C18 (4.576)

-C20 (4.997)

-

-C22 (5.393)

-

-C24 (5.763)

-

-C25 (5.938)

-

-C26 (6.108)

-C28 (6.431)

-C32 (6.977)

-C34 (7.215)

-C36 (7.449)

-C38 (7.644)

-C40 (7.833)

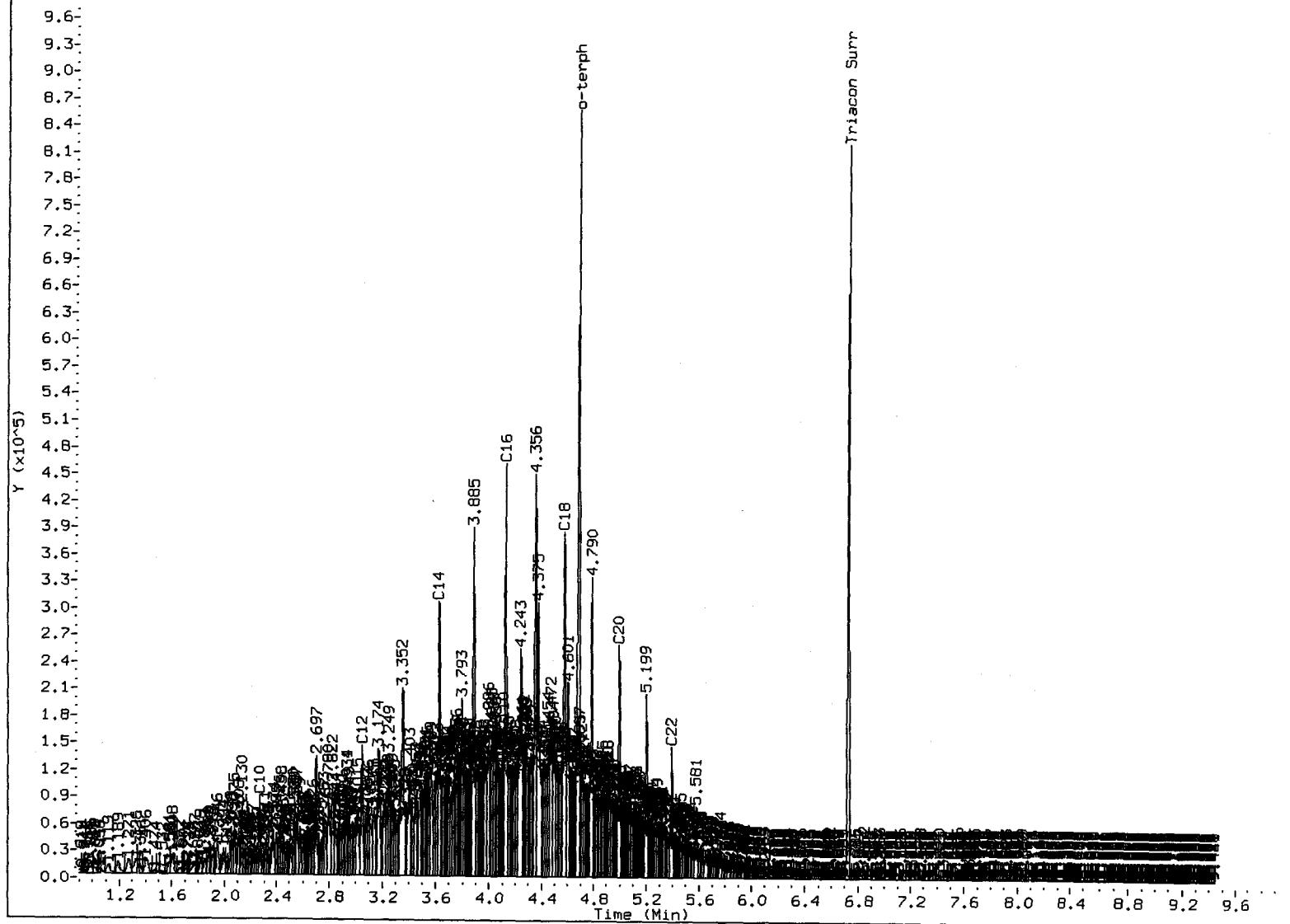
JW  
4/3/13

WJBB 62299

FID:3B-2C/RTX-1 WI97LCSW1

FID:3B SIGNAL

HP6890 GC Data, 0401b008.d



#### MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: JW

Date: 4/3/13

Analytical Resources Inc.  
TPH Quantitation Report

Data file: /chem3/fid3b.i/20130401.b/0401b009.d  
 Method: /chem3/fid3b.i/20130401.b/ftpbfid3b.m  
 Instrument: fid3b.i  
 Operator: JW  
 Report Date: 04/03/2013  
 Macro: FID:3B012413

ARI ID: WI97LCSDW1  
 Client ID: WI97LCSDW1  
 Injection: 01-APR-2013 12:41  
 Dilution Factor: 1

FID:3B RESULTS

Compound	RT	Shift	Height	Area	Method	Range	Total Area	Conc
Toluene	---				WATPHG (Tol-C12)		3025385	112
C8	0.849	0.010	8135	17740	WATPHD (C12-C24)		14555011	1283.50
C10	2.265	0.005	94450	64844	WATPHM (C24-C38)		180394	20.41
C12	3.049	0.003	146239	145936	AK102 (C10-C25)		16752272	1214.55 M
C14	3.630	0.005	296425	210883	AK103 (C25-C36)		133484	18.24
C16	4.129	0.009	439837	500049	OR.DIES (C10-C28)		16839362	1094.74 M
C18	4.579	0.008	390973	400202				
C20	4.999	0.006	282166	272987				
C22	5.396	0.005	151451	141927				
C24	5.764	0.000	41345	35350				
C25	5.940	0.001	18583	16447				
C26	6.109	-0.006	7213	6605				
C28	6.430	-0.001	1708	1478	IT.DIES (C10-C24)		16720956	914.51
C32	6.979	-0.002	10085	6127				
C34	7.214	-0.003	417	417				
Filter Peak	---							
C36	7.422	-0.013	4856	5083	BUNKERC (C10-C38)		16901350	3445.88
o-terph	4.690	0.007	798977	515118	JET-A (C10-C18)		12634992	877.49
Triacon Surr	6.731	0.004	753872	585670				

Range Times: NW Diesel(3.096 - 5.813) NW Gas(0.612 - 3.096) NW M.Oil(5.813 - 7.691)  
 AK102(2.210 - 5.890) AK103(5.890 - 7.485) Jet A(2.210 - 4.621)

Surrogate	Area	Amount	%Rec
o-Terphenyl	515118	35.5	78.9
Triaccontane	585670	51.0	113.4

Analyte	RF	Curve Date
o-Terph Surr	14512.5	22-MAR-2013
Triacon Surr	11474.8	22-MAR-2013
Gas	27130.1	19-OCT-2012
Diesel	11340.1	22-MAR-2013
Motor Oil	8840.0	22-MAR-2013
AK102	13793.0	22-MAR-2013
AK103	7317.0	25-SEP-2012
JetA	14399.0	16-FEB-2012
OR Diesel	15382.0	
IT Diesel	18284.0	
Bunker C	4904.8	14-SEP-2012

*JW  
4/3/13*

Data File: /chem3/fid3b.i /20130401.b/0401b009.d

Date : 01-APR-2013 12:41

Client ID: WI97LCSDW1

Sample Info: WI97LCSDW1

Page 1

Instrument: fid3b.i

Operator: JH

Column diameter: 0.25

/chem3/fid3b.i /20130401.b/0401b009.d

Column phase: RTX-1

Y ( $\times 10^5$ )

9.2  
9.0  
8.8  
8.6  
8.4  
8.2  
8.0  
7.8  
7.6  
7.4  
7.2  
7.0  
6.8  
6.6  
6.4  
6.2  
6.0  
5.8  
5.6  
5.4  
5.2  
5.0  
4.8  
4.6  
4.4  
4.2  
4.0  
3.8  
3.6  
3.4  
3.2  
3.0  
2.8  
2.6  
2.4  
2.2  
2.0  
1.8  
1.6  
1.4  
1.2  
1.0  
0.8  
0.6  
0.4  
0.2

o-terph (4.690)

-C10 (2.265)  
-C12 (3.049)  
-C14 (3.630)  
-C16 (4.129)  
-C18 (4.579)

-C20 (4.999)

-C24 (5.764)

-C25 (5.940)

-C26 (6.109)

-C28 (6.430)

Triacon Surr (6.731)

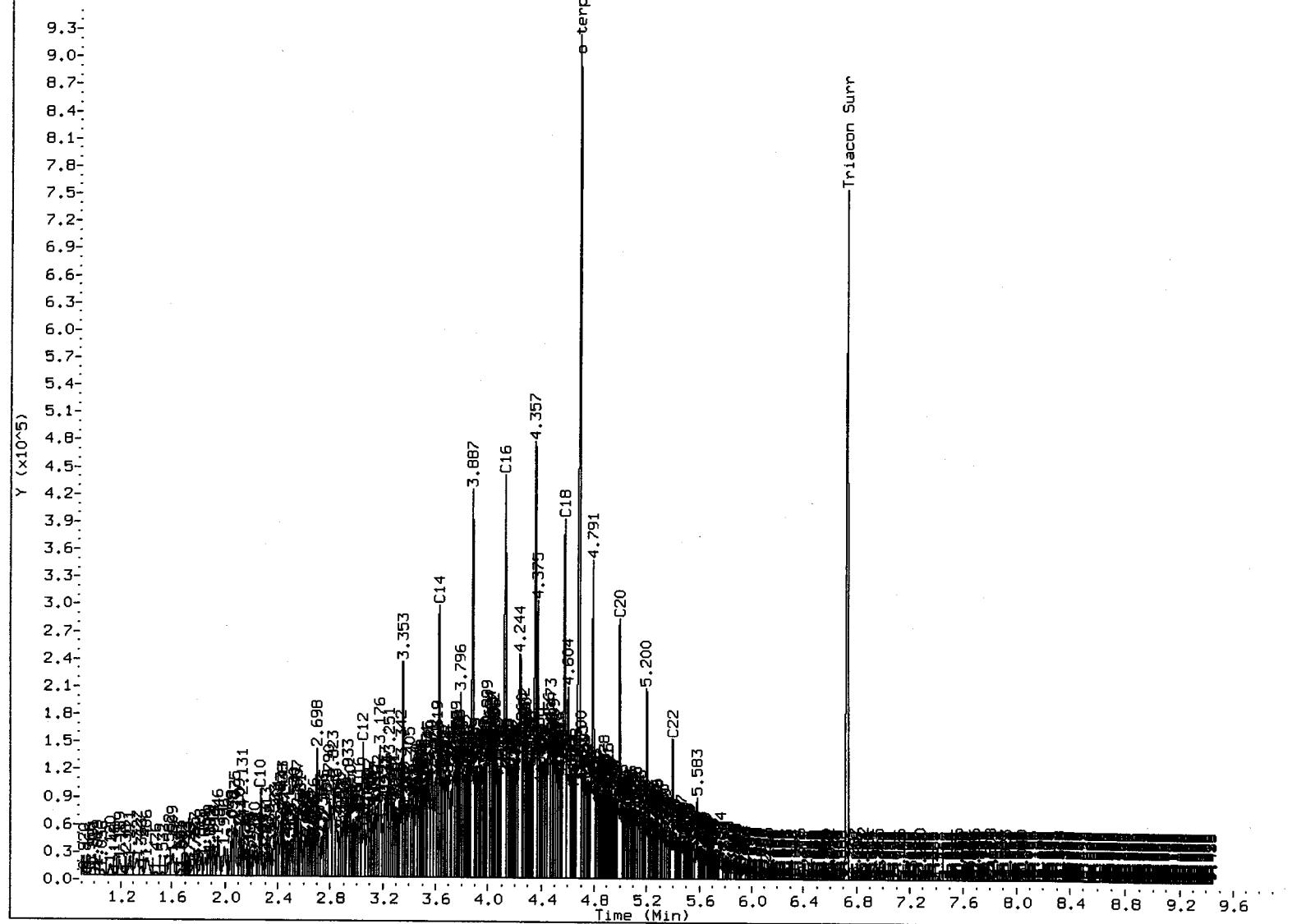
-C32 (6.979)  
-C34 (7.214)  
-C36 (7.422)  
-C38 (7.642)  
-C40 (7.825)

PW  
4/3/13

FID:3B-2C/RTX-1 WI97LCSDW1

FID:3B SIGNAL

HP6890 GC Data, 0401b009.d



#### MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: JW

Date: 4/3/13

**TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT**

Matrix: Water  
Date Received: 03/26/13

ARI Job: WJ08  
Project: Kimberly Clark Haz Waste Cage  
110207

ARI ID	Client ID	Samp Amt	Final Vol	Prep Date
13-6318-032913MB1	Method Blank	500 mL	1.00 mL	03/29/13
13-6318-032913LCS1	Lab Control	500 mL	1.00 mL	03/29/13
13-6318-032913LCSD1	Lab Control Dup	500 mL	1.00 mL	03/29/13
13-6318-WJ08E	W-1	500 mL	1.00 mL	03/29/13

**ORGANICS ANALYSIS DATA SHEET**

**TPHG by Method NWTPHG**

Matrix: Concrete

Data Release Authorized:

Reported: 04/02/13

QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage  
 Event: 110207

<b>ARI ID</b>	<b>Client ID</b>	<b>Analysis Date</b>	<b>Basis</b>	<b>Range</b>		<b>Result</b>
MB-040113 13-6314	Method Blank	04/01/13 PID1	Dry	Gasoline	< 5.0 U	
				HC ID	---	
				Trifluorotoluene	92.5%	
				Bromobenzene	90.8%	
WJ08A 13-6314	S-1	04/01/13 PID1	Dry	Gasoline	< 5.4 U	
				HC ID	---	
				Trifluorotoluene	92.9%	
				Bromobenzene	91.1%	
WJ08B 13-6315	S-2	04/01/13 PID1	Dry	Gasoline	< 5.3 U	
				HC ID	---	
				Trifluorotoluene	95.1%	
				Bromobenzene	92.2%	
WJ08C 13-6316	S-3	04/01/13 PID1	Dry	Gasoline	< 5.3 U	
				HC ID	---	
				Trifluorotoluene	96.6%	
				Bromobenzene	95.8%	
WJ08D 13-6317	S-4	04/01/13 PID1	Dry	Gasoline	< 5.4 U	
				HC ID	---	
				Trifluorotoluene	96.6%	
				Bromobenzene	94.5%	

Gasoline values reported in mg/kg (ppm)

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

GAS: Indicates the presence of gasoline or weathered gasoline.

