

Final Report

Use of Fungi to Degrade Polychlorinated biphenyls (PCBs)



July 2017

Prepared for:

City of Spokane
Integrated Capital Management

Prepared By:

Heidi Montez and Mike Petersen
The Lands Council

Executive Summary

This pilot study was designed to answer the following questions:

- Can certain types of fungi survive and grow in the presence of vector waste?
- Can these fungi break down PCBs (polychlorinated biphenyls) in vector waste?

Vector waste and other growth media (hydrated saw dust and grain) were tested to establish the baseline levels of PCBs. Eight species of fungi were then added to the vector waste mixture and their growth was observed. After several months of growth, analytical testing was then conducted to detect any change in PCBs due to fungal degradation.

Study Duration:

- Vector waste was collected: 2-June-2016
- Fungi exposed to 2% vector waste: 16th-29th-June-2016
- Grain and sawdust spawn growth: 29-June-2016 to 16-August-2016
- Fungi in vector waste jar incubation: 16-August-2016 to 30-November-2016
- Final sampling for analysis: 15th-30th-November-2016

Site Locations:

- Vector waste was collected from the City of Spokane's Decant Facility, 2813 E Ferry Ave, Spokane, WA, 99201.
- Samples for analytical testing were taken at the City of Spokane Riverside Park Water Reclamation Facility Laboratory, 4401 N Aubrey L White Pkwy, Spokane, WA 99205.
- The experiment (cultivation of fungi, media preparation/ sterilization, incubation, growth observations, etc) took place at The Lands Council's Mycology Lab, at the Ash St Station, 1925 N Ash St, Spokane, WA 99205.

Results Key Points:

- All eight species of fungi grew in 2% sterilized vector waste agar media. No difference in growth was observed between the vector waste spiked media and the non-spiked media.
- Some fungi grew better in the vector waste than others. *P. ostreatus* brat, *P. ostreatus columbinus*, and *P. wild CA creek* exhibited the most robust growth overall. The two species quickly colonized the jars with dense mycelium, and showed no signs of contamination. *P. wild CA creek* was healthy and grew thick, dense mycelium the entire time. Two weeks before sampling, two of the *P. wild CA creek* jars started to show green mold growth.

- *P. djamor* was the least dense of all, and it was unclear if contamination was present. *S. ruggosoannulata*, *G. frondosa*, and *L. edodes* had the most contamination, and grew more slowly and less vigorously than the others.
- There was a statically significant decrease in some PCB congeners (16, 45, 46, 50, 133, 175, 191, 201, 202, 206) while other congeners (1-7, 11, 115, 20, 22, 25, 26, 36, 37, 60, 61, 66, 114) showed a statistically significant increase. Some observations in the congeners that were reduced:
 - There may be a pattern associated with congeners containing “ortho-chlorines”.
 - Most were higher molecular weight congeners.
 - The PCB degradation pattern is different from that seen in animal metabolism (ex. river fish).
 - Six out of ten PCB congeners that showed degradation are in the “Least Biodegradable” category according to the Boon Group numbering system (Boon et al, 1997.)
- It was not possible to draw any specific correlations between the reduction in total PCBs and the fungi species or quantity of fungi.

Acknowledgements

The Research Team worked together to refine the purpose and scope of the study, and finalize the experimental design. The team held regular meetings as the study progressed, providing support and insight to the Principal Investigator (PI), Heidi Montez. Mike Petersen provided the support that helped make this project possible. Marcia Davis served as the primary advocate for the project within the City of Spokane. Adrienne Pearson, Jeff Donovan, and Aimee Navickis-Brasch assisted with collecting vector waste and storing items in the city lab. Jeff Donovan assisted the PI in developing sampling procedures and taking the samples. Aimee Navickis-Brasch advised on this report.

The Technical Advisory Committee provided helpful comments and insight on the experimental design and procedures. They attended periodic meetings with the Research Team, some in person and some calling in over the phone. Aimee Navickis-Brasch facilitated the scheduling and agendas of each meeting. Alex Taylor gave specific advice on cultivation techniques and other items related to mycology. Lisa Rodenburg provided advice on experimental procedures regarding PCBs, as well as expert analysis of the test results.

Research Team

Name Contact Information	Organization	Role Responsibility
Heidi Montez (509)209-2401 hmontez@landscouncil.org	The Lands Council	Develop the experimental design and procedures, conduct the research, and write the final report
Mike Petersen (509)990-5719 mpetersen@landscouncil.org	The Lands Council	The Lands Council Executive Director Provide organizational support and final report editing
Marcia Davis (509)625-6398 mdavis@spokanecity.org	City of Spokane	City of Spokane Lead Approval and management of the research contract
Doug Greenlund (509)625-6533 dgreenlund@spokanecity.org	City of Spokane	Environmental Analyst & Technical Writer Advisor
Adrienne Pearson (509)625-7908 apearson@spokanecity.org	City of Spokane	Environmental Analyst Compliance with stormwater permit and city stormwater goals
Jeff Donovan (509)625-4638 jdonovan@spokanecity.org	RPWRF Lab	Chemist Advisor for analytical methods and testing
Aimee Navickis-Brasch (509)995-0557 Aimee.navickis- brasch@HDRinc.com	HDR, Inc	Contractor for the City of Spokane Assist with development of the experimental design; and interpretation of results, facilitate of Technical Advisory Group

Technical Advisory Group

Name Contact Information	Organization	TAG Role
Aimee Navickis-Brasch, PhD Candidate, PE (509)995-0557 Aimee.navickis-brasch@HDRinc.com	HDR	Advisory Group Facilitator Primary contact for the TAG. Distribute materials, collect/document/summarize comments, and distribute comments to research team.
Michelle Mullin (206)553-1616 Mullin.Michelle@epamail.epa.gov	EPA	Regulator Representative Provide regulatory insight regarding management of PCBs
Mike LaScuola (509)324-1574 mlascuola@srhd.org	Spokane Regional Health District	Health District Representative Addressed general public health concerns related to PCBs and other issues related to the research project
Alex Taylor (360)890-5306 alexander.taylor@wsu.edu	WSU	Mycology Specialist Fungi knowledge (i.e. optimal survival based on temperature, pH, soil conditions, moisture, etc.)
Lisa Rodenburg (848)932-5774 rodenburg@envsci.rutgers.edu wildvineyard@gmail.com	Rutgers	PCB Specialist In depth knowledge of PCBs, provide highly detailed analysis of PCB data from final samples
David Cleary, PhD (509)313-6631 cleary@gonzaga.edu	Gonzaga University	Analytical Chemist Provide insight regarding analytical sampling and testing methods in general
Philip Small (509)844-2944 philip.small@landprofile.com	The Land Profile	Soil Scientist Provide insight regarding how the food web might react to mycelium (i.e. optimal soil conditions for supporting mycelium growth)
Mark Maurer, PE, PLA (360)754-2968 maurerm@co.thurston.wa.us	Thurston County	Stormwater Expertise Provide understanding of BMP research to practice studies (related to soils and plants) including regulatory approval process (QAPP/TAPE)
Maureen Johnson (802)238-8281 (802)343-8454 maureensafe@gmail.com	Certified Safety Professional	Health and Safety Provide insight regarding health and safety for practical/real world applications related to mycelium usage
Greg Lahti (509)324-6138 lahtig@wsdot.wa.gov	WSDOT - Eastern Region (ER)	WSDOT Hydraulic-Stormwater Engineer Provide insight regarding WSDOT ER decant facilities including permitting, maintenance as well as management and characterization of vector waste

Table of Contents

EXECUTIVE SUMMARY	I
ACKNOWLEDGEMENTS	III
RESEARCH TEAM.....	III
TECHNICAL ADVISORY GROUP	IV
TABLE OF CONTENTS.....	V
INTRODUCTION.....	1
MATERIALS:	2
METHODS:	4
RESULTS:	5
FUNGI GROWTH	5
PCB ANALYSIS RESULTS:	5
<i>Summary of Dr. Lisa Rodenburg's methods</i>	5
DISCUSSION	6
PCB CONGENER DEGRADATION.....	6
ESTIMATED CHANGE IN TOTAL PCBs	7
CONCLUSION:	12
FURTHER RESEARCH:	12
REFERENCES:.....	14
APPENDICES.....	16
APPENDIX A: BACKGROUND	17
<i>PCBs (polychlorinated biphenyls)</i>	17
<i>Exposure/ Environmental behavior of PCBs</i>	18
APPENDIX B. ANALYTICAL TESTING	20
BASELINE TESTING:	20
APPENDIX C: METHODS	24
<i>Task 1: Collect vector waste</i>	24
TASK 2: PREPARING AGAR MEDIA.....	24
<i>Task 3: Grow acclimated cultures on grain; "grain spawn"</i>	26
<i>Task 4: Grow acclimated cultures on sawdust; "sawdust spawn"</i>	28
<i>Task 5: Training fungi to vector waste</i>	30
<i>Task 3: Grain Spawn & Task 4: Sawdust Spawn</i>	31
<i>Task 5: Grow fungi in a range of vector waste concentrations</i>	31
<i>Task 7: Take samples for analysis</i>	34
<i>Task 7: Take samples for analysis</i>	35
<i>Empirical Observations: Mold Presence</i>	36
APPENDIX D: MEASUREMENTS	39
APPENDIX E: ANALYTICAL TESTING RESULTS.....	50
APPENDIX F: LISA RODENBURG'S INFORMATION	257
APPENDIX G: PERCENT CONGENERS TO TOTAL PCB GRAPHS.....	264

Introduction

PCBs are man-made chemicals that are toxic to human health at very low concentrations, causing cancer and immune deficiencies. Sources of PCBs are myriad; they travel through the environment in a variety of ways, and they are very difficult to remove. Stormwater and vector waste (sludge) in storm drains are known sources of PCBs.

This study investigated whether certain fungi could survive and grow in PCB-contaminated vector waste, and if these fungi could degrade the PCBs. Finding natural, low-impact ways to clean up PCBs is very desirable, from both economic and environmental perspectives.

The Spokane River has elevated levels of PCBs in the water, sediment, and fish which violates Washington State water quality standards. This contamination poses health risks for humans that interact with the Spokane River. PCBs bioaccumulate up the food chain, concentrating in fatty tissues and skin. Humans that eat Spokane River fish are at risk of health problems associated with PCB exposure (Please refer to Appendix A Fish Advisory for more information). Members of the Spokane Tribe of Indians, who traditionally consumed large quantities of river fish, are especially at risk of negative health effects of PCB exposure. (Please refer to Appendix A PCBs for more detailed information and background on PCBs.)

The Lands Council, a non-profit organization in Spokane WA, is dedicated to protecting forests, water, and wildlife in the Inland Northwest, with a strong focus on protecting the Spokane River. The Lands Council is interested in using “green technology”, or methods that mimic nature, to manage pollution. In a partnership with the City of Spokane, the Lands Council carried out this study to investigate a potential “green technology” to address PCB pollution: using fungi to degrade PCBs.

Fungi are known to excel in waste recycling and breaking down organic material. Many are equipped with powerful digestive enzymes, allowing them to utilize a wide variety of organic material as food. Several strains of fungi that are known to degrade lignin in wood, which few other organisms have the ability to do, have demonstrated the ability to degrade PCBs. Cvancarova et al. demonstrated that within a six week period, 8 strains of fungi were able to successfully degrade a PCB (in the form of Delor 103) in liquid media (Cvancarova, et al, 2011). Yin et al. demonstrated that four types of wild fungi found in contaminated river sediments could significantly reduce the concentration of select PCBs (Yin, et al 2011).

This study has two specific purposes:

- To assess whether eight selected species of fungi can grow and survive in PCB-contaminated vector waste from the City of Spokane.
- To assess whether these fungi have the ability to break down PCBs in the vector waste.

Materials:

The vector waste, or storm drain sludge, used in this study was collected from the City of Spokane's decant facility. Vector waste is unloaded and allowed to dry at this facility after being collected from storm drains around the City of Spokane. The specific stormwater basin from which the vector waste was sourced is unknown.

The fungi used in this study were selected based on several criteria: their likelihood to successfully degrade PCBs, their ease of cultivation, and their aggressive growth habits. *Grifola frondosa*, *Lentinula edodes*, *Pleurotus ostreatus*, and *Trametes versicolor* were all chosen based on their documented success degrading PCBs in previous studies (Cvancarova, 2011; A. Kubatova, 2000; McCoy, P. 2016; Singh H. 2006). *Pleurotus djamor* was selected for its relation to *P. ostreatus*, its aggressive growth habit, preference for warm temperatures, and resistance to contamination. *Pleurotus populinus CA creek* was selected for its relation to *P. ostreatus*, its local origins, and its aggressive growth habit. *Stropharia rugosoannulata* was selected for its ease in outdoor cultivation, its ability to grow in both wood and soil, and its reputation for coexisting with diverse microbial populations (Stamets, 2000). Table 1 shows the species of fungi used in this study, and lists abbreviations, common names, where the PI obtained the culture, and some characteristics of that species.

Table 1. Fungi Used in This Study

Species	Abbreviation	Common name	Source	characteristics
Grifola frondosa var olga	GF Olga	Maitake	“Fungi for the People” Eugene, OR	wood-degrading choice gourmet edible, found in the eastern United States
Lentinula edodes var bellweather	L E bell	Shiitake	“Fungi for the People” Eugene, OR	wood-degrading choice gourmet edible, originally from Asia
Pleurotus djamor	P djamor	Pink Oyster	“Fungi for the People” Eugene, OR	wood-degrading, easily cultivated gourmet edible, found in the southern U.S.
Pleurotus ostreatus var brat	P O brat	Pearl Oyster	“Fungi for the People” Eugene, OR	aggressive wood-degrading species, gourmet edible, found in many temperate and subtropical forests
Pleurotus ostreatus var columbinus	PO columb	Blue Oyster	friend of the researcher in Olympia, WA	aggressive wood-degrading fungus, easily cultivated gourmet edible found in temperate forests, prefers cooler temperatures
Pleurotus populinus	P wild CA creek	Aspen Oyster	California Creek, south of Spokane	wood- degrading, found on dead/ dying trees of genus Populus in N America.
Stropharia rugosoannulata	SRA	King Stropharia	“Fungi for the People” Eugene, OR	Wood degrading and soil dwelling fungus, known for outdoor cultivation, and cohabitation with microbes
Trametes versicolor var black	TV black	Turkey Tail	“Fungi for the People” Eugene, OR	Aggressive wood degrading fungus, found in temperate and subtropical forests around the world

Methods:

Samples of the vector waste along with grain and sawdust were sent to a laboratory for PCB testing. Appendix B –Table B-1 includes a summary of the parameters tested, the standard testing methods, the laboratory that conducted the testing, and the number of samples tested.

Vector waste for this study was collected from the City of Spokane decant facility, 2813 E. Ferry Ave. Total PCB concentrations from collected vector waste were representative of typical concentrations collected from the same source. Appendix C includes a summary of methods used for collecting the vector waste samples.

Mycelium of each of the eight strains of fungi were grown in petri dishes on sterile vector waste-spiked media in order to 'train' the mycelium to the vector waste. Research suggests that fungi can be 'trained' to digest new food sources if introduced to them at an early growth stage (Leatham,1984).

Cultivation techniques that are often utilized by mushroom farmers were used to grow the mycelium (Stamets, Paul. 2000). Hydrated sterilized grain, and hydrated sterilized sawdust are typical bulk media for cultivating fungi.

Vector waste could potentially be toxic to the fungi. It was known that these fungi could grow in media containing 2% vector waste, but whether they could survive in higher concentrations was unknown. Fungi were grown in four different concentrations of vector waste, as well as in sawdust without vector waste and growth rates were compared.

Each jar was sampled after the same number of growing days (91 days).

A detailed description of the methods followed to conduct this study is located in Appendix C and Appendix D includes a summary of the measurements taken throughout the study.

Results:

Fungi Growth

The fungi thrived in media containing 2% vector waste but whether they could survive in higher concentrations was unknown, as toxicity in higher concentrations was possible. Fungi were grown in four concentrations of vector waste, from 12.5 g to 100 g.

Growth was visible within two days after mixing in vector waste for all fungal species., see Appendix C, Table C2 for detailed results.

PCB analysis results:

Summary of Dr. Lisa Rodenburg's methods

The data set of this pilot study was made up of 30 samples. This is not enough for “Positive Matrix Factor Analysis”, or to observe distinctive enough patterns to make very strong conclusions about degradation in the jars. Method 1668 was designed for using SPB-octyl column, but Pacific Rim Laboratory analyzed the samples using SGE-HT8, which made it challenging to compare the data with Aroclors. It was expected that many of the PCBs present in the vector waste were originally sourced from Aroclors, and others from inadvertently produced PCBs (such as PCB-11). Local research and PCB testing information in and around the Spokane River has gathered this information.

Also, since very little research has been done on congener specific PCB degradation patterns of fungi, there is not an established pattern to look for or compare to. There are established patterns for congener specific PCB degradation in animals (mainly fish), however they are not consistent with the patterns observed in the fungi.

Dr. Lisa Rodenburg is an expert in PCBs at Rutgers University. Dr. Rodenburg used two approaches to analyze the data. The percentage of total mass of each PCB congener in the final sample was compared with the vector waste baseline samples that were collected on June 2, 2016 and analyzed at the beginning. It is important to note that totals calculations can be extremely variable from one sample to the next, so this should be taken into consideration, especially for a small sample size. The second approach is to compare each sample to known Aroclor patterns. Assuming that most congeners present in these samples are from Aroclors (1016, 1242, 1248, & 1260), the congener patterns in the final samples can be compared to Aroclors.

Discussion

PCB Congener Degradation

There was a statistically significant reduction of some PCB congeners (16, 45, 46, 50, 133, 175, 191, 201, 202, 206) and a statistically significant increase of others (1-7, 11, 115, 20, 22, 25, 26, 36, 37, 60, 61, 66, 114). One explanation is that certain congeners were broken down by fungal digestive enzymes and transformed into other congeners (see Cvancarova, et al, 2011). However, due to the small sample size it is possible that these results may not be representative. With a larger sample size, a pattern may be easier to detect. A summary of the results is located in Appendix F.

Dr. Rodenburg's observations from the final PCB data:

- Reduced congeners contained more 'ortho-chlorines' than congeners that were increased. According to Dr. Rodenburg, microbes have not been shown to have the ability to remove chlorines that are in the 'ortho' positions on the PCB molecule. Thus the PCB congeners that contain 'ortho-chlorines' tend to be more persistent. In this case, the results show that PCB congeners containing ortho-chlorines decreased, suggesting that fungal digestive enzymes could be particularly suited to breaking down these congeners. It is important to note that PCB congener degradation patterns have not been documented for fungi, so the results from this study cannot be compared to existing patterns.
- Some higher molecular weight congeners were reduced. It is unlikely these congeners volatilized because of their high molecular weight. This pattern can be observed in the graphs in Appendix G. Each graph represents a sample collected from one of the jars at the end of the experiment (post samples) including the control. The plotted points show the percent of each PCB congener detected during testing, divided by the total PCB concentration from that sample. The average PCB results from the baseline samples are also included for comparison.
- Boon Group Numbering is a system created to organize PCB congeners into categories based on their biodegradability. This system uses roman numerals (I, II, III, IV, V, and VI) with "I" being the least biodegradable, and "VI" being the most biodegradable. Six out of the ten PCB congeners that were degraded are in the category "I", which is the least biodegradable. (Boon et al, 1997). Perhaps these congeners are "least biodegradable" for many organisms, but these results suggest they may be more biodegradable than other congeners for fungi. Degradation analysis of PCBs to the congener level has not been done for fungi, so there is no supporting evidence in the literature.
- The PCB degradation pattern seen in this data is different from what is observed in animal metabolism. The congener specific patterns are well documented in animals (i.e. river fish and birds). It is not surprising that the patterns are completely different since Animalia and Fungi are separate kingdoms of organisms; they likely have very different digestive methods. Fungal degradation of PCBs at the congener level has not been well studied, so there is not enough information to say the detected pattern is typical for these fungi or not.

Estimated Change in Total PCBs

In addition to the PCB congener analysis discussed above, changes in the total PCBs were also considered. Total PCBs are the sum of all PCB congeners detected in testing, measured as a concentration. Measuring total PCBs is important for water quality and regulatory issues. The change in total PCBs was assessed between the “baseline” and “post” samples. The “baseline” samples are the vector waste samples collected on June 2, 2016 along with the hydrated sawdust and grain that were tested to find the beginning concentration of PCBs. The “post” samples are the final samples taken from the sample jars at the end of the experiment, after fungal growth. This assessment included estimating the starting concentration of total PCBs in each jar, before fungal growth. This estimation was calculated by using the baseline samples total PCB levels, and the weights of vector waste that went into the sample jars. A summary of the results as well as the variables used to estimate the total PCBs is listed in Table 2. The results are also shown in Figure 1.

The total starting mass of PCBs in the sample jars was calculated using the results from the baseline samples and the following methods:

- The dry mass (M_d) was determined for each material (hydrated sawdust, vector waste, and myceliated sawdust) using Equation 1 along with the respective moisture content (MC) and the wet weight of the material (M_w).

Equation 1

$$MC = \frac{M_w - M_d}{M_w} \times 100\%$$

- The mass of PCBs (M_{PCB}) was determined for each material by multiplying the dry mass (M_d) of each material by the average total PCBs measured in the baseline sample as shown in equation 2.

Equation 2

$$M_{PCB} = M_d \times C_{PCB}$$

- The total mass in each jar was calculated by summing the mass of PCBs of all materials in the jar

Equation 3

$$M_{T-PCB} = M_{PCB-HSD} + M_{PCB-MSD} + M_{PCB-VW}$$

- The concentration of total PCBs for each jar was calculated by dividing the sum of total PCBs by the total dry mass of all the materials in the jar

Equation 4

$$\frac{M_{T-PCB}}{M_{d-MSD} + M_{d-VW} + M_{d-HSD}}$$

- Finally, the estimated change in Total PCB concentrations between the baseline sample and the post samples was estimated using equation 5.

Equation 5

$$\%C_{Change} = \frac{C_{PCB-Baseline} - C_{PCB-Post}}{C_{PCB-Baseline}} \times 100\%$$

The moisture content of the myceliated saw dust was only measured for one sample. The dry mass of myceliated sawdust for each jar was calculated assuming that the moisture content was the same for each species of fungi.

The Number 1 jars had an equal amount of vactor waste as the control jars, allowing a direct comparison of PCB concentrations to be made. The other jars had less vactor waste than the control jars, not allowing for a direct comparison. For this reason, the PCB concentrations of only the Number 1 Jars are discussed. (Number 1 Sample jars of *Lentinula edodes var bellweather* and *Trametes versicolor var. black* were not selected for sampling, so these species are not represented in this discussion.) As noted in the shaded rows of Table 2, five out of six Number 1 jars that were sampled showed a decrease in PCB concentration. These results suggest that when grown in certain concentrations of sawdust and vactor waste, the fungi *Pleurotus ostreatus var brat*, *Stropharia ruggosoannulata*, *Grifola frondosa var olga*, *Pleurotus djamor*, and *Pleurotus populinus CA creek*, appear to reduce total PCBs. Some key observations are as follows:

- The sample with the largest reduction in PCB concentration was the Number 1 jar of *Pleurotus ostreatus var. brat* (P. Ost. Brat), which had a total PCB reduction of 55.18%. This particular fungus is a cultivated variety of the “Pearl Oyster Mushroom”; a gourmet edible known for its vigorous growth and ability to grow on a wide variety of substrates. *Pleurotus ostreatus* is native to temperate and subtropical forests around the globe, and can be found growing on a wide variety of dead or dying deciduous woods.
- The sample with the second largest reduction in PCB concentration was the Number 1 jar of *Stropharia ruggosoannulata* (SRA), which had a total PCB reduction of 50.08%. This fungus is a gourmet edible known as the “Garden Giant”, known for its ease of outdoor cultivation. In North America, it is common east of the Great Plains, occasionally found in Washington and BC Canada, and is often found in woodchips and gardens, or along stream banks.

The results of the comparison between baseline samples and all final samples indicate that the largest reduction in total PCBs was by 55%, and for the Number 1 jars, the greatest increase in total PCBs was 25%. Potential explanations for PCB reduction in the jars are fungal degradation, degradation by indigenous microbes present in the raw vactor waste (Passatore et al, 2014.), volatilization, or other unknown reasons. It is unclear how PCB concentrations could have increased in some jars. This increase could potentially be explained by the degradation of higher molecular weight PCB congeners into several smaller molecular weight congeners, thus increasing the total PCB concentration.