GRO: Positive result that does not match an identifiable gasoline pattern.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

**TPHG SOIL SURROGATE RECOVERY SUMMARY**

ARI Job: WJ08  
Matrix: Concrete

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
Event: 110207

<b>Client ID</b>	<b>BFB</b>	<b>TFT</b>	<b>BBZ</b>	<b>TOT</b>	<b>OUT</b>
MB-040113	NA	92.5%	90.8%	0	
LCS-040113	NA	93.0%	88.0%	0	
LCSD-040113	NA	97.0%	91.2%	0	
S-1	NA	92.9%	91.1%	0	
S-2	NA	95.1%	92.2%	0	
S-3	NA	96.6%	95.8%	0	
S-4	NA	96.6%	94.5%	0	

**LCS/MB LIMITS      QC LIMITS**

(TFT) = Trifluorotoluene

(80-120)

(65-128)

(BBZ) = Bromobenzene

(80-120)

(52-149)

Log Number Range: 13-6314 to 13-6317

**ORGANICS ANALYSIS DATA SHEET**

**TPHG by Method NWTPHG**

Page 1 of 1

Lab Sample ID: LCS-040113

LIMS ID: 13-6314

Matrix: Concrete

Data Release Authorized: *BB*

Reported: 04/02/13

**Sample ID: LCS-040113**

**LAB CONTROL SAMPLE**

QC Report No: WJ08-Aspect Consulting LLC

Project: Kimberly Clark Haz Waste Cage

Event: 110207

Date Sampled: NA

Date Received: NA

Date Analyzed LCS: 04/01/13 11:03

Purge Volume: 5.0 mL

LCSD: 04/01/13 11:32

Instrument/Analyst LCS: PID1/JLW

Sample Amount LCS: 100 mg-dry-wt

LCSD: PID1/JLW

LCSD: 100 mg-dry-wt

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	48.4	50.0	96.8%	50.9	50.0	102%	5.0%

Reported in mg/kg (ppm)

RPD calculated using sample concentrations per SW846.

**TPHG Surrogate Recovery**

	LCS	LCSD
Trifluorotoluene	93.0%	97.0%
Bromobenzene	88.0%	91.2%

**ORGANICS ANALYSIS DATA SHEET**

**TPHG by Method NWTPHG**

Matrix: Water

Data Release Authorized: *[Signature]*  
Reported: 04/02/13

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
Event: 110207

<b>ARI ID</b>	<b>Client ID</b>	<b>Analysis Date</b>	<b>DL</b>	<b>Range</b>	<b>Result</b>
MB-040113 13-6318	Method Blank	04/01/13	1.0	Gasoline	< 0.25 U
				HC ID	---
		PID1	1.0	Trifluorotoluene	92.5%
				Bromobenzene	90.8%
WJ08E 13-6318	W-1	04/01/13	1.0	Gasoline	< 0.25 U
				HC ID	---
		PID1	1.0	Trifluorotoluene	92.6%
				Bromobenzene	89.7%

Gasoline values reported in mg/L (ppm)

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

GAS: Indicates the presence of gasoline or weathered gasoline.

GRO: Positive result that does not match an identifiable gasoline pattern.

**TPHG WATER SURROGATE RECOVERY SUMMARY**

ARI Job: WJ08  
Matrix: Water

QC Report No: WJ08-Aspect Consulting LLC  
Project: Kimberly Clark Haz Waste Cage  
Event: 110207

<b>Client ID</b>	<b>TFT</b>	<b>BBZ</b>	<b>TOT OUT</b>
MB-040113	92.5%	90.8%	0
LCS-040113	93.0%	88.0%	0
LCSD-040113	97.0%	91.2%	0
W-1	92.6%	89.7%	0

<b>LCS/MB LIMITS</b>	<b>QC LIMITS</b>
(TFT) = Trifluorotoluene	(80-120)
(BBZ) = Bromobenzene	(80-120)
	(80-120)

Log Number Range: 13-6318 to 13-6318

**ORGANICS ANALYSIS DATA SHEET**

**TPHG by Method NWTPHG**

Page 1 of 1

Lab Sample ID: LCS-040113

LIMS ID: 13-6318

Matrix: Water

Data Release Authorized: *[Signature]*

Reported: 04/02/13

**Sample ID: LCS-040113**

**LAB CONTROL SAMPLE**

QC Report No: WJ08-Aspect Consulting LLC

Project: Kimberly Clark Haz Waste Cage

Event: 110207

Date Sampled: NA

Date Received: NA

Date Analyzed LCS: 04/01/13 11:03

Purge Volume: 5.0 mL

LCSD: 04/01/13 11:32

Instrument/Analyst LCS: PID1/JLW

Dilution Factor LCS: 1.0

LCSD: PID1/JLW

LCSD: 1.0

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	0.97	1.00	97.0%	1.02	1.00	102%	5.0%

Reported in mg/L (ppm)

RPD calculated using sample concentrations per SW846.

**TPHG Surrogate Recovery**

	LCS	LCSD
Trifluorotoluene	93.0%	97.0%
Bromobenzene	88.0%	91.2%

**INORGANICS ANALYSIS DATA SHEET**
**TOTAL METALS**

Page 1 of 1

Lab Sample ID: WJ08A

LIMS ID: 13-6314

Matrix: Concrete

 Data Release Authorized: *[Signature]*

Reported: 04/05/13

Percent Total Solids: 95.5%

**Sample ID: S-1  
SAMPLE**

 QC Report No: WJ08-Aspect Consulting LLC  
 Project: Kimberly Clark Haz Waste Cage

110207

Date Sampled: 03/26/13

Date Received: 03/26/13

<b>Prep Meth</b>	<b>Prep Date</b>	<b>Analysis Method</b>	<b>Analysis Date</b>	<b>CAS Number</b>	<b>Analyte</b>	<b>LOQ</b>	<b>mg/kg-dry</b>	<b>Q</b>
3050B	04/01/13	6010C	04/02/13	7440-38-2	Arsenic	10	10	U
3050B	04/01/13	6010C	04/02/13	<b>7440-39-3</b>	Barium	0.8	<b>79.5</b>	
3050B	04/01/13	6010C	04/02/13	<b>7440-43-9</b>	Cadmium	0.5	<b>0.7</b>	
3050B	04/01/13	6010C	04/02/13	<b>7440-47-3</b>	Chromium	1	<b>31</b>	
3050B	04/01/13	6010C	04/02/13	7439-92-1	Lead	5	5	U
CLP	04/01/13	7471A	04/05/13	7439-97-6	Mercury	0.02	0.02	U
3050B	04/01/13	6010C	04/02/13	7782-49-2	Selenium	10	10	U
3050B	04/01/13	6010C	04/02/13	7440-22-4	Silver	0.8	0.8	U

U-Analyte undetected at given LOQ

LOQ-Limit of Quantitation

**INORGANICS ANALYSIS DATA SHEET**
**TOTAL METALS**

Page 1 of 1

Lab Sample ID: WJ08B

LIMS ID: 13-6315

Matrix: Concrete

 Data Release Authorized: *[Signature]*

Reported: 04/05/13

Percent Total Solids: 95.7%

**Sample ID: S-2  
SAMPLE**

QC Report No: WJ08-Aspect Consulting LLC

Project: Kimberly Clark Haz Waste Cage

110207

Date Sampled: 03/26/13

Date Received: 03/26/13

<b>Prep Meth</b>	<b>Prep Date</b>	<b>Analysis Method</b>	<b>Analysis Date</b>	<b>CAS Number</b>	<b>Analyte</b>	<b>LOQ</b>	<b>mg/kg-dry</b>	<b>Q</b>
3050B	04/01/13	6010C	04/02/13	7440-38-2	Arsenic	10	10	U
3050B	04/01/13	6010C	04/02/13	<b>7440-39-3</b>	Barium	0.7	<b>66.0</b>	
3050B	04/01/13	6010C	04/02/13	7440-43-9	Cadmium	0.5	0.5	U
3050B	04/01/13	6010C	04/02/13	<b>7440-47-3</b>	Chromium	1	<b>33</b>	
3050B	04/01/13	6010C	04/02/13	7439-92-1	Lead	5	5	U
CLP	04/01/13	7471A	04/05/13	7439-97-6	Mercury	0.02	0.02	U
3050B	04/01/13	6010C	04/02/13	7782-49-2	Selenium	10	10	U
3050B	04/01/13	6010C	04/02/13	7440-22-4	Silver	0.7	0.7	U

 U-Analyte undetected at given LOQ  
 LOQ-Limit of Quantitation

**INORGANICS ANALYSIS DATA SHEET**

**TOTAL METALS**

Page 1 of 1

Lab Sample ID: WJ08C

LIMS ID: 13-6316

Matrix: Concrete

Data Release Authorized:

Reported: 04/05/13

**Sample ID: S-3  
SAMPLE**

QC Report No: WJ08-Aspect Consulting LLC

Project: Kimberly Clark Haz Waste Cage

110207

Date Sampled: 03/26/13

Date Received: 03/26/13

Percent Total Solids: 96.3%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
3050B	04/01/13	6010C	04/02/13	7440-38-2	Arsenic	10	10	U
3050B	04/01/13	6010C	04/02/13	<b>7440-39-3</b>	Barium	0.8	<b>73.5</b>	
3050B	04/01/13	6010C	04/02/13	<b>7440-43-9</b>	Cadmium	0.5	<b>0.5</b>	
3050B	04/01/13	6010C	04/02/13	<b>7440-47-3</b>	Chromium	1	<b>32</b>	
3050B	04/01/13	6010C	04/02/13	7439-92-1	Lead	5	5	U
CLP	04/01/13	7471A	04/05/13	7439-97-6	Mercury	0.02	0.02	U
3050B	04/01/13	6010C	04/02/13	7782-49-2	Selenium	10	10	U
3050B	04/01/13	6010C	04/02/13	7440-22-4	Silver	0.8	0.8	U

U-Analyte undetected at given LOQ

LOQ-Limit of Quantitation

**INORGANICS ANALYSIS DATA SHEET**
**TOTAL METALS**

Page 1 of 1

Lab Sample ID: WJ08D

LIMS ID: 13-6317

Matrix: Concrete

Data Release Authorized:

Reported: 04/05/13

**Sample ID: S-4  
SAMPLE**

QC Report No: WJ08-Aspect Consulting LLC

Project: Kimberly Clark Haz Waste Cage

110207

Date Sampled: 03/26/13

Date Received: 03/26/13

Percent Total Solids: 95.4%

<b>Prep Meth</b>	<b>Prep Date</b>	<b>Analysis Method</b>	<b>Analysis Date</b>	<b>CAS Number</b>	<b>Analyte</b>	<b>LOQ</b>	<b>mg/kg-dry</b>	<b>Q</b>
3050B	04/01/13	6010C	04/02/13	7440-38-2	Arsenic	10	10	U
3050B	04/01/13	6010C	04/02/13	<b>7440-39-3</b>	Barium	0.8	<b>57.5</b>	
3050B	04/01/13	6010C	04/02/13	<b>7440-43-9</b>	Cadmium	0.5	<b>1.2</b>	
3050B	04/01/13	6010C	04/02/13	<b>7440-47-3</b>	Chromium	1	<b>35</b>	
3050B	04/01/13	6010C	04/02/13	7439-92-1	Lead	5	5	U
CLP	04/01/13	7471A	04/05/13	7439-97-6	Mercury	0.02	0.02	U
3050B	04/01/13	6010C	04/02/13	7782-49-2	Selenium	10	10	U
3050B	04/01/13	6010C	04/02/13	7440-22-4	Silver	0.8	0.8	U

U-Analyte undetected at given LOQ

LOQ-Limit of Quantitation

**INORGANICS ANALYSIS DATA SHEET**
**TOTAL METALS**

Page 1 of 1

Lab Sample ID: WJ08A

LIMS ID: 13-6314

Matrix: Concrete

 Data Release Authorized: *(Signature)*

Reported: 04/05/13

**Sample ID: S-1**
**MATRIX SPIKE**

QC Report No: WJ08-Aspect Consulting LLC

Project: Kimberly Clark Haz Waste Cage

110207

Date Sampled: 03/26/13

Date Received: 03/26/13

**MATRIX SPIKE QUALITY CONTROL REPORT**

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	6010C	10 U	210	202	104%	
Barium	6010C	79.5	284	202	101%	
Cadmium	6010C	0.7	51.3	50.4	100%	
Chromium	6010C	31	80	50.4	97.2%	
Lead	6010C	5 U	200	202	99.0%	
Mercury	7471A	0.02 U	0.22	0.209	105%	
Selenium	6010C	10 U	190	202	94.1%	
Silver	6010C	0.8 U	51.8	50.4	103%	

Reported in mg/kg-dry

N-Control Limit Not Met

H-% Recovery Not Applicable, Sample Concentration Too High

NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

**INORGANICS ANALYSIS DATA SHEET**

**TOTAL METALS**

Page 1 of 1

Lab Sample ID: WJ08A

LIMS ID: 13-6314

Matrix: Concrete

Data Release Authorized:

Reported: 04/05/13

Sample ID: S-1  
**DUPLICATE**

QC Report No: WJ08-Aspect Consulting LLC

Project: Kimberly Clark Haz Waste Cage

110207

Date Sampled: 03/26/13

Date Received: 03/26/13

**MATRIX DUPLICATE QUALITY CONTROL REPORT**

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	6010C	10 U	10 U	0.0%	+/- 10	L
Barium	6010C	79.5	66.4	18.0%	+/- 20%	
Cadmium	6010C	0.7	0.5	33.3%	+/- 0.5	L
Chromium	6010C	31	26	17.5%	+/- 20%	
Lead	6010C	5 U	5 U	0.0%	+/- 5	L
Mercury	7471A	0.02 U	0.02 U	0.0%	+/- 0.02	L
Selenium	6010C	10 U	10 U	0.0%	+/- 10	L
Silver	6010C	0.8 U	0.8 U	0.0%	+/- 0.8	L

Reported in mg/kg-dry

--Control Limit Not Met

L-RPD Invalid, Limit = Detection Limit

**INORGANICS ANALYSIS DATA SHEET**
**TOTAL METALS**

Page 1 of 1

Lab Sample ID: WJ08LCS

LIMS ID: 13-6317

Matrix: Concrete

 Data Release Authorized: *(Signature)*

Reported: 04/05/13

**Sample ID: LAB CONTROL**

QC Report No: WJ08-Aspect Consulting LLC

Project: Kimberly Clark Haz Waste Cage

110207

Date Sampled: NA

Date Received: NA

**BLANK SPIKE QUALITY CONTROL REPORT**

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	6010C	209	200	104%	
Barium	6010C	210	200	105%	
Cadmium	6010C	51.3	50.0	103%	
Chromium	6010C	51.9	50.0	104%	
Lead	6010C	206	200	103%	
Mercury	7471A	0.50	0.50	100%	
Selenium	6010C	208	200	104%	
Silver	6010C	53.6	50.0	107%	

Reported in mg/kg-dry

N-Control limit not met

NA-Not Applicable, Analyte Not Spiked

Control Limits: 80-120%

**INORGANICS ANALYSIS DATA SHEET**

**TOTAL METALS**

Page 1 of 1

Lab Sample ID: WJ08MB

LIMS ID: 13-6317

Matrix: Concrete

Data Release Authorized:

Reported: 04/05/13

**Sample ID: METHOD BLANK**

QC Report No: WJ08-Aspect Consulting LLC

Project: Kimberly Clark Haz Waste Cage

110207

Date Sampled: NA

Date Received: NA

Percent Total Solids: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
3050B	04/01/13	6010C	04/02/13	7440-38-2	Arsenic	5	5	U
3050B	04/01/13	6010C	04/02/13	7440-39-3	Barium	0.3	0.3	U
3050B	04/01/13	6010C	04/02/13	7440-43-9	Cadmium	0.2	0.2	U
3050B	04/01/13	6010C	04/02/13	7440-47-3	Chromium	0.5	0.5	U
3050B	04/01/13	6010C	04/02/13	7439-92-1	Lead	2	2	U
CLP	04/01/13	7471A	04/05/13	7439-97-6	Mercury	0.02	0.02	U
3050B	04/01/13	6010C	04/02/13	7782-49-2	Selenium	5	5	U
3050B	04/01/13	6010C	04/02/13	7440-22-4	Silver	0.3	0.3	U

U-Analyte undetected at given LOQ

LOQ-Limit of Quantitation

**INORGANICS ANALYSIS DATA SHEET**
**TOTAL METALS**

Page 1 of 1

Lab Sample ID: WJ08E

LIMS ID: 13-6318

Matrix: Water

Data Release Authorized: ✓

Reported: 04/05/13

**Sample ID: W-1  
SAMPLE**

QC Report No: WJ08-Aspect Consulting LLC

Project: Kimberly Clark Haz Waste Cage

110207

Date Sampled: 03/26/13

Date Received: 03/26/13

<b>Prep Meth</b>	<b>Prep Date</b>	<b>Analysis Method</b>	<b>Analysis Date</b>	<b>CAS Number</b>	<b>Analyte</b>	<b>RL</b>	<b>mg/L</b>	<b>Q</b>
3010A	03/27/13	6010C	04/01/13	7440-38-2	Arsenic	0.05	0.05	U
3010A	03/27/13	6010C	04/01/13	<b>7440-39-3</b>	Barium	0.003	<b>0.011</b>	
3010A	03/27/13	6010C	04/01/13	7440-43-9	Cadmium	0.002	0.002	U
3010A	03/27/13	6010C	04/01/13	7440-47-3	Chromium	0.005	0.005	U
3010A	03/27/13	6010C	04/01/13	<b>7439-92-1</b>	Lead	0.02	<b>1.65</b>	
7470A	03/27/13	7470A	03/29/13	7439-97-6	Mercury	0.0001	0.0001	U
3010A	03/27/13	6010C	04/01/13	7782-49-2	Selenium	0.05	0.05	U
3010A	03/27/13	6010C	04/01/13	7440-22-4	Silver	0.003	0.003	U

U-Analyte undetected at given RL

RL=Reporting Limit

**INORGANICS ANALYSIS DATA SHEET**
**TOTAL METALS**

Page 1 of 1

Lab Sample ID: WJ08E

LIMS ID: 13-6318

Matrix: Water

 Data Release Authorized: *[Signature]*

Reported: 04/05/13

**Sample ID: W-1**
**MATRIX SPIKE**

QC Report No: WJ08-Aspect Consulting LLC

Project: Kimberly Clark Haz Waste Cage

110207

Date Sampled: 03/26/13

Date Received: 03/26/13

**MATRIX SPIKE QUALITY CONTROL REPORT**

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	6010C	0.05 U	2.25	2.00	112%	
Barium	6010C	0.011	2.18	2.00	108%	
Cadmium	6010C	0.002 U	0.540	0.500	108%	
Chromium	6010C	0.005 U	0.548	0.500	110%	
Lead	6010C	1.65	3.74	2.00	104%	
Mercury	7470A	0.0001 U	0.0011	0.0010	110%	
Selenium	6010C	0.05 U	2.17	2.00	108%	
Silver	6010C	0.003 U	0.558	0.500	112%	

Reported in mg/L

N-Control Limit Not Met

H-% Recovery Not Applicable, Sample Concentration Too High

NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

**INORGANICS ANALYSIS DATA SHEET**

**TOTAL METALS**

Page 1 of 1

Lab Sample ID: WJ08E

LIMS ID: 13-6318

Matrix: Water

Data Release Authorized:

Reported: 04/05/13

**Sample ID: W-1  
DUPLICATE**

QC Report No: WJ08-Aspect Consulting LLC

Project: Kimberly Clark Haz Waste Cage

110207

Date Sampled: 03/26/13

Date Received: 03/26/13

**MATRIX DUPLICATE QUALITY CONTROL REPORT**

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	6010C	0.05 U	0.05 U	0.0%	+/- 0.05	L
Barium	6010C	0.011	0.011	0.0%	+/- 0.003	L
Cadmium	6010C	0.002 U	0.002 U	0.0%	+/- 0.002	L
Chromium	6010C	0.005 U	0.005 U	0.0%	+/- 0.005	L
Lead	6010C	1.65	1.66	0.6%	+/- 20%	
Mercury	7470A	0.0001 U	0.0001 U	0.0%	+/- 0.0001	L
Selenium	6010C	0.05 U	0.05 U	0.0%	+/- 0.05	L
Silver	6010C	0.003 U	0.003 U	0.0%	+/- 0.003	L

Reported in mg/L

\*-Control Limit Not Met

L-RPD Invalid, Limit = Detection Limit

**INORGANICS ANALYSIS DATA SHEET**

**TOTAL METALS**

Page 1 of 1

Lab Sample ID: WJ08LCS

LIMS ID: 13-6318

Matrix: Water

Data Release Authorized:

Reported: 04/05/13

**Sample ID: LAB CONTROL**

QC Report No: WJ08-Aspect Consulting LLC

Project: Kimberly Clark Haz Waste Cage

110207

Date Sampled: NA

Date Received: NA

**BLANK SPIKE QUALITY CONTROL REPORT**

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	6010C	2.21	2.00	110%	
Barium	6010C	2.18	2.00	109%	
Cadmium	6010C	0.544	0.500	109%	
Chromium	6010C	0.547	0.500	109%	
Lead	6010C	2.12	2.00	106%	
Mercury	7470A	0.0022	0.0020	110%	
Selenium	6010C	2.20	2.00	110%	
Silver	6010C	0.558	0.500	112%	

Reported in mg/L

N-Control limit not met

Control Limits: 80-120%

**INORGANICS ANALYSIS DATA SHEET**

**TOTAL METALS**

Page 1 of 1

Lab Sample ID: WJ08MB

LIMS ID: 13-6318

Matrix: Water

Data Release Authorized:

Reported: 04/05/13

**Sample ID: METHOD BLANK**

QC Report No: WJ08-Aspect Consulting LLC

Project: Kimberly Clark Haz Waste Cage

110207

Date Sampled: NA

Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L	Q
3010A	03/27/13	6010C	04/01/13	7440-38-2	Arsenic	0.05	0.05	U
3010A	03/27/13	6010C	04/01/13	7440-39-3	Barium	0.003	0.003	U
3010A	03/27/13	6010C	04/01/13	7440-43-9	Cadmium	0.002	0.002	U
3010A	03/27/13	6010C	04/01/13	7440-47-3	Chromium	0.005	0.005	U
3010A	03/27/13	6010C	04/01/13	7439-92-1	Lead	0.02	0.02	U
7470A	03/27/13	7470A	03/29/13	7439-97-6	Mercury	0.0001	0.0001	U
3010A	03/27/13	6010C	04/01/13	7782-49-2	Selenium	0.05	0.05	U
3010A	03/27/13	6010C	04/01/13	7440-22-4	Silver	0.003	0.003	U

U-Analyte undetected at given RL

RL=Reporting Limit

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Yelena Aravkina, M.S.  
Michael Erdahl, B.S.  
Kurt Johnson, B.S.  
Eric Young, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
(206) 285-8282  
[fbi@isomedia.com](mailto:fbi@isomedia.com)  
[www.friedmanandbruya.com](http://www.friedmanandbruya.com)

June 28, 2013

Steve Germiat, Project Manager  
Aspect Consulting, LLC  
401 2<sup>nd</sup> Ave S, Suite 201  
Seattle, WA 98104

Dear Mr. Germiat:

Included are the results from the testing of material submitted on June 13, 2013 from the Kimberly Clark, 110207-4-4, F&BI 306203 project. There are 50 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures

c: [data@aspectconsulting.com](mailto:data@aspectconsulting.com), Parker Wittman, Bob Hanford  
ASP0628R.DOC

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 13, 2013 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Kimberly Clark, 110207-4-4, F&BI 306203 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Aspect Consulting, LLC</u>
306203-01	HWC-1S
306203-02	HWC-1D
306203-03	HWC-2S
306203-04	HWC-2D
306203-05	HWC-3S
306203-06	HWC-3D
306203-07	HWC-4S
306203-08	HWC-4D

The NWTPH-Gx and 8260C results samples were not received in 5035 sampling containers. The data were flagged accordingly.

The 8260C calibration standard failed the acceptance criteria for hexachlorobutadiene. The data were flagged accordingly.

The 8260C matrix spike and matrix spike duplicate failed the relative percent difference for several compounds. The analytes were not detected therefore the data were acceptable.