Further and more specific testing is necessary to determine what specific PCB congeners are present before and after fungal degradation. Grain and sawdust growth media was tested at the beginning of the study, showing very low levels of PCBs (see Table 2). Materials that were not tested include the live fungal cultures themselves, and the agar media. These media could have potentially contaminated the final samples, but since it is

not consistent across the board this is unlikely. Dr. Rodenburg emphasized that total PCB calculations are notoriously variable from sample to sample, and for this reason totals calculations are often not representative. Measuring total PCBs is an important starting point in determining if fungi are capable of degrading them, but it is clear that further experiments would need a greater focus on which PCBs are being degraded and what the breakdown products of this degradation are.

It is also worth noting that the concentration of total PCBs measured in the control samples was about half the concentration as the baseline vector waste sample. (The control samples contained either vector waste only, or vector waste plus hydrated sawdust, and they were exposed to the same conditions as the sample jars.) The results suggest that the total PCBs may have been reduced by placing and incubating raw vector waste in a jar for the testing period without adding cultivated fungi. One potential hypothesis for this reduction is that biological activity could have reduced PCB concentrations in the control jars. Previous studies have found indigenous microbes can reduce PCB concentration in contaminated soils and sediments during laboratory incubation assays (Passatore et al, 2014.)

It is important to note the vector waste was not sterilized, and thus inevitably contained living organisms (particularly micro-organisms such as bacteria and fungi). Living organisms were present in vector waste that was stored in the refrigerator (mycelium), as well as in the control jars in the incubation room (mycelium and germinating plant seeds). It is also important to note that most micro-organisms are not visible to the naked eye, and it is very likely that in addition to the observed activity, there was also unobserved biological activity present in the jars. However, because control jars were included for all samples, it is unlikely that differences in micro-organism activity between jars could account for the differences in PCB concentrations.

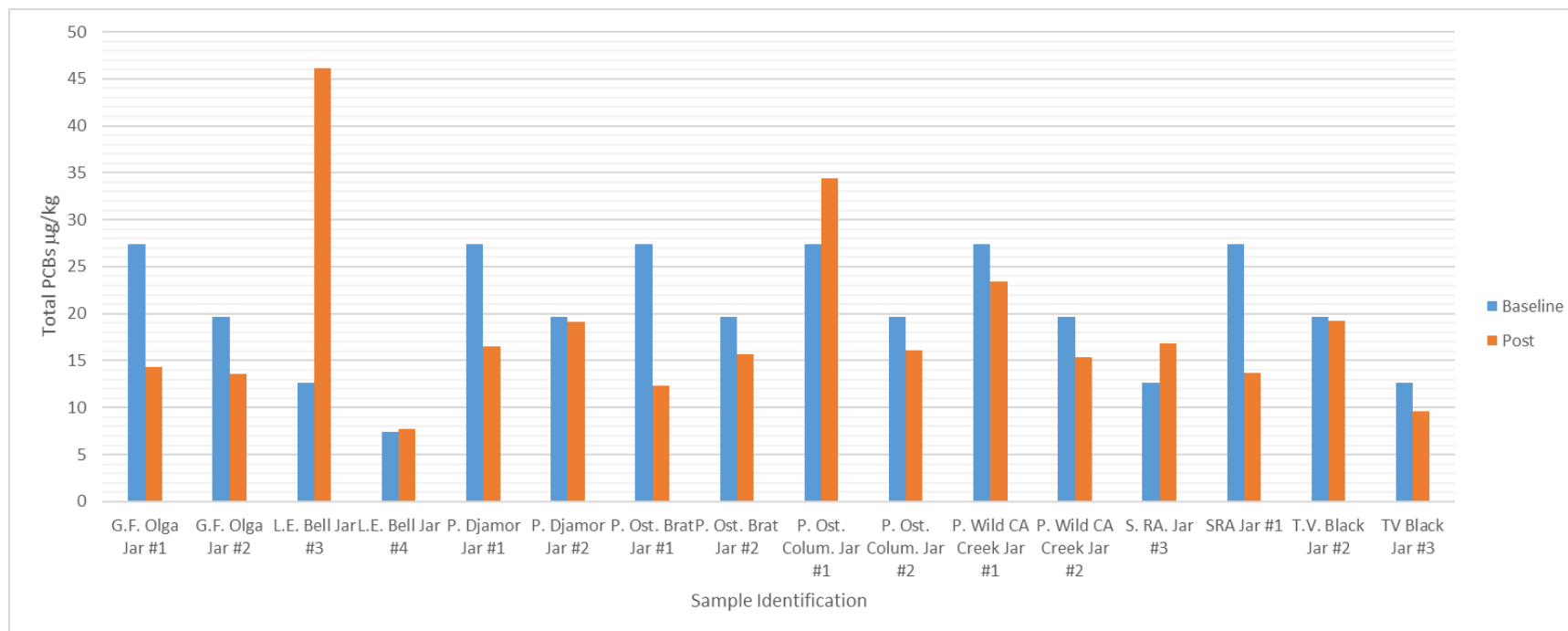


Figure 1. Comparison of Estimated Baseline to Measured Post Total PCB Concentrations

Table 2. Summary of Variables for Total PCB Comparison

Sample ID	Sample Size (n)	Moisture Content	Wet Weight (g) HSD/VW/MSD	Baseline Total PCBs (ug/kg or ppb) Estimated	Post Total PCBs (ug/kg or ppb) Measured	Estimated Change ¹ in Total PCBs (%)
Myceliated Saw Dust (MSD)	0	70.4%	N/A	0.13	NT	N/A
Hydrated Saw Dust (HSD)	2	68.70%	N/A	0.49	NT	N/A
Vactor waste (VW)	4	16.70%	N/A	37.40	NT	N/A
G.F. Olga Jar #1	1	52.29%	100/50/50	28.28	14.30	47.89%
G.F. Olga Jar #2	2	51.11%	75/50/50	20.48	13.60	30.70%
L.E. Bell Jar #3	1	69.50%	87.5/25/50	13.30	46.10	-265.83%
L.E. Bell Jar #4	1	73.87%	94/12.5/50	7.93	7.73	-3.56%
P. Djamor Jar #1	1	54.20%	100/50/50	28.28	16.50	39.87%
P. Djamor Jar #2	1	65.24%	75/50/50	20.48	19.10	2.68%
P. Ost. Brat Jar #1	1	44.70%	100/50/50	28.28	12.30	55.18%
P. Ost. Brat Jar #2	1	54.85	75/50/50	20.48	15.70	20.00%
P. Ost. Colum. Jar #1	1	49%	100/50/50	28.28	34.40	-25.36%
P. Ost. Colum. Jar #2	1	59.56%	75/50/50	20.48	16.10	17.97%
P. Wild CA Creek Jar #1	1	64.13%	100/50/50	28.28	23.40	14.73%
P. Wild CA Creek Jar #2	3	61.20%	75/50/50	20.48	15.38	21.66%
S. RA. Jar #3	1	66.28%	87.5/25/50	13.30	16.80	-33.32%
SRA Jar #1	1	42.38%	100/50/50	28.28	13.70	50.08%
T.V. Black Jar #2	1	67.39%	75/50/50	20.48	19.20	2.17%
TV Black Jar #3	1	71.18%	87.5/25/50	13.30	9.60	23.82%
Vactor waste + Sawdust Control	1	20.68%	100/50/0	NT	18.20	N/A
Vactor waste Control	1	26.46%	100/0/0	NT	15.90	N/A

1. A positive number denotes a decrease in total PCBs and a negative number indicates an increase in PCBs.
2. NT= not tested
3. Shaded boxes indicate #1 Sample jars and Controls
4. ug/kg (micrograms per kilogram) = ppb (parts per billion)

Conclusion:

The pilot study tested whether fungi could survive and grow in vactor waste, and whether the fungi were able to degrade PCBs. It was observed that all eight varieties of fungi survived and grew in vactor waste. There was a statically significant decrease in some PCB congeners, particularly those containing “ortho-chlorines”.

Further research:

The fungi showed no signs of toxicity while growing in 2% vactor waste-spiked media, as evidenced by the lack of noticeable difference in growth between the vactor waste-spiked dishes and the control dishes. An important future study would be to grow the fungi in increasing amounts of vactor waste to determine at what level (if any) it becomes toxic. Additionally, this would allow for testing amounts of PCBs from these samples to determine if the ability of the fungi to degrade them changes depending on the concentration they are grown in. Furthermore, growing these fungi on several more generations of vactor waste-spiked petri dishes, increasing the amount of vactor waste each generation, could potentially 'train' the fungi to digest vactor waste more effectively. Thus, populations of 'trained' fungi could potentially be introduced to existing vactor waste to degrade PCBs.

It would be pertinent to repeat the study for longer time periods to determine if degradation continues. Specifically, this would address the issue of whether larger PCB congeners are being degraded to smaller ones, and if fungi are able to further degrade smaller congener PCBs to non-harmful breakdown products. It is possible that any smaller congener PCBs that were accumulated were beyond the ability of the fungi to degrade. It is equally possible, however, that further breakdown of smaller congener PCBs would have occurred if the study were of a longer duration. Further studies are clearly needed to distinguish between these two possibilities.

Since higher molecular weight PCB congeners were significantly decreased in this study, future studies spiking fungi with these high molecular weight congeners in large doses would be informative. If the fungi are able to degrade elevated amounts of high molecular weight PCB congeners, studying the byproducts of degradation would be facilitated because they would be present in larger amounts. This would allow for more precise measurement of the breakdown products. Breakdown products could also be introduced to a new round of fungi to determine if they can be degraded further by the same organism.

A potential confounding factor in this study is the sawdust media the fungi were grown on. Since many of these fungi digest wood, it is possible that, with sawdust as a food source, they preferentially digested the sawdust before the PCBs. It would be interesting to observe the behavior of the fungi when they are partially "starved" of their preferred food source. Additionally, this would allow for testing the ability of fungi to degrade PCBs in other highly contaminated sources, such as "biosolids" from the city's Water Reclamation Facility.

Here we have provided compelling evidence that certain, easily cultivatable forms of fungi are able to degrade highly toxic forms of PCBs from vactor waste. Future studies into this promising area would include quantification of the specific breakdown products

of this PCB degradation, and further investigation into the extent of the ability of these fungi to thrive in toxic conditions and continue to degrade harmful byproducts to non-harmful biological "waste".

References:

- Boon, Meer, Allchin, Law, Klungsoyr, Leonards, Spliid, Storr-Hansen, McKenzie, Wells. 1997. Concentration-Dependent Changes of PCB Patterns in Fish- Eating Mammals: Structural Evidence for Induction of Cytochrome P450. *Archives of Environmental Contamination and Toxicology* 33:298-311.
- Cvancarova, Kresinova, Filipova, Covino, Cajthaml. 2011. Biodegradation of PCBs by ligninolytic fungi and characterization on the degradation products. *Chemosphere*.
- Dept of Ecology. 2014. Polychlorinated Biphenyls (PCBs) in General Consumer Products. Publication No. 14-04-035
- Faroon, Keith, Smith-Simon, and De Rosa. 2003. *Concise International Chemical Assessment Document 55- Polychlorinated biphenyls: human health aspects*. Geneva: Published under the joint sponsorship of the United Nations Environment Programme, the International Labour Organization, and the World Health Organization, and produced within the framework of the Inter-Organization Programme for the Sound Management of Chemicals.
- G.F. Leatham, T.J. Griffin. 1984. Adapting liquid spawn *Lentinus edodes* to oak wood. *Applied microbiology and biotechnology* 20 issue 5: 360-363.
- Harvey, Chelsea. 2017. Scientists discover pollution 10,000 meters below the ocean's surface in the Mariana Trench. *Washington Post*
- Ichiro Kamei, Shigenori Sonoki, Koichi Haraguchi & Ryuichiro Kondo. 2006. Fungal bioconversion of toxic polychlorinated biphenyls by white-rot fungus, *Phlebia brevispora*. *Appl Microbiolgy and Biotechnology*.
- Kubatova A., Erbanova P., Eichlerova I., Homolka L., Nerud F., Sasek V. 2000. PCB congener selective biodegradation by the white rot fungus *Pleurotus ostreatus* in contaminated soil. *Chemosphere* 43: 207-215
- McCoy, P. 2016. *Radical Mycology: A Treatise On Seeing and Working With Fungi*. Portland: Chthaeus Press.
- Passatore, Rossetti, Juwarkar, Massacci. 2014. Phytoremediation and bioremediation of polychlorinated biphenyls (PCBs): State of knowledge and research perspectives. *Journal of Hazardous Materials* 278: 189-202.
- Public Health Service Agency for Toxic Substances and Disease Registry. 2000. *Toxicological profile for polychlorinated biphenyls (PCBS)*. U.S. Department of Health and Human Services.
- Singh H. 2006. *Mycoremediation: fungal bioremediation*. Wiley: Hoboken.
- Spokane River Forum. 2009. *Toxic Chemicals and Heavy Metals in the Spokane River- a Public Guide*. WA State Department of Ecology.