Methylene chloride was detected in the 8260C analysis of sample HWC-4D. The data were flagged as due to laboratory contamination.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/28/13

Date Received: 06/13/13

Project: Kimberly Clark, 110207-4-4, F&BI 306203

Date Extracted: 06/14/13

Date Analyzed: 06/14/13

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
USING METHOD NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate (% Recovery) (Limit 50-150)
HWC-1S pc 306203-01	<2	105
HWC-1D pc 306203-02	<2	99
HWC-2S pc 306203-03	<2	100
HWC-2D pc 306203-04	<2	101
HWC-3S pc 306203-05	<2	93
HWC-3D pc 306203-06	<2	102
HWC-4S pc 306203-07	<2	104
HWC-4D pc 306203-08	<2	99
Method Blank 03-1155 MB	<2	102

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/28/13

Date Received: 06/13/13

Project: Kimberly Clark, 110207-4-4, F&BI 306203

Date Extracted: 06/14/13

Date Analyzed: 06/14/13

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL AND MOTOR OIL  
USING METHOD NWTPH-Dx**  
**Sample Extracts Passed Through a  
Silica Gel Column Prior to Analysis**  
Results Reported on a Dry Weight Basis  
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 48-168)
HWC-1S 306203-01	<50	<250	99
HWC-1D 306203-02	<50	<250	96
HWC-2S 306203-03	<50	<250	93
HWC-2D 306203-04	<50	<250	93
HWC-3S 306203-05	<50	<250	92
HWC-3D 306203-06	<50	<250	94
HWC-4S 306203-07	<50	<250	96
HWC-4D 306203-08	<50	<250	97
Method Blank 03-1169 MB	<50	<250	99

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	HWC-1S	Client:	Aspect Consulting, LLC
Date Received:	06/13/13	Project:	Kimberly Clark, 110207-4-4, F&BI 306203
Date Extracted:	06/14/13	Lab ID:	306203-01
Date Analyzed:	06/17/13	Data File:	306203-01.036
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	84	60	125
Indium	88	60	125
Holmium	98	60	125

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Chromium	5.67
Arsenic	<1
Selenium	<1
Silver	<1
Cadmium	<1
Barium	6.41
Lead	1.49

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	HWC-1D	Client:	Aspect Consulting, LLC
Date Received:	06/13/13	Project:	Kimberly Clark, 110207-4-4, F&BI 306203
Date Extracted:	06/14/13	Lab ID:	306203-02
Date Analyzed:	06/17/13	Data File:	306203-02.037
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	92	60	125
Indium	91	60	125
Holmium	102	60	125

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Chromium	11.2
Arsenic	1.24
Selenium	<1
Silver	<1
Cadmium	<1
Barium	18.4
Lead	2.90

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	HWC-2S	Client:	Aspect Consulting, LLC
Date Received:	06/13/13	Project:	Kimberly Clark, 110207-4-4, F&BI 306203
Date Extracted:	06/14/13	Lab ID:	306203-03
Date Analyzed:	06/17/13	Data File:	306203-03.038
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	90	60	125
Indium	92	60	125
Holmium	101	60	125

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Chromium	10.8
Arsenic	1.32
Selenium	<1
Silver	<1
Cadmium	<1
Barium	18.7
Lead	2.56

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	HWC-2D	Client:	Aspect Consulting, LLC
Date Received:	06/13/13	Project:	Kimberly Clark, 110207-4-4, F&BI 306203
Date Extracted:	06/14/13	Lab ID:	306203-04
Date Analyzed:	06/17/13	Data File:	306203-04.040
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	102	60	125
Indium	89	60	125
Holmium	100	60	125

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Chromium	28.8
Arsenic	10.3
Selenium	<1
Silver	<1
Cadmium	<1
Barium	68.6
Lead	85.6

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	HWC-3S	Client:	Aspect Consulting, LLC
Date Received:	06/13/13	Project:	Kimberly Clark, 110207-4-4, F&BI 306203
Date Extracted:	06/14/13	Lab ID:	306203-05
Date Analyzed:	06/17/13	Data File:	306203-05.041
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	90	60	125
Indium	90	60	125
Holmium	100	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	11.5
Arsenic	1.55
Selenium	<1
Silver	<1
Cadmium	<1
Barium	18.2
Lead	3.96

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	HWC-3D	Client:	Aspect Consulting, LLC
Date Received:	06/13/13	Project:	Kimberly Clark, 110207-4-4, F&BI 306203
Date Extracted:	06/14/13	Lab ID:	306203-06
Date Analyzed:	06/17/13	Data File:	306203-06.042
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	94	60	125
Indium	88	60	125
Holmium	98	60	125

Analyte:	Concentration mg/kg (ppm)
Chromium	23.7
Arsenic	7.31
Selenium	<1
Silver	<1
Cadmium	<1
Barium	35.1
Lead	24.7

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	HWC-4S	Client:	Aspect Consulting, LLC
Date Received:	06/13/13	Project:	Kimberly Clark, 110207-4-4, F&BI 306203
Date Extracted:	06/14/13	Lab ID:	306203-07
Date Analyzed:	06/17/13	Data File:	306203-07.043
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	88	60	125
Indium	87	60	125
Holmium	99	60	125

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Chromium	11.6
Arsenic	<1
Selenium	<1
Silver	<1
Cadmium	<1
Barium	16.7
Lead	1.83

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	HWC-4D	Client:	Aspect Consulting, LLC
Date Received:	06/13/13	Project:	Kimberly Clark, 110207-4-4, F&BI 306203
Date Extracted:	06/14/13	Lab ID:	306203-08
Date Analyzed:	06/17/13	Data File:	306203-08.044
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	96	60	125
Indium	91	60	125
Holmium	100	60	125

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Chromium	47.1
Arsenic	11.9
Selenium	<1
Silver	<1
Cadmium	<1
Barium	57.7
Lead	132

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	NA	Project:	Kimberly Clark, 110207-4-4, F&BI 306203
Date Extracted:	06/14/13	Lab ID:	I3-346 mb
Date Analyzed:	06/17/13	Data File:	I3-346 mb.045
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	77	60	125
Indium	87	60	125
Holmium	95	60	125

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Chromium	<1
Arsenic	<1
Selenium	<1
Silver	<1
Cadmium	<1
Barium	<1
Lead	<1

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

Date of Report: 06/28/13

Date Received: 06/13/13

Project: Kimberly Clark, 110207-4-4, F&BI 306203

Date Extracted: 06/14/13

Date Analyzed: 06/17/13

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL MERCURY  
USING EPA METHOD 1631E**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Total Mercury</u>
HWC-1S 306203-01	<0.1
HWC-1D 306203-02	<0.1
HWC-2S 306203-03	<0.1
HWC-2D 306203-04	<0.1
HWC-3S 306203-05	<0.1
HWC-3D 306203-06	<0.1
HWC-4S 306203-07	<0.1
HWC-4D 306203-08	0.28
Method Blank	<0.1

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Volatile Compounds By EPA Method 8260C**

Client Sample ID: HWC-1S pc  
 Date Received: 06/13/13  
 Date Extracted: 06/13/13  
 Date Analyzed: 06/13/13  
 Matrix: Soil  
 Units: mg/kg (ppm)

Client: Aspect Consulting, LLC  
 Project: Kimberly Clark, 110207-4-4, F&BI 306203  
 Lab ID: 306203-01  
 Data File: 061320.D  
 Instrument: GCMS4  
 Operator: JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	59	116
Toluene-d8	101	51	121
4-Bromofluorobenzene	103	32	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25 ca
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Volatile Compounds By EPA Method 8260C**

Client Sample ID: HWC-1D pc  
 Date Received: 06/13/13  
 Date Extracted: 06/13/13  
 Date Analyzed: 06/13/13  
 Matrix: Soil  
 Units: mg/kg (ppm)

Client: Aspect Consulting, LLC  
 Project: Kimberly Clark, 110207-4-4, F&BI 306203  
 Lab ID: 306203-02  
 Data File: 061321.D  
 Instrument: GCMS4  
 Operator: JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	59	116
Toluene-d8	102	51	121
4-Bromofluorobenzene	103	32	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25 ca
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: HWC-2S pc  
 Date Received: 06/13/13  
 Date Extracted: 06/13/13  
 Date Analyzed: 06/13/13  
 Matrix: Soil  
 Units: mg/kg (ppm)

Client: Aspect Consulting, LLC  
 Project: Kimberly Clark, 110207-4-4, F&BI 306203  
 Lab ID: 306203-03  
 Data File: 061322.D  
 Instrument: GCMS4  
 Operator: JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	59	116
Toluene-d8	100	51	121
4-Bromofluorobenzene	101	32	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25 ca
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Volatile Compounds By EPA Method 8260C**

Client Sample ID: HWC-2D pc  
 Date Received: 06/13/13  
 Date Extracted: 06/13/13  
 Date Analyzed: 06/13/13  
 Matrix: Soil  
 Units: mg/kg (ppm)

Client: Aspect Consulting, LLC  
 Project: Kimberly Clark, 110207-4-4, F&BI 306203  
 Lab ID: 306203-04  
 Data File: 061323.D  
 Instrument: GCMS4  
 Operator: JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	59	116
Toluene-d8	102	51	121
4-Bromofluorobenzene	100	32	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25 ca
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Volatile Compounds By EPA Method 8260C**

Client Sample ID: HWC-3S pc  
 Date Received: 06/13/13  
 Date Extracted: 06/13/13  
 Date Analyzed: 06/13/13  
 Matrix: Soil  
 Units: mg/kg (ppm)

Client: Aspect Consulting, LLC  
 Project: Kimberly Clark, 110207-4-4, F&BI 306203  
 Lab ID: 306203-05  
 Data File: 061324.D  
 Instrument: GCMS4  
 Operator: JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	59	116
Toluene-d8	101	51	121
4-Bromofluorobenzene	100	32	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25 ca
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Volatile Compounds By EPA Method 8260C**

Client Sample ID: HWC-3D pc  
 Date Received: 06/13/13  
 Date Extracted: 06/13/13  
 Date Analyzed: 06/13/13  
 Matrix: Soil  
 Units: mg/kg (ppm)

Client: Aspect Consulting, LLC  
 Project: Kimberly Clark, 110207-4-4, F&BI 306203  
 Lab ID: 306203-06  
 Data File: 061325.D  
 Instrument: GCMS4  
 Operator: JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	59	116
Toluene-d8	102	51	121
4-Bromofluorobenzene	100	32	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25 ca
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Volatile Compounds By EPA Method 8260C**

Client Sample ID: HWC-4S pc  
 Date Received: 06/13/13  
 Date Extracted: 06/13/13  
 Date Analyzed: 06/13/13  
 Matrix: Soil  
 Units: mg/kg (ppm)

Client: Aspect Consulting, LLC  
 Project: Kimberly Clark, 110207-4-4, F&BI 306203  
 Lab ID: 306203-07  
 Data File: 061326.D  
 Instrument: GCMS4  
 Operator: JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	59	116
Toluene-d8	101	51	121
4-Bromofluorobenzene	101	32	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25 ca
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Volatile Compounds By EPA Method 8260C**

Client Sample ID: HWC-4D pc  
 Date Received: 06/13/13  
 Date Extracted: 06/13/13  
 Date Analyzed: 06/13/13  
 Matrix: Soil  
 Units: mg/kg (ppm)

Client: Aspect Consulting, LLC  
 Project: Kimberly Clark, 110207-4-4, F&BI 306203  
 Lab ID: 306203-08  
 Data File: 061327.D  
 Instrument: GCMS4  
 Operator: JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	59	116
Toluene-d8	101	51	121
4-Bromofluorobenzene	102	32	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	0.56 lc	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25 ca
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Volatile Compounds By EPA Method 8260C**

Client Sample ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	NA	Project:	Kimberly Clark, 110207-4-4, F&BI 306203
Date Extracted:	06/13/13	Lab ID:	03-1108 mb
Date Analyzed:	06/13/13	Data File:	061308.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	59	116
Toluene-d8	101	51	121
4-Bromofluorobenzene	103	32	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.03	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.5
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.25
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.25 ca
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.25 ca

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID: HWC-1S  
 Date Received: 06/13/13  
 Date Extracted: 06/13/13  
 Date Analyzed: 06/14/13  
 Matrix: Soil  
 Units: mg/kg (ppm)

Client: Aspect Consulting, LLC  
 Project: Kimberly Clark, 110207-4-4, F&BI 306203  
 Lab ID: 306203-01 1/5  
 Data File: 061415.D  
 Instrument: GCMS8  
 Operator: ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	83	56	115
Phenol-d6	88	54	113
Nitrobenzene-d5	95	31	164
2-Fluorobiphenyl	94	47	133
2,4,6-Tribromophenol	90	35	141
Terphenyl-d14	103	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<0.3	3-Nitroaniline	<3
Bis(2-chloroethyl) ether	<0.03	Acenaphthene	<0.03
2-Chlorophenol	<0.3	2,4-Dinitrophenol	<0.9
1,3-Dichlorobenzene	<0.03	Dibenzofuran	<0.03
1,4-Dichlorobenzene	<0.03	2,4-Dinitrotoluene	<0.03
1,2-Dichlorobenzene	<0.03	4-Nitrophenol	<0.9
Benzyl alcohol	<0.3	Diethyl phthalate	<0.03
Bis(2-chloroisopropyl) ether	<0.03	Fluorene	<0.03
2-Methylphenol	<0.3	4-Chlorophenyl phenyl ether	<0.03
Hexachloroethane	<0.03	N-Nitrosodiphenylamine	<0.03
N-Nitroso-di-n-propylamine	<0.03	4-Nitroaniline	<3
3-Methylphenol + 4-Methylphenol	<0.6	4,6-Dinitro-2-methylphenol	<0.9
Nitrobenzene	<0.03	4-Bromophenyl phenyl ether	<0.03
Isophorone	<0.03	Hexachlorobenzene	<0.03
2-Nitrophenol	<0.3	Pentachlorophenol	<0.3
2,4-Dimethylphenol	<0.3	Phenanthrene	<0.03
Benzoic acid	<1.5	Anthracene	<0.03
Bis(2-chloroethoxy)methane	<0.03	Carbazole	<0.03
2,4-Dichlorophenol	<0.3	Di-n-butyl phthalate	<0.05
1,2,4-Trichlorobenzene	<0.03	Fluoranthene	<0.03
Naphthalene	<0.03	Pyrene	<0.03
Hexachlorobutadiene	<0.03	Benzyl butyl phthalate	<0.03
4-Chloroaniline	<3	Benz(a)anthracene	<0.03
4-Chloro-3-methylphenol	<0.3	Chrysene	<0.03
2-Methylnaphthalene	<0.03	Bis(2-ethylhexyl) phthalate	<0.48
Hexachlorocyclopentadiene	<0.09	Di-n-octyl phthalate	<0.03
2,4,6-Trichlorophenol	<0.3	Benzo(a)pyrene	<0.03
2,4,5-Trichlorophenol	<0.3	Benzo(b)fluoranthene	<0.03
2-Chloronaphthalene	<0.03	Benzo(k)fluoranthene	<0.03
2-Nitroaniline	<0.03	Indeno(1,2,3-cd)pyrene	<0.03
Dimethyl phthalate	<0.03	Dibenz(a,h)anthracene	<0.03
Acenaphthylene	<0.03	Benzo(g,h,i)perylene	<0.03
2,6-Dinitrotoluene	<0.03		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID: HWC-1D  
 Date Received: 06/13/13  
 Date Extracted: 06/13/13  
 Date Analyzed: 06/17/13  
 Matrix: Soil  
 Units: mg/kg (ppm)

Client: Aspect Consulting, LLC  
 Project: Kimberly Clark, 110207-4-4, F&BI 306203  
 Lab ID: 306203-02 1/5  
 Data File: 061704.D  
 Instrument: GCMS8  
 Operator: ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	83	56	115
Phenol-d6	88	54	113
Nitrobenzene-d5	94	31	164
2-Fluorobiphenyl	91	47	133
2,4,6-Tribromophenol	91	35	141
Terphenyl-d14	102	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<0.3	3-Nitroaniline	<3
Bis(2-chloroethyl) ether	<0.03	Acenaphthene	<0.03
2-Chlorophenol	<0.3	2,4-Dinitrophenol	<0.9
1,3-Dichlorobenzene	<0.03	Dibenzofuran	<0.03
1,4-Dichlorobenzene	<0.03	2,4-Dinitrotoluene	<0.03
1,2-Dichlorobenzene	<0.03	4-Nitrophenol	<0.9
Benzyl alcohol	<0.3	Diethyl phthalate	<0.03
Bis(2-chloroisopropyl) ether	<0.03	Fluorene	<0.03
2-Methylphenol	<0.3	4-Chlorophenyl phenyl ether	<0.03
Hexachloroethane	<0.03	N-Nitrosodiphenylamine	<0.03
N-Nitroso-di-n-propylamine	<0.03	4-Nitroaniline	<3
3-Methylphenol + 4-Methylphenol	<0.6	4,6-Dinitro-2-methylphenol	<0.9
Nitrobenzene	<0.03	4-Bromophenyl phenyl ether	<0.03
Isophorone	<0.03	Hexachlorobenzene	<0.03
2-Nitrophenol	<0.3	Pentachlorophenol	<0.3
2,4-Dimethylphenol	<0.3	Phenanthrene	<0.03
Benzoic acid	<1.5	Anthracene	<0.03
Bis(2-chloroethoxy)methane	<0.03	Carbazole	<0.03
2,4-Dichlorophenol	<0.3	Di-n-butyl phthalate	<0.05
1,2,4-Trichlorobenzene	<0.03	Fluoranthene	<0.03
Naphthalene	<0.03	Pyrene	<0.03
Hexachlorobutadiene	<0.03	Benzyl butyl phthalate	<0.03
4-Chloroaniline	<3	Benz(a)anthracene	<0.03
4-Chloro-3-methylphenol	<0.3	Chrysene	<0.03
2-Methylnaphthalene	<0.03	Bis(2-ethylhexyl) phthalate	<0.48
Hexachlorocyclopentadiene	<0.09	Di-n-octyl phthalate	<0.03
2,4,6-Trichlorophenol	<0.3	Benzo(a)pyrene	<0.03
2,4,5-Trichlorophenol	<0.3	Benzo(b)fluoranthene	<0.03
2-Chloronaphthalene	<0.03	Benzo(k)fluoranthene	<0.03
2-Nitroaniline	<0.03	Indeno(1,2,3-cd)pyrene	<0.03
Dimethyl phthalate	<0.03	Dibenz(a,h)anthracene	<0.03
Acenaphthylene	<0.03	Benzo(g,h,i)perylene	<0.03
2,6-Dinitrotoluene	<0.03		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID: HWC-2S  
 Date Received: 06/13/13  
 Date Extracted: 06/13/13  
 Date Analyzed: 06/14/13  
 Matrix: Soil  
 Units: mg/kg (ppm)

Client: Aspect Consulting, LLC  
 Project: Kimberly Clark, 110207-4-4, F&BI 306203  
 Lab ID: 306203-03 1/5  
 Data File: 061417.D  
 Instrument: GCMS8  
 Operator: ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	83	56	115
Phenol-d6	84	54	113
Nitrobenzene-d5	95	31	164
2-Fluorobiphenyl	96	47	133
2,4,6-Tribromophenol	86	35	141
Terphenyl-d14	100	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<0.3	3-Nitroaniline	<3
Bis(2-chloroethyl) ether	<0.03	Acenaphthene	<0.03
2-Chlorophenol	<0.3	2,4-Dinitrophenol	<0.9
1,3-Dichlorobenzene	<0.03	Dibenzofuran	<0.03
1,4-Dichlorobenzene	<0.03	2,4-Dinitrotoluene	<0.03
1,2-Dichlorobenzene	<0.03	4-Nitrophenol	<0.9
Benzyl alcohol	<0.3	Diethyl phthalate	<0.03
Bis(2-chloroisopropyl) ether	<0.03	Fluorene	<0.03
2-Methylphenol	<0.3	4-Chlorophenyl phenyl ether	<0.03
Hexachloroethane	<0.03	N-Nitrosodiphenylamine	<0.03
N-Nitroso-di-n-propylamine	<0.03	4-Nitroaniline	<3
3-Methylphenol + 4-Methylphenol	<0.6	4,6-Dinitro-2-methylphenol	<0.9
Nitrobenzene	<0.03	4-Bromophenyl phenyl ether	<0.03
Isophorone	<0.03	Hexachlorobenzene	<0.03
2-Nitrophenol	<0.3	Pentachlorophenol	<0.3
2,4-Dimethylphenol	<0.3	Phenanthrene	<0.03
Benzoic acid	<1.5	Anthracene	<0.03
Bis(2-chloroethoxy)methane	<0.03	Carbazole	<0.03
2,4-Dichlorophenol	<0.3	Di-n-butyl phthalate	<0.05
1,2,4-Trichlorobenzene	<0.03	Fluoranthene	<0.03
Naphthalene	<0.03	Pyrene	<0.03
Hexachlorobutadiene	<0.03	Benzyl butyl phthalate	<0.03
4-Chloroaniline	<3	Benz(a)anthracene	<0.03
4-Chloro-3-methylphenol	<0.3	Chrysene	<0.03
2-Methylnaphthalene	<0.03	Bis(2-ethylhexyl) phthalate	<0.48
Hexachlorocyclopentadiene	<0.09	Di-n-octyl phthalate	<0.03
2,4,6-Trichlorophenol	<0.3	Benzo(a)pyrene	<0.03
2,4,5-Trichlorophenol	<0.3	Benzo(b)fluoranthene	<0.03
2-Chloronaphthalene	<0.03	Benzo(k)fluoranthene	<0.03
2-Nitroaniline	<0.03	Indeno(1,2,3-cd)pyrene	<0.03
Dimethyl phthalate	<0.03	Dibenz(a,h)anthracene	<0.03
Acenaphthylene	<0.03	Benzo(g,h,i)perylene	<0.03
2,6-Dinitrotoluene	<0.03		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID: HWC-2D  
 Date Received: 06/13/13  
 Date Extracted: 06/13/13  
 Date Analyzed: 06/15/13  
 Matrix: Soil  
 Units: mg/kg (ppm)

Client: Aspect Consulting, LLC  
 Project: Kimberly Clark, 110207-4-4, F&BI 306203  
 Lab ID: 306203-04 1/5  
 Data File: 061418.D  
 Instrument: GCMS8  
 Operator: ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	76	56	115
Phenol-d6	83	54	113
Nitrobenzene-d5	91	31	164
2-Fluorobiphenyl	90	47	133
2,4,6-Tribromophenol	80	35	141
Terphenyl-d14	93	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<0.3	3-Nitroaniline	<3
Bis(2-chloroethyl) ether	<0.03	Acenaphthene	<0.03
2-Chlorophenol	<0.3	2,4-Dinitrophenol	<0.9
1,3-Dichlorobenzene	<0.03	Dibenzofuran	<0.03
1,4-Dichlorobenzene	<0.03	2,4-Dinitrotoluene	<0.03
1,2-Dichlorobenzene	<0.03	4-Nitrophenol	<0.9
Benzyl alcohol	<0.3	Diethyl phthalate	<0.03
Bis(2-chloroisopropyl) ether	<0.03	Fluorene	<0.03
2-Methylphenol	<0.3	4-Chlorophenyl phenyl ether	<0.03
Hexachloroethane	<0.03	N-Nitrosodiphenylamine	<0.03
N-Nitroso-di-n-propylamine	<0.03	4-Nitroaniline	<3
3-Methylphenol + 4-Methylphenol	<0.6	4,6-Dinitro-2-methylphenol	<0.9
Nitrobenzene	<0.03	4-Bromophenyl phenyl ether	<0.03
Isophorone	<0.03	Hexachlorobenzene	<0.03
2-Nitrophenol	<0.3	Pentachlorophenol	<0.3
2,4-Dimethylphenol	<0.3	Phenanthrene	0.049
Benzoic acid	<1.5	Anthracene	<0.03
Bis(2-chloroethoxy)methane	<0.03	Carbazole	<0.03
2,4-Dichlorophenol	<0.3	Di-n-butyl phthalate	<0.05
1,2,4-Trichlorobenzene	<0.03	Fluoranthene	0.064
Naphthalene	<0.03	Pyrene	0.069
Hexachlorobutadiene	<0.03	Benzyl butyl phthalate	<0.03
4-Chloroaniline	<3	Benz(a)anthracene	0.034
4-Chloro-3-methylphenol	<0.3	Chrysene	0.034
2-Methylnaphthalene	<0.03	Bis(2-ethylhexyl) phthalate	<0.48
Hexachlorocyclopentadiene	<0.09	Di-n-octyl phthalate	<0.03
2,4,6-Trichlorophenol	<0.3	Benzo(a)pyrene	<0.03
2,4,5-Trichlorophenol	<0.3	Benzo(b)fluoranthene	0.036
2-Chloronaphthalene	<0.03	Benzo(k)fluoranthene	<0.03
2-Nitroaniline	<0.03	Indeno(1,2,3-cd)pyrene	<0.03
Dimethyl phthalate	<0.03	Dibenz(a,h)anthracene	<0.03
Acenaphthylene	<0.03	Benzo(g,h,i)perylene	<0.03
2,6-Dinitrotoluene	<0.03		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID: HWC-3S  
 Date Received: 06/13/13  
 Date Extracted: 06/13/13  
 Date Analyzed: 06/15/13  
 Matrix: Soil  
 Units: mg/kg (ppm)

Client: Aspect Consulting, LLC  
 Project: Kimberly Clark, 110207-4-4, F&BI 306203  
 Lab ID: 306203-05 1/5  
 Data File: 061419.D  
 Instrument: GCMS8  
 Operator: ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	84	56	115
Phenol-d6	88	54	113
Nitrobenzene-d5	93	31	164
2-Fluorobiphenyl	93	47	133
2,4,6-Tribromophenol	90	35	141
Terphenyl-d14	99	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<0.3	3-Nitroaniline	<3
Bis(2-chloroethyl) ether	<0.03	Acenaphthene	<0.03
2-Chlorophenol	<0.3	2,4-Dinitrophenol	<0.9
1,3-Dichlorobenzene	<0.03	Dibenzofuran	<0.03
1,4-Dichlorobenzene	<0.03	2,4-Dinitrotoluene	<0.03
1,2-Dichlorobenzene	<0.03	4-Nitrophenol	<0.9
Benzyl alcohol	<0.3	Diethyl phthalate	<0.03
Bis(2-chloroisopropyl) ether	<0.03	Fluorene	<0.03
2-Methylphenol	<0.3	4-Chlorophenyl phenyl ether	<0.03
Hexachloroethane	<0.03	N-Nitrosodiphenylamine	<0.03
N-Nitroso-di-n-propylamine	<0.03	4-Nitroaniline	<3
3-Methylphenol + 4-Methylphenol	<0.6	4,6-Dinitro-2-methylphenol	<0.9
Nitrobenzene	<0.03	4-Bromophenyl phenyl ether	<0.03
Isophorone	<0.03	Hexachlorobenzene	<0.03
2-Nitrophenol	<0.3	Pentachlorophenol	<0.3
2,4-Dimethylphenol	<0.3	Phenanthrene	<0.03
Benzoic acid	<1.5	Anthracene	<0.03
Bis(2-chloroethoxy)methane	<0.03	Carbazole	<0.03
2,4-Dichlorophenol	<0.3	Di-n-butyl phthalate	<0.05
1,2,4-Trichlorobenzene	<0.03	Fluoranthene	<0.03
Naphthalene	<0.03	Pyrene	<0.03
Hexachlorobutadiene	<0.03	Benzyl butyl phthalate	<0.03
4-Chloroaniline	<3	Benz(a)anthracene	<0.03
4-Chloro-3-methylphenol	<0.3	Chrysene	<0.03
2-Methylnaphthalene	<0.03	Bis(2-ethylhexyl) phthalate	<0.48
Hexachlorocyclopentadiene	<0.09	Di-n-octyl phthalate	<0.03
2,4,6-Trichlorophenol	<0.3	Benzo(a)pyrene	<0.03
2,4,5-Trichlorophenol	<0.3	Benzo(b)fluoranthene	<0.03
2-Chloronaphthalene	<0.03	Benzo(k)fluoranthene	<0.03
2-Nitroaniline	<0.03	Indeno(1,2,3-cd)pyrene	<0.03
Dimethyl phthalate	<0.03	Dibenz(a,h)anthracene	<0.03
Acenaphthylene	<0.03	Benzo(g,h,i)perylene	<0.03
2,6-Dinitrotoluene	<0.03		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID: HWC-3D  
 Date Received: 06/13/13  
 Date Extracted: 06/13/13  
 Date Analyzed: 06/15/13  
 Matrix: Soil  
 Units: mg/kg (ppm)