Stamets, Paul. 2000. *Growing Gourmet and Medicinal Mushrooms*. Ten Speed Press.

United States Environmental Protection Agency, 2017. Managing Remediation Waste From Polychlorinated Biphenyls (PCBs) Cleanups.

Yuefen Yin, Junhui Guo, Li Zheng, Li Tian, Xiaoru Wang, 2011. Capability of polychlorinated biophenyl (PCBs) degrading fungi segregated from sediments. *Springer Science+Business Media B.V. World Journal of Microbiology and Biotechnology*.

Appendices

Appendix A: Background

The Washington State Department of Health released the Spokane River Fish Advisory in 2012, which stated

“The fish consumption advisory for the Spokane River due to PCBs has been expanded and is for the general public, especially women who are or might become pregnant, nursing mothers, and young children. Health officials recommend that no fish taken from the Idaho border to Upriver Dam be eaten. Largescale sucker caught between Upriver Dam and Nine Mile Dam should not be eaten; all other species on this stretch of the river should be limited to one meal per month. For Long Lake (Spokane Lake) largescale sucker and brown trout should be limited to one meal per month.

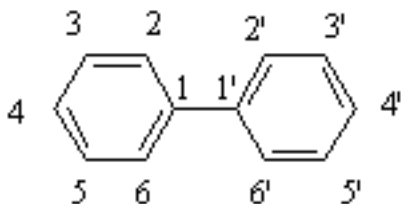
Fish heads and entrails from any fish for the entire length of the Spokane River should not be eaten; fish fillets should be eaten instead of the whole fish. Removing the fat and skin from fish before cooking reduces exposure to PCBs and other contaminants that collect in the fat of fish. PCBs are long-lasting chemicals that are found worldwide. They can cause behavior and learning deficits in children exposed in the womb, so meal limits of certain fish are especially important for women of child-bearing age and young children. Banned since 1977, PCBs were used as insulating fluid in electrical transformers, lubricants, and hydraulic fluids.

State health officials encourage all Washingtonians to eat at least two fish meals per week as part of a heart healthy diet in accordance with American Heart Association recommendations.”

learn more about the Spokane River fish advisory and other fish consumption advisories, go to (www.doh.wa.gov/fish/) on the state health department Web site.

PCBs (polychlorinated biphenyls)

Polychlorinated biphenyls, or PCBs, are a group of toxic human-made chemicals that are either oily liquids or solids, and appear colorless or light yellow. They have no known odor or taste, and some can volatilize into the air as vapor. PCB molecules consist of two phenyl rings linked by a single carbon–carbon bond, with 1 to 10 of the hydrogen atoms replaced with chlorines. In the following figure, numbers 2-6 represent possible locations for hydrogen or chlorine atoms to bond.



Molecular structure of a PCB molecule, source: INCHEM.
<http://www.inchem.org/documents/cicads/cicads/cicad55.htm#2.0>

There are 209 possible combinations of chlorine to hydrogen bonding patterns, each resulting in a different PCB molecule. These 209 types of PCBs are referred to as “congeners”, and they vary in toxicity and behavior in the environment (Faroon, et.al, 2003).

There are no known naturally occurring PCBs, rather they are all from human production (U.S. DHHS, 2000). PCB production began in 1929, for use in electrical transformers and capacitors, construction materials, hydraulic machinery, and other materials. The physical and chemical properties of PCBs made them attractive as insulating fluids, lubricants, plasticizers, surface coatings, inks, adhesives, pesticide extenders, paints, and microencapsulation of dyes for carbonless duplicating paper (Faroon, et.al, 2003). They were also used extensively in caulking compounds to improve durability, flexibility, and adherence to other building materials. (Dept of Ecology. 2014) PCBs are generally inert, resistant to both acids and alkalis, as well as to temperature (U.S. DHHS, 2000). Although heat resistant, they are combustible; the by-products being more hazardous than the PCBs themselves. These resulting byproducts can include hydrogen chloride, polychlorinated dibenzodioxins (PCDDs), and polychlorinated dibenzofurans (PCDFs) (U.S. DHHS, 2000). These oily chemicals are hydrophobic: relatively insoluble in water, and lipophilic: readily binding to fats (U.S. DHHS, 2000).

By the 1970s, the toxicity of PCBs became widely known, and in 1977 PCB production in the US was halted (U.S. DHHS, 2000). Human health effects linked to PCB exposure include decreased sperm motility, fetal growth rate, and development, decreased neurological functions in children, and increases in cancers of the digestive system (especially liver cancer) and malignant melanoma (Faroon, et.al, 2003).

Monsanto Corporation was the largest producer of PCBs in the USA, under the trade name “Aroclor” (U.S. DHHS, 2000).

Exposure/ Environmental behavior of PCBs

Between when production began in 1929, and when they were banned in 1977, PCBs ended up in the environment via many pathways. Leaks from transformers and capacitors, accidental spills, fires, placement in landfills, dumping, etc, all contributed to pollution (U.S. DHHS, 2000).

Inevitably, even after intentional production of PCBs ceased, the pre-existing chemicals still remained, whether in equipment, landfills, or already in soil, air and water. Decades later these “legacy” PCBs still continue to enter the environment via burning of waste, illegal/ improper disposal of PCB containing material, poorly maintained hazardous waste sites, etc. In addition, recent testing has revealed that PCBs are present in a myriad of *new* products, as an “inadvertent” byproduct to the production process. (Dept of Ecology, 2014) Products that contain commercial pigments often contain PCBs.

Once in the environment, PCBs sorb strongly to soils, and often bioaccumulate in the fatty tissues of animals. They are hydrophobic, so do not dissolve easily in water. PCBs can persist in the environment for decades without degradation.

The Spokane River, which flows from Lake Coeur d’Alene, through the Spokane metropolitan area, the Spokane Indian Reservation, and into the Columbia River, has elevated levels of PCBs in the water, sediment, and fish. This is an exceedingly

challenging issue. As previously discussed, PCB sources are diverse and still misunderstood. Conventional clean-up and remediation methods often require expensive industrial equipment, and focus on moving the chemicals from one place to another, or trapping the chemicals in place (Spokane River Forum, 2009).

Appendix B. Analytical Testing

Baseline testing:

Samples of the following were sent to a laboratory for analytical testing. Table B-1 includes a summary of the parameters tested, the standard testing methods, the laboratory that conducted the testing, and the number of samples tested. Table B-2 provides a summary of the analytical testing that was conducted on the baseline samples. The post samples were only analyzed for PCBs and Table 1 includes a summary of the number of the post samples collected from the jars. The laboratory results from both the baseline and post testing are located in Appendix E.

- Raw Vector waste (from one of the collected jars)
- Hydrated Sterilized Rye Grain
- Hydrated Sterilized Alder Sawdust

Table B-1: Testing Parameters and Methods

Parameter	Standard Testing Method	Volume Required	Sample Container	Holding Time	Preservation	Laboratory	Number of Samples	Estimated Cost per Sample
PCB Congeners ¹	EPA 1668	Fill 4 oz jar	4 oz glass jars	28 days (freeze if longer)	<6°C	Pacific Rim	3 vector waste, 2 grain, 2 wood chips	\$725
Total Petroleum Hydrocarbons (TPH) – Diesel Range	NWTPH-Dx	Fill 8 oz jar	8oz glass jars	14 days	<6°C	Test America	1 vector waste	\$65
Total Petroleum Hydrocarbons (TPH) – Gasoline Range	NWTPH-Gx	5 g	40 mL VOA Vial	14 days	Methanol, <6°C	Test America	1 vector waste	\$44
Nitrate-Nitrite	4500-NO ₃ -E-00	Fill 8 oz jar	8 oz glass jar	7 days	<6°C	RPWRF	1 vector waste	
Total Phosphorus	SM 4500-P E-99	Fill 8 oz jar	8 oz glass jar	28 days	<6°C	RPWRF	1 vector waste	
Particle Size Distribution including Hydrometer Analysis	ASTM D422	Fill 8 oz jar	8 oz jar	N/A	<6°C	Test America	1 vector waste	\$150
pH	SM 4500-H+ B-00	Fill 8 oz jar	8 oz glass jar	<24 hours	<6°C	RPWRF	1 vector waste	
Total Recoverable Metals (Ag, Al, As, Be, Cd, Cr, Cu, Mo, Ni, Pb, Sb, Se Tl, Zn)	EPA 200.7	Fill 8 oz jar	8 oz glass jar	6 months	<6°C	RPWRF	1 vector waste	
Pesticides	EPA 8081	Fill 8 oz jar	8 oz glass jar	14 days	<6°C	Test America	1 vector waste	\$99
Total and Volatile Solids	SM 2540 B-97	Fill 8 oz jar	Fill 8 oz jar	7 days	<6°C	RPWRF	1 vector waste	
								\$5,433

1. Reporting limits: 0.01 – 0.1 g/kg per congener

Table B-2: Summary of Baseline Analytical Testing Conducted

Parameter	Method	Laboratory	Baseline		
			Vector waste n=4	Hydrated Grain n=2	Hydrated Saw Dust n=2
209 PCBs	EPA 1668C	Pacific Rim	✓	✓	✓
Total Solids	SM-2540 B-97	RPWRF	✓		
Volatile Solids	SM-2540 B-97	RPWRF	✓		
NO ₃ /NO ₂ -N	SM-4500-NO ₃ E-00	RPWRF	✓		
pH	SM-4500-NO ₃ E-00	RPWRF	✓		
Total Recoverable Ag	EPA 200.7	RPWRF	✓		
Total Recoverable Al	EPA 200.7	RPWRF	✓		
Total Recoverable As	EPA 200.7	RPWRF	✓		
Total Recoverable Ba	EPA 200.7	RPWRF	✓		
Total Recoverable Be	EPA 200.7	RPWRF	✓		
Total Recoverable Ca	EPA 200.7	RPWRF	✓		
Total Recoverable Cd	EPA 200.7	RPWRF	✓		
Total Recoverable Cr	EPA 200.7	RPWRF	✓		
Total Recoverable Cu	EPA 200.7	RPWRF	✓		
Total Recoverable Mg	EPA 200.7	RPWRF	✓		
Total Recoverable Mo	EPA 200.7	RPWRF	✓		
Total Recoverable Ni	EPA 200.7	RPWRF	✓		
Total Recoverable Pb	EPA 200.7	RPWRF	✓		
Total Recoverable Sb	EPA 200.7	RPWRF	✓		
Total Recoverable Se	EPA 200.7	RPWRF	✓		
Total Recoverable Tl	EPA 200.7	RPWRF	✓		
Total Recoverable V	EPA 200.7	RPWRF	✓		
Total Recoverable Zn	EPA 200.7	RPWRF	✓		
Total Phosphorus	SM 4500-P E-99	RPWRF	✓		
Particle Size	ASTM D422	Test America	✓		✓
Volatile Petroleum Products	NWTPH-Gx	Test America	✓		
Semi-Volatile Petroleum Products	NWTPH-Dx	Test America	✓		
Organochlorine Pesticides	EPA 8081B	Test America	✓		

Representativeness of the Vector waste

The PCB concentration of the vector waste used in this study was compared to previously tested samples of vector waste. The reason was to assess whether the PCB concentration in this vector waste was typical, or representative, of PCB concentrations in City of Spokane vector waste. The comparison focused on the results reported in the City of Spokane's 2015 PCB Characterization Report from samples collected at the WSDOT Pines and the City of Spokane Decant Facilities. A summary of the data compared is noted in Table B-3.