Client: Aspect Consulting, LLC  
 Project: Kimberly Clark, 110207-4-4, F&BI 306203  
 Lab ID: 306203-06 1/50  
 Data File: 061422.D  
 Instrument: GCMS8  
 Operator: ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	80	56	115
Phenol-d6	82	54	113
Nitrobenzene-d5	86	31	164
2-Fluorobiphenyl	94	47	133
2,4,6-Tribromophenol	60	35	141
Terphenyl-d14	97	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<3	3-Nitroaniline	<30
Bis(2-chloroethyl) ether	<0.3	Acenaphthene	<0.3
2-Chlorophenol	<3	2,4-Dinitrophenol	<9
1,3-Dichlorobenzene	<0.3	Dibenzofuran	<0.3
1,4-Dichlorobenzene	<0.3	2,4-Dinitrotoluene	<0.3
1,2-Dichlorobenzene	<0.3	4-Nitrophenol	<9
Benzyl alcohol	<3	Diethyl phthalate	<0.3
Bis(2-chloroisopropyl) ether	<0.3	Fluorene	<0.3
2-Methylphenol	<3	4-Chlorophenyl phenyl ether	<0.3
Hexachloroethane	<0.3	N-Nitrosodiphenylamine	<0.3
N-Nitroso-di-n-propylamine	<0.3	4-Nitroaniline	<30
3-Methylphenol + 4-Methylphenol	<6	4,6-Dinitro-2-methylphenol	<9
Nitrobenzene	<0.3	4-Bromophenyl phenyl ether	<0.3
Isophorone	<0.3	Hexachlorobenzene	<0.3
2-Nitrophenol	<3	Pentachlorophenol	<3
2,4-Dimethylphenol	<3	Phenanthrene	<0.3
Benzoic acid	<15	Anthracene	<0.3
Bis(2-chloroethoxy)methane	<0.3	Carbazole	<0.3
2,4-Dichlorophenol	<3	Di-n-butyl phthalate	<0.5
1,2,4-Trichlorobenzene	<0.3	Fluoranthene	<0.3
Naphthalene	<0.3	Pyrene	<0.3
Hexachlorobutadiene	<0.3	Benzyl butyl phthalate	<0.3
4-Chloroaniline	<30	Benz(a)anthracene	<0.3
4-Chloro-3-methylphenol	<3	Chrysene	<0.3
2-Methylnaphthalene	<0.3	Bis(2-ethylhexyl) phthalate	<4.8
Hexachlorocyclopentadiene	<0.9	Di-n-octyl phthalate	<0.3
2,4,6-Trichlorophenol	<3	Benzo(a)pyrene	<0.3
2,4,5-Trichlorophenol	<3	Benzo(b)fluoranthene	<0.3
2-Chloronaphthalene	<0.3	Benzo(k)fluoranthene	<0.3
2-Nitroaniline	<0.3	Indeno(1,2,3-cd)pyrene	<0.3
Dimethyl phthalate	<0.3	Dibenz(a,h)anthracene	<0.3
Acenaphthylene	<0.3	Benzo(g,h,i)perylene	<0.3
2,6-Dinitrotoluene	<0.3		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID: HWC-4S  
 Date Received: 06/13/13  
 Date Extracted: 06/13/13  
 Date Analyzed: 06/15/13  
 Matrix: Soil  
 Units: mg/kg (ppm)

Client: Aspect Consulting, LLC  
 Project: Kimberly Clark, 110207-4-4, F&BI 306203  
 Lab ID: 306203-07 1/5  
 Data File: 061420.D  
 Instrument: GCMS8  
 Operator: ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	80	56	115
Phenol-d6	86	54	113
Nitrobenzene-d5	93	31	164
2-Fluorobiphenyl	91	47	133
2,4,6-Tribromophenol	84	35	141
Terphenyl-d14	97	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<0.3	3-Nitroaniline	<3
Bis(2-chloroethyl) ether	<0.03	Acenaphthene	<0.03
2-Chlorophenol	<0.3	2,4-Dinitrophenol	<0.9
1,3-Dichlorobenzene	<0.03	Dibenzofuran	<0.03
1,4-Dichlorobenzene	<0.03	2,4-Dinitrotoluene	<0.03
1,2-Dichlorobenzene	<0.03	4-Nitrophenol	<0.9
Benzyl alcohol	<0.3	Diethyl phthalate	<0.03
Bis(2-chloroisopropyl) ether	<0.03	Fluorene	<0.03
2-Methylphenol	<0.3	4-Chlorophenyl phenyl ether	<0.03
Hexachloroethane	<0.03	N-Nitrosodiphenylamine	<0.03
N-Nitroso-di-n-propylamine	<0.03	4-Nitroaniline	<3
3-Methylphenol + 4-Methylphenol	<0.6	4,6-Dinitro-2-methylphenol	<0.9
Nitrobenzene	<0.03	4-Bromophenyl phenyl ether	<0.03
Isophorone	<0.03	Hexachlorobenzene	<0.03
2-Nitrophenol	<0.3	Pentachlorophenol	<0.3
2,4-Dimethylphenol	<0.3	Phenanthrene	0.059
Benzoic acid	<1.5	Anthracene	<0.03
Bis(2-chloroethoxy)methane	<0.03	Carbazole	<0.03
2,4-Dichlorophenol	<0.3	Di-n-butyl phthalate	<0.05
1,2,4-Trichlorobenzene	<0.03	Fluoranthene	0.032
Naphthalene	<0.03	Pyrene	0.038
Hexachlorobutadiene	<0.03	Benzyl butyl phthalate	<0.03
4-Chloroaniline	<3	Benz(a)anthracene	<0.03
4-Chloro-3-methylphenol	<0.3	Chrysene	<0.03
2-Methylnaphthalene	<0.03	Bis(2-ethylhexyl) phthalate	<0.48
Hexachlorocyclopentadiene	<0.09	Di-n-octyl phthalate	<0.03
2,4,6-Trichlorophenol	<0.3	Benzo(a)pyrene	<0.03
2,4,5-Trichlorophenol	<0.3	Benzo(b)fluoranthene	<0.03
2-Chloronaphthalene	<0.03	Benzo(k)fluoranthene	<0.03
2-Nitroaniline	<0.03	Indeno(1,2,3-cd)pyrene	<0.03
Dimethyl phthalate	<0.03	Dibenz(a,h)anthracene	<0.03
Acenaphthylene	<0.03	Benzo(g,h,i)perylene	<0.03
2,6-Dinitrotoluene	<0.03		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID: HWC-4D  
 Date Received: 06/13/13  
 Date Extracted: 06/13/13  
 Date Analyzed: 06/15/13  
 Matrix: Soil  
 Units: mg/kg (ppm)

Client: Aspect Consulting, LLC  
 Project: Kimberly Clark, 110207-4-4, F&BI 306203  
 Lab ID: 306203-08 1/5  
 Data File: 061421.D  
 Instrument: GCMS8  
 Operator: ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	78	56	115
Phenol-d6	84	54	113
Nitrobenzene-d5	92	31	164
2-Fluorobiphenyl	89	47	133
2,4,6-Tribromophenol	83	35	141
Terphenyl-d14	99	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<0.3	3-Nitroaniline	<3
Bis(2-chloroethyl) ether	<0.03	Acenaphthene	<0.03
2-Chlorophenol	<0.3	2,4-Dinitrophenol	<0.9
1,3-Dichlorobenzene	<0.03	Dibenzofuran	<0.03
1,4-Dichlorobenzene	<0.03	2,4-Dinitrotoluene	<0.03
1,2-Dichlorobenzene	<0.03	4-Nitrophenol	<0.9
Benzyl alcohol	<0.3	Diethyl phthalate	<0.03
Bis(2-chloroisopropyl) ether	<0.03	Fluorene	<0.03
2-Methylphenol	<0.3	4-Chlorophenyl phenyl ether	<0.03
Hexachloroethane	<0.03	N-Nitrosodiphenylamine	<0.03
N-Nitroso-di-n-propylamine	<0.03	4-Nitroaniline	<3
3-Methylphenol + 4-Methylphenol	<0.6	4,6-Dinitro-2-methylphenol	<0.9
Nitrobenzene	<0.03	4-Bromophenyl phenyl ether	<0.03
Isophorone	<0.03	Hexachlorobenzene	<0.03
2-Nitrophenol	<0.3	Pentachlorophenol	<0.3
2,4-Dimethylphenol	<0.3	Phenanthrene	<0.03
Benzoic acid	<1.5	Anthracene	<0.03
Bis(2-chloroethoxy)methane	<0.03	Carbazole	<0.03
2,4-Dichlorophenol	<0.3	Di-n-butyl phthalate	<0.05
1,2,4-Trichlorobenzene	<0.03	Fluoranthene	0.046
Naphthalene	<0.03	Pyrene	0.054
Hexachlorobutadiene	<0.03	Benzyl butyl phthalate	<0.03
4-Chloroaniline	<3	Benz(a)anthracene	<0.03
4-Chloro-3-methylphenol	<0.3	Chrysene	0.031
2-Methylnaphthalene	<0.03	Bis(2-ethylhexyl) phthalate	<0.48
Hexachlorocyclopentadiene	<0.09	Di-n-octyl phthalate	<0.03
2,4,6-Trichlorophenol	<0.3	Benzo(a)pyrene	<0.03
2,4,5-Trichlorophenol	<0.3	Benzo(b)fluoranthene	<0.03
2-Chloronaphthalene	<0.03	Benzo(k)fluoranthene	<0.03
2-Nitroaniline	<0.03	Indeno(1,2,3-cd)pyrene	<0.03
Dimethyl phthalate	<0.03	Dibenz(a,h)anthracene	<0.03
Acenaphthylene	<0.03	Benzo(g,h,i)perylene	<0.03
2,6-Dinitrotoluene	<0.03		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID: Method Blank  
 Date Received: NA  
 Date Extracted: 06/13/13  
 Date Analyzed: 06/17/13  
 Matrix: Soil  
 Units: mg/kg (ppm)

Client: Aspect Consulting, LLC  
 Project: Kimberly Clark, 110207-4-4, F&BI 306203  
 Lab ID: 03-1151 mb 1/5  
 Data File: 061703.D  
 Instrument: GCMS8  
 Operator: ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	88	56	115
Phenol-d6	97	54	113
Nitrobenzene-d5	97	31	164
2-Fluorobiphenyl	93	47	133
2,4,6-Tribromophenol	94	35	141
Terphenyl-d14	98	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<0.3	3-Nitroaniline	<3
Bis(2-chloroethyl) ether	<0.03	Acenaphthene	<0.03
2-Chlorophenol	<0.3	2,4-Dinitrophenol	<0.9
1,3-Dichlorobenzene	<0.03	Dibenzofuran	<0.03
1,4-Dichlorobenzene	<0.03	2,4-Dinitrotoluene	<0.03
1,2-Dichlorobenzene	<0.03	4-Nitrophenol	<0.9
Benzyl alcohol	<0.3	Diethyl phthalate	<0.03
Bis(2-chloroisopropyl) ether	<0.03	Fluorene	<0.03
2-Methylphenol	<0.3	4-Chlorophenyl phenyl ether	<0.03
Hexachloroethane	<0.03	N-Nitrosodiphenylamine	<0.03
N-Nitroso-di-n-propylamine	<0.03	4-Nitroaniline	<3
3-Methylphenol + 4-Methylphenol	<0.6	4,6-Dinitro-2-methylphenol	<0.9
Nitrobenzene	<0.03	4-Bromophenyl phenyl ether	<0.03
Isophorone	<0.03	Hexachlorobenzene	<0.03
2-Nitrophenol	<0.3	Pentachlorophenol	<0.3
2,4-Dimethylphenol	<0.3	Phenanthrene	<0.03
Benzoic acid	<1.5	Anthracene	<0.03
Bis(2-chloroethoxy)methane	<0.03	Carbazole	<0.03
2,4-Dichlorophenol	<0.3	Di-n-butyl phthalate	<0.05
1,2,4-Trichlorobenzene	<0.03	Fluoranthene	<0.03
Naphthalene	<0.03	Pyrene	<0.03
Hexachlorobutadiene	<0.03	Benzyl butyl phthalate	<0.03
4-Chloroaniline	<3	Benz(a)anthracene	<0.03
4-Chloro-3-methylphenol	<0.3	Chrysene	<0.03
2-Methylnaphthalene	<0.03	Bis(2-ethylhexyl) phthalate	<0.48
Hexachlorocyclopentadiene	<0.09	Di-n-octyl phthalate	<0.03
2,4,6-Trichlorophenol	<0.3	Benzo(a)pyrene	<0.03
2,4,5-Trichlorophenol	<0.3	Benzo(b)fluoranthene	<0.03
2-Chloronaphthalene	<0.03	Benzo(k)fluoranthene	<0.03
2-Nitroaniline	<0.03	Indeno(1,2,3-cd)pyrene	<0.03
Dimethyl phthalate	<0.03	Dibenz(a,h)anthracene	<0.03
Acenaphthylene	<0.03	Benzo(g,h,i)perylene	<0.03
2,6-Dinitrotoluene	<0.03		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	HWC-1S	Client:	Aspect Consulting, LLC
Date Received:	06/13/13	Project:	Kimberly Clark, 110207-4-4, F&BI 306203
Date Extracted:	06/14/13	Lab ID:	306203-01
Date Analyzed:	06/17/13	Data File:	54.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	89	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	HWC-1D	Client:	Aspect Consulting, LLC
Date Received:	06/13/13	Project:	Kimberly Clark, 110207-4-4, F&BI 306203
Date Extracted:	06/14/13	Lab ID:	306203-02
Date Analyzed:	06/17/13	Data File:	56.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	99	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	HWC-2S	Client:	Aspect Consulting, LLC
Date Received:	06/13/13	Project:	Kimberly Clark, 110207-4-4, F&BI 306203
Date Extracted:	06/14/13	Lab ID:	306203-03
Date Analyzed:	06/18/13	Data File:	62.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	101	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	HWC-2D	Client:	Aspect Consulting, LLC
Date Received:	06/13/13	Project:	Kimberly Clark, 110207-4-4, F&BI 306203
Date Extracted:	06/14/13	Lab ID:	306203-04
Date Analyzed:	06/18/13	Data File:	66.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	90	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	HWC-3S	Client:	Aspect Consulting, LLC
Date Received:	06/13/13	Project:	Kimberly Clark, 110207-4-4, F&BI 306203
Date Extracted:	06/14/13	Lab ID:	306203-05
Date Analyzed:	06/18/13	Data File:	68.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	110	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	HWC-3D	Client:	Aspect Consulting, LLC
Date Received:	06/13/13	Project:	Kimberly Clark, 110207-4-4, F&BI 306203
Date Extracted:	06/14/13	Lab ID:	306203-06
Date Analyzed:	06/18/13	Data File:	70.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	94	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	HWC-4S	Client:	Aspect Consulting, LLC
Date Received:	06/13/13	Project:	Kimberly Clark, 110207-4-4, F&BI 306203
Date Extracted:	06/14/13	Lab ID:	306203-07
Date Analyzed:	06/18/13	Data File:	72.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	113	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	HWC-4D	Client:	Aspect Consulting, LLC
Date Received:	06/13/13	Project:	Kimberly Clark, 110207-4-4, F&BI 306203
Date Extracted:	06/14/13	Lab ID:	306203-08
Date Analyzed:	06/18/13	Data File:	74.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	93	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082

Client Sample ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	NA	Project:	Kimberly Clark, 110207-4-4, F&BI 306203
Date Extracted:	06/14/13	Lab ID:	03-1168 mb
Date Analyzed:	06/17/13	Data File:	48.D\ECD1A.CH
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	94	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/28/13

Date Received: 06/13/13

Project: Kimberly Clark, 110207-4-4, F&BI 306203

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
FOR TPH AS GASOLINE  
USING METHOD NWTPH-Gx**

Laboratory Code: 306203-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	20	95	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/28/13

Date Received: 06/13/13

Project: Kimberly Clark, 110207-4-4, F&BI 306203

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL  
SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 306203-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	97	104	73-135	7

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	104	74-139

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: 06/28/13

Date Received: 06/13/13

Project: Kimberly Clark, 110207-4-4, F&BI 306203

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 306189-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Chromium	mg/kg (ppm)	50	9.75	85	85	57-128	0
Arsenic	mg/kg (ppm)	10	1.43	89	86	70-118	3
Selenium	mg/kg (ppm)	5	<1	92	89	64-117	3
Silver	mg/kg (ppm)	10	<1	94	92	73-122	2
Cadmium	mg/kg (ppm)	10	<1	100	98	83-116	2
Barium	mg/kg (ppm)	50	33.9	86 b	90 b	60-141	5 b
Lead	mg/kg (ppm)	50	1.57	96	93	59-148	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	mg/kg (ppm)	50	91	78-121
Arsenic	mg/kg (ppm)	10	94	83-113
Selenium	mg/kg (ppm)	5	96	84-115
Silver	mg/kg (ppm)	10	94	81-116
Cadmium	mg/kg (ppm)	10	98	54-114
Barium	mg/kg (ppm)	50	94	85-116
Lead	mg/kg (ppm)	50	95	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/28/13

Date Received: 06/13/13

Project: Kimberly Clark, 110207-4-4, F&BI 306203

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF SOIL SAMPLES FOR  
TOTAL MERCURY  
USING EPA METHOD 1631E**

Laboratory Code: 306189-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Mercury	mg/kg (ppm)	0.125	<0.1	91	87	62-140	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	mg/kg (ppm)	0.125	89	63-131

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: 06/28/13

Date Received: 06/13/13

Project: Kimberly Clark, 110207-4-4, F&BI 306203

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 306157-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	25	21	10-142	17
Chloromethane	mg/kg (ppm)	2.5	<0.5	51	48	10-126	6
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	53	49	10-138	8
Bromomethane	mg/kg (ppm)	2.5	<0.5	82	73	10-163	12
Chloroethane	mg/kg (ppm)	2.5	<0.5	63	58	10-176	8
Trichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	55	52	10-176	6
Acetone	mg/kg (ppm)	12.5	<0.5	61	62	10-163	2
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	57	54	10-160	5
Methylene chloride	mg/kg (ppm)	2.5	<0.5	58	58	10-156	0
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	75	72	21-145	4
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	62	61	14-137	2
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	67	65	19-140	3
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	70	68	10-158	3
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	70	68	25-135	3
Chloroform	mg/kg (ppm)	2.5	<0.05	71	69	21-145	3
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	71	71	19-147	0
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	72	70	12-160	3
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	67	66	10-156	2
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	62	60	17-140	3
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	67	67	9-164	0
Benzene	mg/kg (ppm)	2.5	<0.03	62	61	29-129	2
Trichloroethene	mg/kg (ppm)	2.5	<0.03	61	60	21-139	2
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	64	65	30-135	2
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	78	76	23-155	3
Dibromomethane	mg/kg (ppm)	2.5	<0.05	74	75	23-145	1
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	81	79	24-155	2
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	79	78	28-144	1
Toluene	mg/kg (ppm)	2.5	0.17	58	56	35-130	4
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	76	75	26-149	1
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	75	73	10-205	3
2-Hexanone	mg/kg (ppm)	12.5	<0.5	73	74	15-166	1
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	67	68	31-137	1
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	48	47	20-133	2
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	72	70	28-150	3
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	67	66	28-142	2
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	60	58	32-129	3
Ethylbenzene	mg/kg (ppm)	2.5	0.31	54	53	32-137	2
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	71	67	31-143	6
m,p-Xylene	mg/kg (ppm)	5	1.2	53 b	53 b	34-136	0 b
o-Xylene	mg/kg (ppm)	2.5	1.0	57 b	54 b	33-134	5 b
Styrene	mg/kg (ppm)	2.5	<0.05	61	62	35-137	2
Isopropylbenzene	mg/kg (ppm)	2.5	0.17	53	51	31-142	4
Bromoform	mg/kg (ppm)	2.5	<0.05	71	69	21-156	3
n-Propylbenzene	mg/kg (ppm)	2.5	0.75	53 b	50 b	23-146	6 b
Bromobenzene	mg/kg (ppm)	2.5	<0.05	61	62	34-130	2
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	2.2	53 b	45 b	18-149	16 b
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	95	91	28-140	4
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	72	71	25-144	1
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	76	74	31-134	3
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	64	63	31-136	2
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	52	49	30-137	6
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	4.4	58 b	43 b	10-182	30 b
sec-Butylbenzene	mg/kg (ppm)	2.5	0.42	50	46	23-145	8
p-Isopropyltoluene	mg/kg (ppm)	2.5	0.31	46	44	21-149	4
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	51	51	30-131	0
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	54	53	29-129	2
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	56	55	31-132	2
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	78	73	11-161	7
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	48	45	22-142	6
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	44	43	10-142	2
Naphthalene	mg/kg (ppm)	2.5	0.50	60	56	14-157	7
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	50	49	20-144	2

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: 06/28/13

Date Received: 06/13/13

Project: Kimberly Clark, 110207-4-4, F&BI 306203

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	57	10-146
Chloromethane	mg/kg (ppm)	2.5	74	27-133
Vinyl chloride	mg/kg (ppm)	2.5	79	22-139
Bromomethane	mg/kg (ppm)	2.5	92	38-114
Chloroethane	mg/kg (ppm)	2.5	83	10-163
Trichlorodifluoromethane	mg/kg (ppm)	2.5	87	10-196
Acetone	mg/kg (ppm)	12.5	78	52-141
1,1-Dichloroethene	mg/kg (ppm)	2.5	78	47-128
Methylene chloride	mg/kg (ppm)	2.5	66	42-132
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	89	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	82	67-127
1,1-Dichloroethane	mg/kg (ppm)	2.5	86	68-115
2,2-Dichloropropane	mg/kg (ppm)	2.5	98	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	86	72-113
Chloroform	mg/kg (ppm)	2.5	87	66-120
2-Butanone (MEK)	mg/kg (ppm)	12.5	86	57-123
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	90	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	91	62-131
1,1-Dichloropropene	mg/kg (ppm)	2.5	86	69-128
Carbon tetrachloride	mg/kg (ppm)	2.5	100	60-139
Benzene	mg/kg (ppm)	2.5	83	68-114
Trichloroethene	mg/kg (ppm)	2.5	83	64-117
1,2-Dichloropropane	mg/kg (ppm)	2.5	81	72-127
Bromodichloromethane	mg/kg (ppm)	2.5	98	72-130
Dibromomethane	mg/kg (ppm)	2.5	92	70-120
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	90	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	98	75-136
Toluene	mg/kg (ppm)	2.5	81	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	94	72-132
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	82	75-113
2-Hexanone	mg/kg (ppm)	12.5	85	33-152
1,3-Dichloropropane	mg/kg (ppm)	2.5	82	72-130
Tetrachloroethene	mg/kg (ppm)	2.5	78	72-114
Dibromochloromethane	mg/kg (ppm)	2.5	90	74-125
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	87	74-132
Chlorobenzene	mg/kg (ppm)	2.5	80	76-111
Ethylbenzene	mg/kg (ppm)	2.5	82	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	94	69-135
m,p-Xylene	mg/kg (ppm)	5	80	78-122
o-Xylene	mg/kg (ppm)	2.5	82	77-124
Styrene	mg/kg (ppm)	2.5	82	74-126
Isopropylbenzene	mg/kg (ppm)	2.5	82	76-127
Bromoform	mg/kg (ppm)	2.5	93	56-132
n-Propylbenzene	mg/kg (ppm)	2.5	90	74-124
Bromobenzene	mg/kg (ppm)	2.5	89	72-122
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	89	76-126
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	91	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	94	61-137
2-Chlorotoluene	mg/kg (ppm)	2.5	89	74-121
4-Chlorotoluene	mg/kg (ppm)	2.5	90	75-122
tert-Butylbenzene	mg/kg (ppm)	2.5	92	73-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	90	76-125
sec-Butylbenzene	mg/kg (ppm)	2.5	90	71-130
p-Isopropyltoluene	mg/kg (ppm)	2.5	88	70-132
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	84	75-121
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	85	74-117
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	86	76-121
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	109	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	88	64-135
Hexachlorobutadiene	mg/kg (ppm)	2.5	85	50-153
Naphthalene	mg/kg (ppm)	2.5	88	63-140
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	82	63-138

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: 06/28/13

Date Received: 06/13/13

Project: Kimberly Clark, 110207-4-4, F&BI 306203

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
FOR SEMIVOLATILES BY EPA METHOD 8270D**