Except for the sample collected on April 16, 2015, the total PCB concentrations in vector waste were slightly lower (3.06 to 11.9 ppb) compared to the average concentrations measured in the samples collected for this study on 6/2/2017. The total PCB concentration in the 4/16/2015 sample (399 ppb) is consistent with samples collected in catch basins from more industrial areas in the city. Whereas the concentration in the 4/17/2015 sample (11 ppb) is consistent with concentrations from residential catch basins. The samples collected from the Pines Facility were consistently lower than the other samples. The City of Spokane report indicated that the source of the Pines samples could not be determined based on the total PCB concentration.

The average total PCB concentration measured in the baseline vector waste samples collected during this study was 37.4 ug/kg. This concentration is between the high and low concentration previously measured and based on the City's 2015 report, the concentration is closer or more representative of the concentrations expected in residential catch basins.

Table B-3. Comparison of Total PCB Concentrations in Vector waste Measured Prior to this Study

Sample	City of Spokane	City of Spokane	Pines Facility	Pines Facility	Pines Facility DUP	City of Spokane ^{1,2}
Collection Date	4/16/2015	4/17/2015	4/22/2015	4/22/2015	4/23/2015	6/2/2016
Total PCBs (ug/kg or ppb)	399	11.9	5	4	3.06	37.4

1. These results represent the average of four samples with a standard deviation of 5.30 ug/kg.
2. Samples collected for this study.

Appendix C: Methods

Task 1: Collect vactor waste

Vactor waste for this study was collected from the City of Spokane decant facility, 2813 E. Ferry Ave. Using a shovel and taking from several locations of the pile, roughly 20 gallons of vactor waste was collected. A portable cement mixer was used to homogenize the material as best as possible (Figure C-1). The homogenized vactor waste was loaded into six 2.5 gallon glass jars and two quart glass jars (all brand new) by hand with nitrile gloves. All jars were closed with lids, and immediately transported to the City of Spokane's Wastewater Laboratory. The 2.5 gallon jars were placed into refrigeration, and the quart jars were sterilized in the lab's autoclave.



Figure C-1 Collecting Vactor waste from City of Spokane Decant Facility 2-June-2016

Task 2: Preparing agar media

Step A: Making nutrified malt agar media

Nutrified malt agar media was mixed and sterilized in two erlenmeyer flasks, using the following media recipe and method:

500mL H₂O
10 g agar agar
10 g malt
1 g nutritional yeast

- 1) Weigh dry ingredients individually, place into autoclavable glass bottle
- 2) Measure 250mL water using graduated cylinder, add to bottle
- 3) Cover all bottle mouths with tin foil, load all into pressure cooker
- 4) sterilize bottles and scalpel in pressure cooker at 15 psi for 45 mins (following the All American Pressure Cooker/Canner Manual: <http://fantes.net/manuals/all-american-pressure-cooker-manual.pdf>)
- 5) pour hot, sterile media from bottles into petri dishes using sterile technique (described here: <http://vlab.amrita.edu/?sub=3&brch=73&sim=212&cnt=1>)
 - a) in laminar flow, pour media into petri dishes. Stack when cool and cover stack with original plastic petri dish sleeve. Leave undisturbed in laminar flow to cool and set overnight.

A total of 48 nutrified malt agar petri dishes were made.

Step B: Making vactor waste spiked media

Vactor waste spiked media (nutrified malt agar media spiked with 2% sterilized vactor waste) was mixed and sterilized in four clean, designated glass bottles, using the following media recipe and method. The small batch size, as well as swirling in between pouring each dish, was recommended by mycologist Alex Taylor, to encourage even suspension of Vactor waste particles in the media.

5 g malt extract

5 g agar agar

0.5g nutritional yeast

1.05g dry vactor waste (pulverize with mortar and pestle as fine as possible)

250mL water

- 1) Weigh dry ingredients individually, place into autoclavable glass bottle (four bottles total)
- 2) Measure water using graduated cylinder, add to bottle
- 3) Cover all four bottle mouths with tin foil, wrap scalpel in tin foil, and load all into pressure cooker
- 4) sterilize bottles and scalpel in pressure cooker at 15 psi for 45 mins (following the All American Pressure Cooker/Canner Manual: <http://fantes.net/manuals/all-american-pressure-cooker-manual.pdf>)
- 5) pour hot, sterile media from bottles into petri dishes using sterile technique (described here: <http://vlab.amrita.edu/?sub=3&brch=73&sim=212&cnt=1>)
 - a) in laminar flow, pour media into petri dishes, swirling bottle in between each pour to suspend VW particles into media. Stack when cool and cover stack with original plastic petri dish sleeve. Leave undisturbed in laminar flow to cool and set overnight.

A total of 48 vactor waste spiked petri dishes were made, for both generations 1 and 2.

Step C: Transferring fungal mycelium to nutrified agar media and vactor waste spiked media petri dishes, Generation 1

- 1) Using sterile technique in laminar flow, transfer each fungal species to 3 nutrified agar media, and to 3 vactor waste spiked media petri dishes with stainless scalpel.
 - a) On each dish, carefully label the following: “species & strain”, “nut-ag” (nutrified agar media) OR “VW” (vactor waste spiked media), “G1” (generation 1), “date”. Number each dish in species group (6 petris total per species: nutag i, nutag ii, nutag iii, vw i, vw ii, vw iii)
 - i) For example, a dish might have the following label: “GF Olga, nut-ag ii, G1, 16-June-2016”
 - b) transfer cutting of mycelium with scalpel (this is “G1 Day 0”)
 - c) tape dish shut
 - d) stack dishes, cover stack of 10 with original sterile petri dish sleeve
- 2) Place all transferred dishes in incubation room at 75 degrees F. (48 total for G1)

Step D: Observe growth on G1 “VW” and “nut-ag” dishes

- 1) On each petri dish lid, outline the edges of the transferred cutting with fine tip sharpie. Using the center of cutting as the starting point, draw X and Y axis (at a 90 degree angle) to the edges of dish.
- 2) Record the following on days 4 and 7:
 - a) Mark edge of mycelial growth at each axis (4 directions) with sharpie, measure in millimeters and record in scientific journal. (see growth chart)
 - b) take photo with ruler in frame, for visual documentation.
 - c) note visual observations in scientific journal (texture, density of mycelium, thin or thick, etc)
- 3) prepare to transfer before mycelium reaches edge of dish (taking a cutting of the actively growing outer edge of mycelium is ideal; growth slows after it reaches the edge of its food source)

Step E: Transfer fungi to “nut-ag” and vector waste dishes, generation 2

- 1) For each species: choose 1 “nut-ag” dish and 1 vector waste dish to transfer that meets the following criteria
 - a) no contamination (no visible mold, bacteria, etc)
 - b) fastest growth in category (ex: TV black nutag i, ii, or iii)
 - c) preferably, mycelium has not reached edge of dish
- 2) Transfer chosen vector waste culture to 3 new vector waste petri dishes in laminar flow using sterile technique.
- 3) Transfer chosen ‘nutag’ culture to 3 new ‘nutag’ dishes in laminar flow using sterile technique.
- 4) On each dish carefully label the following: “species & strain”, “nut-ag” (i, ii, iii) OR (VW) vector waste (i, ii, iii), “G2” (generation 2), “date”
- 5) Transfer cutting using sterile technique (this is “G2 Day 0”)
- 6) Tape dish shut, stack, cover stack with original sleeve.
- 7) Place all transferred dishes in incubation room at 75 degrees F. (48 total for G2)

Step F: Observe growth on G2 vector waste and “nut-ag” dishes

- 1) On each petri dish lid, outline the edges of the transferred cutting with fine tip sharpie. Using the center of cutting as the starting point, draw X and Y axis (at 90 degree angle) to the edges of dish.
- 2) Record the following on days 2, 4, and 6 (amended based on speed of growth G1)
 - a) Mark outer edge of mycelial growth along each axis (4 directions), measure in millimeters and record in scientific journal
 - b) take photo with ruler in frame, for visual documentation
 - c) note any visual observations in scientific journal (texture, density of mycelium, thin or thick, etc)
 - d) prepare to transfer before mycelium reaches edge of dish

Task 3: Grow acclimated cultures on grain; “grain spawn”

Hydrated sterilized grain and hydrated sterilized sawdust are typical bulk media for cultivating fungi. Whole organic rye grain was obtained in bulk from Huckleberry's Natural Market in Spokane, WA for this study. Alder sawdust was acquired as waste shavings from a local company in Spokane, "Surewood Custom Cabinets". Glass quart canning jars with custom filter lids were used for pressure cooking/ sterilizing substrates, and for growing the mycelium inside of. Growth measurements were made while growing mycelium on the petri dishes, sterilized rye grain, and sterilized alder sawdust, which can all be found in Appendix D Measurements.

Step A: Make filter lids

Living mycelium needs to breathe, requiring oxygen and releasing carbon dioxide as waste. The following creates an effective filter, allowing respiration but keeping contaminants/ competing organisms out.

- 1) Obtain 16 wide mouth autoclavable plastic jar lids
 - a) These lids will fit onto wide mouth quart canning jars
- 2) Drill one hole (~1cm in diameter) into the center of each lid
- 3) Cover hole with two squares of cloth athletic tape, placing the weave in opposite directions

Step B: hydrate grain (June 27th)

- 1) In large pot, submerge 16.5 cups organic rye grain in water, soak overnight
 - a) 2 jars x 8 species= 16 jars. 1 cup dry grain per jar. Plus 0.5 cups for sample jar

Step C: sterilize grain (June 28th)

- 1) The following day, bring the pot with soaked grains to a boil, then stir continuously for 5 mins while boiling
- 2) Strain hot grains through colander
 - a) Let all water fully drain off
- 3) Remove metal lids of 17 new glass quart canning jars
- 4) Measure out 2 cups hot grain and place into each quart jar, and one cup into the half pint jar. Fit each jar with a filter lid
- 5) cover lids loosely with squares of aluminum foil
- 6) load all jars into pressure cooker
- 7) Sterilize the 17 grain jars, and the scalpel wrapped in foil, for 60-75 mins at 15 PSI in pressure cooker.
- 8) Turn off heat, allow to cool overnight in pressure cooker.
- 9) The half pint jar of sterilized grain was

Step D: transfer cultures from vector waste spike petri dishes to grain (Wed, June 29th)

- 1) The following day, open pressure cooker inside lab room. (Set aside the one small grain jar for analytical testing.)
- 2) For each species, select one "G2 VW" dish that meets the following criteria:
 - a) fastest growth (use growth measurements from Day 2, 4, & 6 to determine)
 - b) no contamination (no visible mold, bacteria, etc)

- 3) Using sterile technique, transfer the selected 'acclimated' culture of each species with stainless scalpel from petri dish to 2 sterilized quart grain jars (16 total) in laminar flow
 - a) Label each jar carefully: "species", "date", "VW i/ ii/or iii". (This is Day 0.)

Step E: Incubate/ monitor

- 1) Incubate all grain spawn jars at 75 degrees F. in incubation room, allowing colonization of grains by mycelium
 - a) Record the following on days 6, 12, 19, 26, 33 (1x per week) in chart
 - b) Quantify approximate percentage of visible mycelial growth on the following areas of jar:
 - i) Upper surface of grain
 - ii) Grain against vertical sides of jars
 - iii) Grain against base of jar
 - c) Quantify density of mycelium:
 - i) Low- Can barely see the threads of mycelium, can see grains unobstructed
 - ii) Moderate- bright white visible mycelium, threads not as well defined/ thicker mass of white, grains partially obstructed from being covered by mycelium, but can still make out individual grains
 - iii) High- grain texture may be visible, but covered completely in white mycelium. Threads not individually visible, but continuous white mycelia 'mat'.
 - d) take photo, for visual documentation
 - e) note visual observations in scientific journal (texture, density of mycelium, thin or thick, etc)
 - f) Note signs/ no signs of contamination

Task 4: Grow acclimated cultures on sawdust; "sawdust spawn"

Step A: sieve alder sawdust

- 1) Use soil sieves & shaker, and retain material between sieves #4 (4.76mm) & #16 (1.18mm).
- 2) Sieve sawdust until 9.5 gallons sawdust retained

Step B: Make filter lids

- 1) Obtain 25 wide mouth autoclavable plastic jar lids
- 2) Drill one hole (~1cm in diameter) into the center of each lid
- 3) Cover hole with two squares of cloth athletic tape, placing the weave in opposite directions

Step C: Hydrate sieved alder sawdust (7-25)

- 1) Measure 60 cups (~3.75 gallons) sieved alder sawdust into clean rubbermaid bin
 - a) Need 5 cups sterilized hydrated sawdust total per species
 - b) make 3 jars (7.5 cups total) per species

- i) in case a jar gets contaminated, there will be one extra jar per species
 - ii) to choose the 2 best/ fastest growing sawdust spawn out of the 3 jars
- c) 3 jars x 8 species= 24 jars total
- 2) Gradually add water to sieved sawdust in Rubbermaid bin, while mixing with new wooden paint stir stick
 - a) Since the sawdust's initial moisture content depends on source/ ambient temp & humidity, hydration formulas/ recipes are not useful.
 - i) Cultivators always achieve proper moisture content of a fungal growth substrate by 'feel' (McCoy, 2016).
 - ii) Sawdust should readily clump and hold its form when squeezed in the hands but no water should drip out or be left standing on hands or in containers.
 - iii) Moisture is absorbed slowly: add water to sawdust in small amounts, mix thoroughly, and allow to sit for 20+ minutes before checking and adding more water if needed.
 - iv) Avoid over-hydrating which can cause standing water/ mycelial suffocation/ anaerobic activity.

Step D: Sterilize sawdust jars. (7-26)

- 1) Measure out and weigh 2.5 cups hydrated sawdust, record weight.
 - a) 2.5 cups hydrated sawdust= 170g
- 2) Weigh out and load 170g hydrated sawdust into each of 25 quart canning jars. Close with filter lids and cover lids with squares of tin foil
 - a) 24 jars for growing mycelium + 1 jar for calculating moisture content
- 3) Close all jars with filter lids, cover lids with squares of tin foil, load into pressure cooker
- 4) Sterilize in pressure cooker for 2 hours at 15 PSI, allow to cool overnight before opening
 - a) 25 jars require two rounds of pressure cooking, as 19 jars maximum fit inside
- 5) Calculate moisture content of extra jar, and record.
 - a) Formula: Moisture content (%)= (A-B)/(B-tare weight) x 100
 - i) A=mass of wet sample + weight of container
 - ii) B=mass of dry sample + weight of container
 - iii) Tare weight= weight of container

Step E: Transfer grain spawn to sawdust (7-27)

- 1) Select one grain spawn jar per species to transfer mycelium from
 - a) Choose jar using following criteria:
 - i) Fastest growth (determined by measurements in grain jar growth charts)
 - ii) Highest density of mycelium (determined by measurements in grain jar growth chart)
 - iii) No visual contamination
- 2) Transfer selected jar
 - a) Using sterile technique in front of laminar flow, distribute grains evenly between 3 jars of sterilized sawdust, labeling carefully with "species", "date", "VW trained".
 - b) Return filter lid to jar after transferring, then shake jar to distribute grains into sawdust as evenly as possible.
- 3) Place all jars in incubation room at 75 degrees F
- 4) Step F: Incubate/ monitor

- 5) incubate inoculated sawdust jars at 75 degrees F in incubation room
- 6) once per week, make the following observations of each jar:
 - a) take photo(s) for visual documentation
 - b) note visual observations in scientific journal using growth measurement chart
- 7) Allow mycelium to fully colonize sawdust (duration depending on strain)

Task 5: Training fungi to vactor waste

Mycelium of each of the eight strains of fungi was grown in petri dishes on sterile vactor waste-spiked media in order to introduce the mycelium to the components present in the vactor waste. Research suggests that fungi can be trained to digest new food sources if introduced to them at an early growth stage (Leatham, 1984). At the same time, the mycelium was also grown on sterile nutrified agar media in petri dishes as a biological control, to assess any growth differences between the two media.

Each species was grown on a group of 6 petri dishes: (3 “vactor waste” dishes and 3 “control” dishes, for two generations (one group of 6, then transferred to another group of 6). During this task, radial growth of each of the 8 fungal species’ mycelium was measured along x & y axes. The axes were drawn onto each petri dish lid, at 90 degree angles, starting at the center of the transferred cutting, with each axis labeled “A”, “B”, “C”, and “D”. Figure C-2 shows an example of mycelium growing on a petri dish during this step (Generation 1, Day #4) with the axes used to take growth measurements.

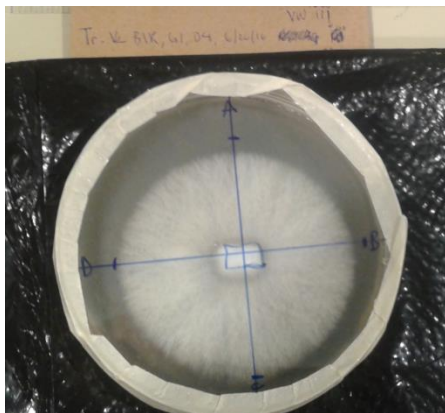


Figure C-2 Task 2 Petri Dish Example with Measurement Axes

Radial growth was measured on each petri dish every 4 days. For the “Generation 1” petri dishes, measurements were first taken on Day #4. The mycelium grew more quickly than expected (see the mycelial growth in Figure C-2, which was on Day #4). By Day #6, many of the fungi had reached the edges of their dishes. Due to the rapid growth of the fungi, growth was measured every 2 days during “Generation 2”. This allowed for more observation time points during the rapid growth. (Please refer to Appendix D Petri Growth Measurement Chart for more information. The fungi showed no difference in growth or signs of toxicity while growing in 2% vactor waste-spiked media.

For each fungal species, the vactor waste-spiked petri dish that contained the fastest growing mycelium was selected. This mycelium was transferred onto sterilized grain,

which was then used for the rest of the experiment. The following were selected for transfer:

- GF Olga VWiii
- LE Bell VWi
- P djamor VWi
- P ost Brat VWii
- P ost columbinus VWi
- P wild CA creek VWi
- SRA VWi
- TV black VWii

Task 3: Grain Spawn & Task 4: Sawdust Spawn

Typical growing methods utilized by cultivators were used to grow out mycelium for this experiment (Stamets, Paul. 2000). Briefly, fungal cultures maintained on agar media in petri dishes are typically grown out on grain spawn, then sawdust spawn. As expected, various growth rates and densities between fungal species were observed. Two species in particular, *Grifola frondosa* and *Lentinula edodes* grew at a much slower rate than the six other fungi. *Pleurotus djamor* had the least dense growth of all, while the other *Pleurotus* species had very dense mycelium. *Trametes versicolor* had the densest mycelium of all the fungi. As expected, since sterile cultivation techniques were carefully used, no contamination was observed in any of the grain or sawdust jars.

The Grain Measurement Chart shows growth measurements the researcher took during mycelial growth on sterilized organic rye grain. Growth was measured visually, as approximate percentages of mycelial coverage on the surface of the grains, and as mycelial density. The “upper” surface is the top most horizontal layer of grains inside the jar, the “vertical” surface is the grain visible through all four sides of the glass jar, and the “base” surface is the grain visible through the bottom of the glass jar. Density was recorded as “i”, “ii”, or “iii”. When the researcher could barely see the threads of mycelium, and could see the grains unobstructed, the density was marked as low, or “i”. When bright white mycelium was visible, mycelial threads were not as well defined and made up a thicker mass of white, and the grains were partially obstructed from being covered by mycelium but still visible as individual grains, the density was marked as moderate, or “ii”. Mycelial growth was marked as high density, or “iii”, when the grain was covered completely in a white mycelial ‘mat’ (meaning mycelial threads not individually visible/ solid white).

The Sawdust Measurement Chart shows growth measurements during mycelial growth on sterilized alder sawdust. The grain jars each had one inoculation point: a cutting from a petri dish dropped onto the top surface of the grain. The sawdust jars each had several inoculation points: a scoop of grain spawn was added to, then shaken and distributed throughout each sterilized sawdust jar. Each of these myceliated grains was a starting place or ‘inoculation point’ for mycelium to grow into the sawdust.

Task 5: Grow fungi in a range of vector waste concentrations

The fungi thrived in media containing 2% vector waste but whether they could survive in higher concentrations was unknown, as toxicity in higher concentrations was possible. Additionally, existing bacteria and fungi could compete with the introduced fungi and

affect their ability to grow and degrade PCBs. Fungi were grown in four concentrations of vector waste (Jars #1, #2, #3, #4) as well as without vector waste (Jar #5).

A range of concentrations of vector waste were made in *P. ostreatus columbinus*, *P. wild CA creek*, and *T. versicolor*, and *P. djamor*, *P. ostreatus brat*, and *S. rugosoannulata*. Jars for *G. frondosa* and *L. edodes* were made two weeks later, since they took longer to colonize the sawdust. Table C-1 shows the amounts of each ingredient added to each jar, the vector waste ranges from 12.5 g to 100 g.

Growth was visible within two days after mixing in vector waste for all fungal species. Table C-2 is a representation of growth measurements of the sample jars in percent colonization, density of the mycelium, and presence of mold if any. In this chart, each jar has a number “% colonization” (percent of the jar colonized by the mycelium), and a category for the density of the mycelium: i being low density, ii medium density, iii high density. Some jars had areas of mycelium of more than one density. (See Appendix C, Table C-2 for more information on growth measurements.) Table C-2 shows the first 2 time points (1 week, and 2 weeks of growth), but a total of 12 time point measurements were taken during the study.

48 petri dishes per generation, 96 total for 2 generations
--

Table C-1 Vector waste spiked jar ingredients (wet weights)

WEIGHTS	Jar #1	Jar #2	Jar #3	Jar #4	Jar #5 (control)	Total for species:
Hydrated sterilized sawdust	50g	75g	87.5g	94g	100g	456.5g
Vector waste (raw)	100g	50g	25g	12.5g	NONE	287.5g
Myceliated sawdust	50g	50g	50g	50g	50g	250g

Step A: Sieve alder sawdust

- 1) Use soil sieves & shaker, and retain material between sieves #4 (4.76mm) & #16 (1.18mm).
- 2) Sieve sawdust until 5.5 gallons sawdust retained

Step B: hydrate sawdust

(following same method as in Task 4, Step C)

- 1) place 5.5 gallons sieved alder sawdust in clean Rubbermaid bin
- 2) Gradually add water to sieved sawdust in Rubbermaid bin, while mixing with new wooden paint stir stick
 - a) Since the sawdust's initial moisture content depends on source/ ambient temp & humidity, hydration formulas/ recipes are not useful.
 - i) Cultivators always achieve proper moisture content of a fungal growth substrate by 'feel' (McCoy, 2016).

- ii) Sawdust should readily clump and hold its form when squeezed in the hands but no water should drip out or be left standing on hands or in containers.
- iii) Moisture is absorbed slowly: add water to sawdust in small amounts, mix thoroughly, and allow to sit for 20+ minutes before checking and adding more water if needed.
- iv) Avoid over-hydrating which can cause standing water/ mycelial suffocation/ anaerobic activity.

Step C: Sterilize sawdust jars.