Laboratory Code: 306126-07 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Phenol	mg/kg (ppm)	1.7	<0.3	93	93	50-150	0
Bis(2-chloroethyl) ether	mg/kg (ppm)	1.7	<0.03	95	93	50-150	2
2-Chlorophenol	mg/kg (ppm)	1.7	<0.3	97	96	50-150	1
1,3-Dichlorobenzene	mg/kg (ppm)	1.7	<0.03	93	90	50-150	3
1,4-Dichlorobenzene	mg/kg (ppm)	1.7	<0.03	92	90	50-150	2
1,2-Dichlorobenzene	mg/kg (ppm)	1.7	<0.03	94	92	50-150	2
Benzyl alcohol	mg/kg (ppm)	1.7	<0.3	100	99	50-150	1
Bis(2-chloroisopropyl) ether	mg/kg (ppm)	1.7	<0.03	88	87	50-150	1
2-Methylphenol	mg/kg (ppm)	1.7	<0.3	98	96	50-150	2
Hexachloroethane	mg/kg (ppm)	1.7	<0.03	93	92	50-150	1
N-Nitroso-di-n-propylamine	mg/kg (ppm)	1.7	<0.03	100	98	50-150	2
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	1.7	<0.6	96	96	50-150	0
Nitrobenzene	mg/kg (ppm)	1.7	<0.03	94	94	50-150	0
Isophorone	mg/kg (ppm)	1.7	<0.03	95	94	50-150	1
2-Nitrophenol	mg/kg (ppm)	1.7	<0.3	102	103	50-150	1
2,4-Dimethylphenol	mg/kg (ppm)	1.7	<0.3	91	91	50-150	0
Benzoic acid	mg/kg (ppm)	2.5	<1.5	88	90	50-150	2
Bis(2-chloroethoxy)methane	mg/kg (ppm)	1.7	<0.03	92	91	50-150	1
2,4-Dichlorophenol	mg/kg (ppm)	1.7	<0.3	100	100	50-150	0
1,2,4-Trichlorobenzene	mg/kg (ppm)	1.7	<0.03	93	93	50-150	0
Naphthalene	mg/kg (ppm)	1.7	<0.03	92	92	50-150	0
Hexachlorobutadiene	mg/kg (ppm)	1.7	<0.03	91	90	50-150	1
4-Chloroaniline	mg/kg (ppm)	3.3	<3	81	60	50-150	30 vo
4-Chloro-3-methylphenol	mg/kg (ppm)	1.7	<0.3	102	103	50-150	1
2-Methylnaphthalene	mg/kg (ppm)	1.7	<0.03	92	92	50-150	0
Hexachlorocyclopentadiene	mg/kg (ppm)	1.7	<0.09	97	92	50-150	5
2,4,6-Trichlorophenol	mg/kg (ppm)	1.7	<0.3	96	97	50-150	1
2,4,5-Trichlorophenol	mg/kg (ppm)	1.7	<0.3	97	98	50-150	1
2-Chloronaphthalene	mg/kg (ppm)	1.7	<0.03	93	94	50-150	1
2-Nitroaniline	mg/kg (ppm)	1.7	<0.03	99	100	50-150	1
Dimethyl phthalate	mg/kg (ppm)	1.7	<0.03	96	97	50-150	1
Acenaphthylene	mg/kg (ppm)	1.7	<0.03	95	95	50-150	0
2,6-Dinitrotoluene	mg/kg (ppm)	1.7	<0.03	105	105	50-150	0
3-Nitroaniline	mg/kg (ppm)	3.3	<3	89	67	50-150	28 vo
Acenaphthene	mg/kg (ppm)	1.7	<0.03	91	92	50-150	1
2,4-Dinitrophenol	mg/kg (ppm)	1.7	<0.9	109	112	50-150	3
Dibenzofuran	mg/kg (ppm)	1.7	<0.03	95	95	50-150	0
2,4-Dinitrotoluene	mg/kg (ppm)	1.7	<0.03	97	98	50-150	1
4-Nitrophenol	mg/kg (ppm)	1.7	<0.9	106	118	50-150	11
Diethyl phthalate	mg/kg (ppm)	1.7	<0.03	96	96	50-150	0
Fluorene	mg/kg (ppm)	1.7	<0.03	93	94	50-150	1
4-Chlorophenyl phenyl ether	mg/kg (ppm)	1.7	<0.03	92	93	50-150	1
N-Nitrosodiphenylamine	mg/kg (ppm)	1.7	<0.03	92	91	50-150	1
4-Nitroaniline	mg/kg (ppm)	3.3	<3	96	92	50-150	4
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	1.7	<0.9	110	112	50-150	2
4-Bromophenyl phenyl ether	mg/kg (ppm)	1.7	<0.03	92	92	50-150	0
Hexachlorobenzene	mg/kg (ppm)	1.7	<0.03	92	92	50-150	0
Pentachlorophenol	mg/kg (ppm)	1.7	<0.3	91	95	50-150	4
Phenanthrene	mg/kg (ppm)	1.7	<0.03	91	92	50-150	1
Anthracene	mg/kg (ppm)	1.7	<0.03	93	93	50-150	0
Carbazole	mg/kg (ppm)	1.7	<0.03	96	96	50-150	0
Di-n-butyl phthalate	mg/kg (ppm)	1.7	<0.03	97	97	50-150	0
Fluoranthene	mg/kg (ppm)	1.7	<0.03	94	95	50-150	1
Pyrene	mg/kg (ppm)	1.7	<0.03	96	96	50-150	0
Benzyl butyl phthalate	mg/kg (ppm)	1.7	<0.03	104	103	50-150	1
Benz(a)anthracene	mg/kg (ppm)	1.7	<0.03	95	95	50-150	0
Chrysene	mg/kg (ppm)	1.7	<0.03	93	93	50-150	0
Bis(2-ethylhexyl) phthalate	mg/kg (ppm)	1.7	<0.48	100	99	50-150	1
Di-n-octyl phthalate	mg/kg (ppm)	1.7	<0.03	100	100	50-150	0
Benzo(a)pyrene	mg/kg (ppm)	1.7	<0.03	88	89	50-150	1
Benzo(b)fluoranthene	mg/kg (ppm)	1.7	<0.03	89	89	50-150	0
Benzo(k)fluoranthene	mg/kg (ppm)	1.7	<0.03	85	88	50-150	3
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	1.7	<0.03	95	98	50-150	3
Dibenz(a,h)anthracene	mg/kg (ppm)	1.7	<0.03	96	95	50-150	1
Benzo(g,h,i)perylene	mg/kg (ppm)	1.7	<0.03	93	95	50-150	2

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: 06/28/13

Date Received: 06/13/13

Project: Kimberly Clark, 110207-4-4, F&BI 306203

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
FOR SEMIVOLATILES BY EPA METHOD 8270D**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Phenol	mg/kg (ppm)	1.7	99	91	51-119	8
Bis(2-chloroethyl) ether	mg/kg (ppm)	1.7	95	95	60-112	0
2-Chlorophenol	mg/kg (ppm)	1.7	96	92	59-114	4
1,3-Dichlorobenzene	mg/kg (ppm)	1.7	94	97	62-113	3
1,4-Dichlorobenzene	mg/kg (ppm)	1.7	93	96	61-114	3
1,2-Dichlorobenzene	mg/kg (ppm)	1.7	95	98	61-113	3
Benzyl alcohol	mg/kg (ppm)	1.7	99	93	50-119	6
Bis(2-chloroisopropyl) ether	mg/kg (ppm)	1.7	89	90	59-113	1
2-Methylphenol	mg/kg (ppm)	1.7	94	89	58-115	5
Hexachloroethane	mg/kg (ppm)	1.7	95	97	63-114	2
N-Nitroso-di-n-propylamine	mg/kg (ppm)	1.7	97	92	62-114	5
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	1.7	96	90	54-120	6
Nitrobenzene	mg/kg (ppm)	1.7	93	95	59-114	2
Isporphorene	mg/kg (ppm)	1.7	96	97	61-113	1
2-Nitrophenol	mg/kg (ppm)	1.7	98	99	59-114	1
2,4-Dimethylphenol	mg/kg (ppm)	1.7	87	87	54-107	0
Benzoic acid	mg/kg (ppm)	2.5	116	107	43-150	8
Bis(2-chloroethoxy)methane	mg/kg (ppm)	1.7	92	97	60-114	5
2,4-Dichlorophenol	mg/kg (ppm)	1.7	97	93	57-118	4
1,2,4-Trichlorobenzene	mg/kg (ppm)	1.7	94	97	56-112	3
Naphthalene	mg/kg (ppm)	1.7	93	95	61-113	2
Hexachlorobutadiene	mg/kg (ppm)	1.7	93	99	60-116	6
4-Chloroaniline	mg/kg (ppm)	3.3	80	74	10-126	8
4-Chloro-3-methylphenol	mg/kg (ppm)	1.7	99	92	59-115	7
2-Methylnaphthalene	mg/kg (ppm)	1.7	92	92	60-115	0
Hexachlorocyclopentadiene	mg/kg (ppm)	1.7	97	95	41-107	2
2,4,6-Trichlorophenol	mg/kg (ppm)	1.7	96	94	47-119	2
2,4,5-Trichlorophenol	mg/kg (ppm)	1.7	96	94	61-121	2
2-Chloronaphthalene	mg/kg (ppm)	1.7	95	96	58-114	1
2-Nitroaniline	mg/kg (ppm)	1.7	94	92	55-119	2
Dimethyl phthalate	mg/kg (ppm)	1.7	98	100	58-116	2
Acenaphthylene	mg/kg (ppm)	1.7	95	96	56-114	1
2,6-Dinitrotoluene	mg/kg (ppm)	1.7	102	101	57-119	1
3-Nitroaniline	mg/kg (ppm)	3.3	89	85	10-143	5
Acenaphthene	mg/kg (ppm)	1.7	93	95	57-114	2
2,4-Dinitrophenol	mg/kg (ppm)	1.7	95	79	40-122	18
Dibenzofuran	mg/kg (ppm)	1.7	95	96	56-115	1
2,4-Dinitrotoluene	mg/kg (ppm)	1.7	96	96	53-126	0
4-Nitrophenol	mg/kg (ppm)	1.7	101	102	40-124	1
Diethyl phthalate	mg/kg (ppm)	1.7	98	101	57-116	3
Fluorene	mg/kg (ppm)	1.7	94	96	57-118	2
4-Chlorophenyl phenyl ether	mg/kg (ppm)	1.7	94	95	54-119	1
N-Nitrosodiphenylamine	mg/kg (ppm)	1.7	93	96	54-113	3
4-Nitroaniline	mg/kg (ppm)	3.3	95	96	47-109	1
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	1.7	98	92	57-108	6
4-Bromophenyl phenyl ether	mg/kg (ppm)	1.7	93	95	56-116	2
Hexachlorobenzene	mg/kg (ppm)	1.7	90	93	57-115	3
Pentachlorophenol	mg/kg (ppm)	1.7	81	74	45-123	9
Phenanthrene	mg/kg (ppm)	1.7	92	95	57-113	3
Anthracene	mg/kg (ppm)	1.7	93	95	60-118	2
Carbazole	mg/kg (ppm)	1.7	95	100	57-116	5
Di-n-butyl phthalate	mg/kg (ppm)	1.7	98	101	56-118	3
Fluoranthene	mg/kg (ppm)	1.7	94	98	58-117	4
Pyrene	mg/kg (ppm)	1.7	100	97	58-120	3
Benzyl butyl phthalate	mg/kg (ppm)	1.7	103	102	56-122	1
Benz(a)anthracene	mg/kg (ppm)	1.7	93	93	54-114	0
Chrysene	mg/kg (ppm)	1.7	92	94	57-119	2
Bis(2-ethylhexyl) phthalate	mg/kg (ppm)	1.7	95	100	56-125	5
Di-n-octyl phthalate	mg/kg (ppm)	1.7	101	105	58-120	4
Benzo(a)pyrene	mg/kg (ppm)	1.7	87	89	56-119	2
Benzo(b)fluoranthene	mg/kg (ppm)	1.7	91	92	47-121	1
Benzo(k)fluoranthene	mg/kg (ppm)	1.7	92	92	59-126	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	1.7	89	88	54-122	1
Dibenz(a,h)anthracene	mg/kg (ppm)	1.7	87	87	54-128	0
Benzo(g,h,i)perylene	mg/kg (ppm)	1.7	88	85	55-122	3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/28/13

Date Received: 06/13/13

Project: Kimberly Clark, 110207-4-4, F&BI 306203

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF SOIL SAMPLES FOR  
POLYCHLORINATED BIPHENYLS AS  
AROCLOL 1016/1260 BY EPA METHOD 8082A**

Laboratory Code: 306203-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Control Limits	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.8	<0.1	90	103	50-150	13
Aroclor 1260	mg/kg (ppm)	0.8	<0.1	89	104	50-150	16

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	Acceptance Criteria
Aroclor 1016	mg/kg (ppm)	0.8	96	70-130
Aroclor 1260	mg/kg (ppm)	0.8	103	70-130

# FRIEDMAN & BRUYA, INC.

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## ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

306203

## SAMPLE CHAIN OF CUSTODY

67

Send Report To Aspect Consulting

Company \_\_\_\_\_

Address

City State Zip

City, State, Zip \_\_\_\_\_

SAMPLERS (signature)	
PROJECT NAME/NO	J. Heath Smith
Kimberly Clark	
110207-4-4	PO#
REMARKS	

_____	1-800-4-A-TEST
<b>TURNAROUND TIME</b>	
<input type="checkbox"/> Standard (2 weeks) <input type="checkbox"/> RUSH <hr/> Rush charges authorized by _____	
<b>SAMPLE DISPOSAL</b>	
<input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Return samples <hr/> Will call with instructions	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED		analytical park 6/13/13 Notes
						TPH-Diesel-0.1	TPH-Gasoline	
HWC-1S	01	6/12	2:10	Silt	1	X	X	
HWC-1D	02		2:30		1	+		
HWC-2S	03		2:40		1	X	X	
HWC-2D	04		2:45		1			
HWC-3S	05		2:55		1			
HWC-3D	06		3:00		1			
HWC-4S	07		3:10		1			
HWC-4D	08		3:20		1			

*Friedman & Bruya, Inc.*

3012 16th Avenue West

Seattle, WA 98119-2029

Ph (206) 285-8282

Fax (206) 283-5044