- 1) Load below measurements of hydrated sawdust into each quart jar, making a group of 5 jars for each species

WEIGHTS for each species	Jar #1	Jar #2	Jar #3	Jar #4	Jar #5
Hydrated sterilized sawdust	50g	75g	87.5g	94g	100g

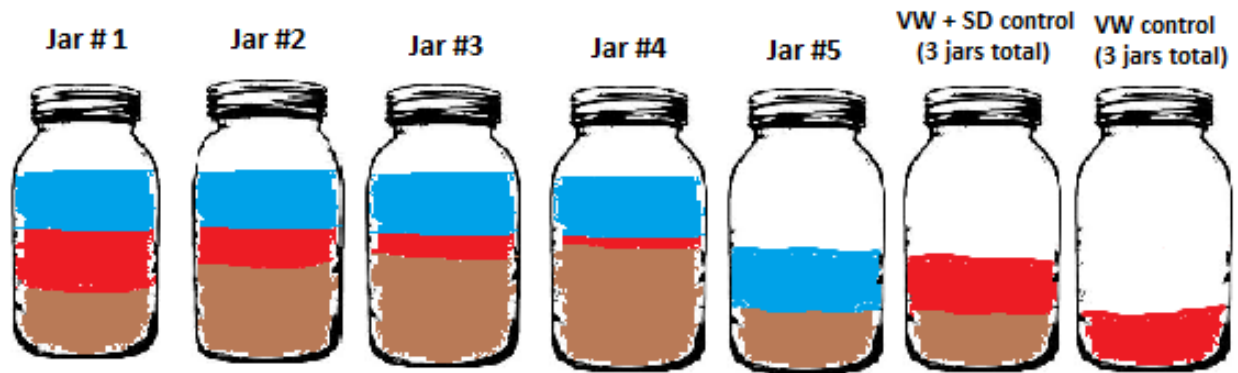
- i) 5 jars x 8 species= 40 jars total
- b) Label each jar carefully with "Jar#" with permanent marker on filter patch lid.
- c) Close with filter lids, cover lids in tin foil to prevent addition of moisture.
- 2) Take 3 additional jars, and load 50g hydrated sawdust into each
 - a) These will be the hydrated sawdust + VW controls (triplicate)
- 3) Load all jars and a stainless spoon wrapped in tin foil into pressure cooker, sterilize for 2 hours at 15 PSI. Allow to cool completely before removal.
 - a) The total of 43 jars will require three rounds of pressure cooking, as a maximum of 19 jars fit inside the pressure cooker

Step D: Create a range of vector waste in sawdust jars

Create a range of vector waste for each species when the mycelium of that species has fully colonized the sawdust jars, at a density of iii (as defined in the growth measurement chart). Do this soon after (within several days) full colonization is reached, as mycelium will start to lose vigor if left too long without more fresh food to consume. Be sure to do this with each species at this same maturity of growth (although it will be on different dates for each species), in order to replicate the scenario as accurately as possible.

- 1) Measure the following weights of raw vector waste into the corresponding sterilized sawdust sample jars.
- 2) Measure the mass of myceliated sawdust (sawdust spawn from previous task) for the corresponding sterilized sawdust jars,
- 3) label carefully with species and date.
- 4) Close each jar snugly with its filter lid
- 5) Shake each jar 20 times, turning upside down and back to mix contents thoroughly.

Each of the eight species of fungi has a group of sample jars, which are Jars#1-#4, and a 'biological control' which is Jar#5. Then there are two separate groups of controls, each containing a total of three jars. The first control contains a mixture of vector waste and hydrated sterilized sawdust, and the second control contains vector waste only.



6) Incubate all jars at 75 degrees F on wire rack in incubation room

Step E: Incubate/ monitor samples

- 1)** Once per week:
 - a)** take photo(s) of each jar for visual documentation
 - b)** note visual observations in chart and insert into scientific journal (percentage of growth, density of mycelium, etc)
 - i)** Low- Can barely see the threads of mycelium, can see grains unobstructed
 - ii)** Moderate- bright white visible mycelium, threads not as well defined/ thicker mass of white, grains partially obstructed from being covered by mycelium, but can still make out individual grains
 - iii)** High- grain texture may be visible, but covered completely in white mycelium. Threads not individually visible, but continuous white mycelia 'mat'.
 - c)** Allow to fully colonize

Task 7: Take samples for analysis.

Step A: Select sampling jars

- 1)** After 91 days of incubation, select 2 jars per species (Jar#1, Jar#2, Jar#3, or Jar#4) based on the following criteria:
 - a)** At least 50% mycelium colonization, or if less, choose the greatest colonization
 - b)** At least some areas of "iii" density, or if less, choose the most dense
 - c)** Favor higher concentrations of vector waste when possible within species
 - d)** After 91 days of growth/ incubation, sample selected sample jars at the riverside wastewater treatment lab, and freeze the rest of the jars of that species (for preservation at 91 growth days).
 - i)** Jars mixed on 8-16 sampled/ frozen on 11-15
 - ii)** Jars mixed on 8-18 sampled/ frozen on 11-17
 - iii)** Jars mixed on 8-31 sampled/ frozen on 11-30
 - iv)** Controls mixed on 8-16, sampled on 11-30 (116 days total)

Step B: Take Samples

Take samples for each species after 91 days of incubation. Samples were taken on three different dates, according to the jar creation dates of the various species. Take careful

notes in lab notebook during/after sampling process: which jars were sampled, procedures, etc (species, jar #, date sample was mixed).

- 1) Gather the following sampling supplies:
 - i) Selected jars
 - ii) Control jars (1 vw only, 1 vw + sawdust)
 - iii) Large stainless steel bowl
 - iv) 4 oz jars (one per sample= 20 jars)
 - v) Acetone (for rinsing)
 - vi) Stir spoon
 - vii) Latex gloves
 - viii) Safety glasses
 - ix) Lab coat
 - x) Permanent marker
- 2) Wear latex gloves, safety glasses, and lab coat
- 3) Under fume hood, rinse clean stainless bowl and spoon with acetone and let air dry.
- 4) Open jar to be sampled, use spoon to loosen contents, pour entire contents into stainless bowl.
- 5) Use spoon to break up material as much as possible, and stir thoroughly to homogenize as best as possible.
- 6) Use spoon to fill a 4oz jar completely with homogenized material.
- 7) Tightly close lid of 4oz jar, and label clearly with species, jar #, sampling date
- 8) Transfer remaining contents from bowl back to original jar, using spoon.
- 9) Wash bowl and spoon thoroughly with hot soapy water, rinse with tap water, then rinse again with DI water.
- 10) Repeat steps 3-9 for each selected jar,
 - a) randomly choose one selected jar to sample in triplicate, and fill a total of three 4oz jars for that sample.
- 11) Print and apply lab label to each jar (City Wastewater Lab).
- 12) Freeze 4oz jars immediately, to store while awaiting the rest of the samples to be taken.
- 13) Freeze all unsampled jars, as well as any sampled jars that still contain material, at TLC Mycology Lab for potential testing in the future.
- 14) Send to Pacific Rim Laboratory for EPA Method 1668 PCB testing.

Task 7: Take samples for analysis.

Each species was sampled after the same number of growing days (91 days) in the vector waste spiked jars. Two sample jars per species were selected for sampling based on specific qualitative assessment criteria. The material from each jar was homogenized, packed into 4 ounce jars, and sent to the lab for PCB analysis. Figure C-3 shows a few sample jars ready for analysis.



Figure C-1 Samples ready for analysis

Empirical Observations: Mold Presence

Mold growth/ competition was an inevitable part of this experiment, since the research team decided to use raw, unsterilized vactor waste.

Visible mold first appeared in some of the *S. rugosoannulata* and *T. versicolor* jars about two weeks after making the samples. The mold continued to grow in these jars, eventually dominating the jars. In these two species, the fungi often formed a dense mycelial edge where it came into contact with the mold in the jar. When this occurred, the mold stayed on one side of this barrier, and the mycelium on the other until the mold overtook the fungi and filled the jar. While the *T. versicolor* jars obviously had competing organisms growing inside, healthy areas of mycelium persisted and became denser over time. *T. versicolor* had the densest mycelium of all the fungi.

After several weeks of mold and mycelium both growing in the jars, the *T. versicolor* mycelium held its colonized space. This was not the case with the *S. rugosoannulata* mycelium. Bright white mycelial 'ribbons' persisted in the moldy jars #1, and #2, but the rest of the substrate was dominated by mold. In jar #3, about half the substrate was colonized by mycelium, and the other half by mold. About two weeks after mixing the vactor waste with *G. frondosa*, Jars #1, #2, #3, & #4 were less than half colonized by the mycelium, and mold became visible. The mold quickly colonized these jars, and held a larger percentage of area than the mycelium throughout the incubation period.

The *L. edodes* also showed signs of contamination by the second week, *L. edodes* jars #1 and #2 had no visible mycelium for the entire duration of the experiment, but #3 was mostly mycelium with a small area that appeared contaminated. The mycelium of *P. djamor* was by far the least dense of all the species. The biological control jar (Jar#5) was not dense either, suggesting this is a normal growth habit for this species. *P. djamor* formed very small, coral-like fruits (mushrooms) inside its sample jars about a month after mixing the samples.

P. ostreatus brat, and *P. ostreatus columbinus* never showed signs of contamination.. The *P. djamor* jars started to darken in color, but the cause was unclear. *P. wild CA creek* was healthy and grew thick, dense mycelium the entire time. Two weeks before sampling, two of the *P. wild CA creek* jars started to show green mold growth. Mold was not observed in any of the other jars.

After a total of 91 incubation days, two sample jars of each fungal species and control jars were chosen for total PCB testing, based on the criteria listed in Task 6, Step A, of Materials and Methods. The following were the jars selected and sampled:

- *G. frondosa* Jar #1
- *G. frondosa* Jar #2
- *L. edodes* Jar #3
- *L. edodes* Jar #4
- *P. djamor* Jar #1
- *P. djamor* Jar #2
- *P. ostreatus columbinus* Jar #1
- *P. ostreatus columbinus* Jar #2
- *P. ostreatus brat* Jar #1
- *P. ostreatus brat* Jar #2
- *P. wild CA creek* Jar #1
- *P. wild CA creek* Jar #2
- *S. rugosoannulata* Jar #1
- *S. rugosoannulata* Jar #3
- *T. versicolor* Jar #2
- *T. versicolor* Jar #3

Table C-2 Growth/ Density at 2 Time Points

Species	% colonization/ density after 1 week of growth					% colonization/ density after 2 weeks of growth				
	Jar #1	Jar #2	Jar #3	Jar #4	Jar #5	Jar #1	Jar #2	Jar #3	Jar #4	Jar #5
GFolga	40/ i-ii	45/ i-ii	65/ i-ii	65/ i-ii	75/ i-ii	20/ i	35/ i	35/ i	50/ i	100/ i-ii
						Mold present	Mold present	Mold present	Mold present	
LEbell	65/ i-ii	75/ i-ii	95/ i-ii	85/ i-ii	100/ i-ii	65/ i-ii	75/ i-ii	95/ i-ii	50/ i-ii	100/ i-ii
							Mold suspected	Mold suspected	Mold present	
Pdjamor	100/ i	100/ i	100/ i	100/ o-i	100/ o-i	100/ i	100/ i	100/ i	100/ i	100/ i
PObrat	100/ i	100/ i	100/ i-ii	100/ i-ii	100/ i	100/ i-ii	100/ i-ii	100/ i-ii	100/ i-ii	100/ i-ii-iii
POcolumb	100/ i-ii	90/ i	100/ i	100/ i-ii	80/ i-ii	100/ i-ii	80/ i	100/ i	100/ i-ii	100/ i-ii
PwildCA creek	100/ i-ii	100/ i-ii	100/ i-ii	100/ i-ii	100/ i-ii	100/ i-ii	100/ i-ii-iii	100/ i-ii-iii	100/ i-ii	100/ i-ii
SRA	60/ i-ii	85/ i-ii	90/ i-iii	95/ i-ii	95/ i	60/ ii	85/ ii	95/ i-ii-iii	85/ i-ii-iii	100/ i-ii-iii
						Mold present	Mold present	Mold present	Mold present	
TVblack	75/ i-ii	95/ i-iii	95/ i-iii	98/ i-iii	100/ i-iii	70/ ii	90/ i-ii-iii	95/ i-ii-iii	95/ i-ii-iii	100/ i-iii
						Mold present	Mold present	Mold present	Mold present	

Appendix D: Measurements

	Jar #1					Jar #2				
Date: July 2, 2016 Day 3	% growth on grain surface					% growth on grain surface				
Species	Upper	vertical	base	density	(notes)	Upper	vertical	base	density	(notes)
<i>Grifola frondosa</i>	2	0	0	i		2	0	0	i	
<i>Lentinula edodes</i>	5	0	0	i		5	0	0	i	
<i>P djamor</i>	15	0	0	ii		10	0	0	ii	
<i>Pleurotus ostreatus brat</i>	10	0	0	ii		8	0	0	ii	
<i>Pleurotus ostreatus columbinus</i>	10	0	0	ii		8	0	0	ii	
<i>Pleurotus wild CA creek</i>	10	0	0	ii		10	0	0	i-ii	
<i>Stropharia rugosoannulata</i>	30	0	0	i		25	0	0	i	
<i>Trametes versicolor black</i>	20	0	0	i-ii		15	0	0	i	
	Jar #1					Jar #2				
Date: July 5, 2016 Day 6	% growth on grain surface					% growth on grain surface				
Species	Upper	vertical	base	density	(notes)	Upper	vertical	base	density	(notes)
<i>Grifola frondosa</i>	20	0	0	i	ii near	10	0	0	i	
<i>Lentinula edodes</i>	20	0	0	i		25	0	0	i	
<i>P djamor</i>	70	5	0	ii center	ireach	50	0	0	ii center, isides	
<i>Pleurotus ostreatus brat</i>	40	0	0	ii		40	5	0	ii	
<i>Pleurotus ostreatus columbinus</i>	30	0	0	ii		25	0	0	ii	
<i>Pleurotus wild CA creek</i>	25	5	0	ii		60	0	0	ii	
<i>Stropharia rugosoannulata</i>	90	5	0	ii		75	10	0	ii	
<i>Trametes versicolor black</i>	80	10	0	ii		75	0	0	ii	
	Jar #1					Jar #2				
Date: July 11, 2016 Day 12	% growth on grain surface					% growth on grain surface				
Species	Upper	vertical	base	density	(notes)	Upper	vertical	base	density	(notes)
<i>Grifola frondosa</i>	60	20	0	i		50	2	0	i	
<i>Lentinula edodes</i>	70	30	0	i		95	30	0	i	
<i>P djamor</i>	100	70	0	ii		100	50	0	ii	
<i>Pleurotus ostreatus brat</i>	100	50	0	ii		100	35	0	ii	
<i>Pleurotus ostreatus columbinus</i>	100	30	0	iii		99	35	0	iii	
<i>Pleurotus wild CA creek</i>	95	35	0	ii		100	85	10	ii	
<i>Stropharia rugosoannulata</i>	100	90	50	iii		100	70	0	iii	
<i>Trametes versicolor black</i>	100	80	5	iii		100	70	0	iii	
	Jar #1					Jar #2				
Date: July 18, 2016 Day 19	% growth on grain surface					% growth on grain surface				
Species	Upper	vertical	base	density	(notes)	Upper	vertical	base	density	(notes)
<i>Grifola frondosa</i>	70	40	0	i		75	45	0	i	
<i>Lentinula edodes</i>	90	75	0	ii		85	75	0	ii	
<i>P djamor</i>	95	95	90	iii		95	98	90	iii	
<i>Pleurotus ostreatus brat</i>	90	90	85	ii-iii		90	85	85	ii-iii	
<i>Pleurotus ostreatus columbinus</i>	100	98	95	iii		100	100	95	iii	
<i>Pleurotus wild CA creek</i>	100	98	95	iii		100	100	98	iii	
<i>Stropharia rugosoannulata</i>	98	100	95	iii		98	100	95	iii	
<i>Trametes versicolor black</i>	98	100	100	iii		98	100	100	iii	
	Jar #1					Jar #2				
Date: July 25, 2016 Day 26	% growth on grain surface					% growth on grain surface				
Species	Upper	vertical	base	density	(notes)	Upper	vertical	base	density	(notes)
<i>Grifola frondosa</i>	99	60	0	ii		100	70	2	ii	
<i>Lentinula edodes</i>	100	98	90	ii	dense	100	100	100	ii	
<i>P djamor</i>	100	100	100	ii	pink b	100	100	100	ii	pink base& up walls
<i>Pleurotus ostreatus brat</i>	100	100		ii-iii	climbi	100	100	100	ii-iii	
<i>Pleurotus ostreatus columbinus</i>	100	100	100	iii	grian r	100	100	100	iii	
<i>Pleurotus wild CA creek</i>	100	100	100	iii	climbi	100	100	100	iii	yellow & 1 blk area
<i>Stropharia rugosoannulata</i>	100	100	100	iii	lumpy	100	100	100	iii	climbing a bit
<i>Trametes versicolor black</i>	100	100	100	iii	tan, th	100	100	100	iii	thick tan patches

Species	Jar #1			Jar #2			Jar #3		
Date: August 2, 2016	% growth	density	notes	% growth	density	notes	% growth	density	notes
<i>Grifola frondosa</i>	50	ii		50	ii		50	ii	
<i>Lentinula edodes</i>	75	ii		60	ii		80	ii	
<i>P djamor</i>	100	i-ii		85	i-ii		100	i-ii	
<i>Pleurotus ostreatus brat</i>	100	i-ii		100	i-ii		100	i-ii	
<i>Pleurotus ostreatus columbinus</i>	80	ii		60	ii		50	ii	
<i>Pleurotus wild CA creek</i>	100	i-ii		100	i-ii		100	i-ii	
<i>Stropharia rugosoannulata</i>	100	i-ii		100	i-ii		98	i-ii	
<i>Trametes versicolor black</i>	100	ii-iii	mostly iii	100	ii-iii	mostly iii	100	ii-iii	mostly iii
Species	Jar #1			Jar #2			Jar #3		
Date: August 9, 2016	% growth	density	notes	% growth	density	notes	% growth	density	notes
<i>Grifola frondosa</i>	75	ii	growing up glass	75	ii		75	ii	
<i>Lentinula edodes</i>	80	ii	growing up glass	80	ii		80	ii	
<i>P djamor</i>	100	ii		100	ii		100	ii	
<i>Pleurotus ostreatus brat</i>	100	ii		100	ii		100	ii	
<i>Pleurotus ostreatus columbinus</i>	100	ii-iii		80	i-ii		80	i-ii	
<i>Pleurotus wild CA creek</i>	100	ii-iii		100	ii-iii		100	ii-iii	
<i>Stropharia rugosoannulata</i>	100	i-ii-iii		100	ii-iii		100	i-ii-iii	
<i>Trametes versicolor black</i>	100	iii		100	iii		100	iii	
Species	Jar #1			Jar #2			Jar #3		
Date: August 17, 2016	% growth	density	notes	% growth	density	notes	% growth	density	notes
<i>Grifola frondosa</i>	100	ii		100	i-ii		100	i-ii	
<i>Lentinula edodes</i>	100	i-ii	almost invisible in places	100	i-ii	mostly i	100	i-ii	mostly i
<i>P djamor</i>	100	ii-iii		100	ii-iii		100	ii-iii	
<i>Pleurotus ostreatus brat</i>	100	ii		100	ii		100	ii	
<i>Pleurotus ostreatus columbinus</i>			made ratios yesterday			made ratios yesterday			made ratios yesterday
<i>Pleurotus wild CA creek</i>			made ratios yesterday			made ratios yesterday			made ratios yesterday
<i>Stropharia rugosoannulata</i>	100	i-ii-iii							
<i>Trametes versicolor black</i>			made ratios yesterday			made ratios yesterday			made ratios yesterday

Date:17-Aug-2016

Date:22-Aug-2016

Species	Jar #	% growth	density	notes	Jar #	% growth	density
<i>G. frondosa</i> date mixed: 31-Aug-16	1	n/a	n/a		1	n/a	n/a
	2	n/a	n/a		2	n/a	n/a
	3	n/a	n/a		3	n/a	n/a
	4	n/a	n/a		4	n/a	n/a
	5	n/a	n/a		5	n/a	n/a
<i>L. edodes</i> date mixed: 31-Aug-16	1	n/a	n/a		1	n/a	n/a
	2	n/a	n/a		2	n/a	n/a
	3	n/a	n/a		3	n/a	n/a
	4	n/a	n/a		4	n/a	n/a
	5	n/a	n/a		5	n/a	n/a
<i>P. djamor</i> date mixed: 18-Aug-16	1	n/a	n/a		1	100	i
	2	n/a	n/a		2	100	i
	3	n/a	n/a		3	100	i
	4	n/a	n/a		4	100	0-i
	5	n/a	n/a		5	100	0-i
<i>P. ostreatus brat</i> date mixed: 18-Aug-16	1	n/a	n/a		1	100	i
	2	n/a	n/a		2	100	i
	3	n/a	n/a		3	100	i-ii
	4	n/a	n/a		4	100	i-ii
	5	n/a	n/a		5	100	i
<i>P. ostreatus columbinus</i> date mixed: 16-Aug-16	1	50	i	growth already visible after only 1 day! No contams visible	1	100	i-ii
	2	45	i	growth already visible after only 1 day! No contams visible	2	90	i
	3	45	i	growth already visible after only 1 day! No contams visible	3	100	i
	4	35	i	growth already visible after only 1 day! No contams visible	4	100	i-ii
	5	20	i	growth already visible after only 1 day! No contams visible	5	80	i-ii
<i>P. wild CA creek</i> date mixed: 16-Aug-16	1	30	i	visible growth, no contams visible	1	100	i-ii
	2	35	i	visible growth, no contams visible	2	100	i-ii
	3	35	i	visible growth, no contams visible	3	100	i-iii
	4	20	i	visible growth, no contams visible	4	100	i-ii
	5	15	i	visible growth, no contams visible	5	100	i-ii
<i>S. rugosoannulata</i> date mixed: 18-Aug-16	1	n/a	n/a		1	60	i-ii
	2	n/a	n/a		2	85	i-ii
	3	n/a	n/a		3	90	i-iii
	4	n/a	n/a		4	95	i-ii
	5	n/a	n/a		5	95	i
<i>T. versicolor black</i> date mixed: 18-Aug-16	1	50	i	seem vigorous, already fuzzing out. No contams visible	1	75	i-ii
	2	45	i	seem vigorous, already fuzzing out. No contams visible	2	95	i-iii
	3	45	i	seem vigorous, already fuzzing out. No contams visible	3	95	i-iii
	4	50	i	seem vigorous, already fuzzing out. No contams visible	4	98	i-iii
	5	40	i	seem vigorous, already fuzzing out. No contams visible	5	100	i-iii

Date: 29-Aug-2016

notes	Jar #	% growth	density
	1	n/a	n/a
	2	n/a	n/a
	3	n/a	n/a
	4	n/a	n/a
	5	n/a	n/a
	1	n/a	n/a
	2	n/a	n/a
	3	n/a	n/a
	4	n/a	n/a
	5	n/a	n/a
mycelial icicles hanging from particles on walls of jar. Consistently very fine mycelium throughout. A seed germinated! Spooky looking	1	100	i
again, very consistantly fine myc throughout, a couple 'icicles' but not as many particles stuck on walls.	2	100	i
two spots with white mycelium, the rest same as jars #1 and #2	3	100	i
very fine mycelium consistant throughout	4	100	i
extremely fine mycelium throughout... almost invisible	5	100	i
very fine mycelium reached all parts of substrate, visibly touching VW particles, climbing glass in 2 spots, few dense spots	1	100	i-ii
fine mycelium, a bit thicker than jar #1, reached entire jar substrate. A few denser spots	2	100	i-ii
a bit thicker mycelium than the first two jars, several dense white spots	3	100	i-ii
exactly like jar #3	4	100	i-ii
mostly very fine mycelium, a few dense spots at surface of substrate. All jars seem like the mycelium is not avoiding VW	5	100	i-ii-iii
a seed has germinated in jar! (from VW no doubt) actually 2, one on upper wall of jar. Mycelium looks happy	1	100	i-ii
very fine myc, base not totally colonized yet. Myc visibly touching VW particles	2	80	i
fine myc, few dense spots, 'truffula tree' sd piece at top	3	100	i
mostly very fine myc, some dense spots, touching VW	4	100	i-ii
very fine myc in large areas, other large areas of ii dense myc	5	100	i-ii
fine myc to dense chunks scattered throughout. Not avoiding VW	1	100	i-ii
fine myc to dense chunks scattered throughout. Not avoiding VW	2	100	i-ii-iii
fine myc to dense chunks scattered throughout. Not avoiding VW	3	100	i-ii-iii
very fine myc through most, one large area of ii, a few small spots of ii	4	100	i-ii
about half i, half ii	5	100	i-ii
pattern of myc growth noticeably diff, forming 'islands' of colonization w bright white edges	1	60	ii
pattern of myc growth noticeably diff, forming 'islands' of colonization w bright white edges	2	85	ii
caves' of bright thick myc formin around chunks of VW! Fin fine myc on sdust	3	95	i-ii-iii
same as jars 1,2,3, and two large caves at base around sd and vw	4	85	i-ii-iii
extremely fine mycelium	5	100	i-ii-iii
slightly resembles sra in growth habit, large areas of ii, 'caves', and a couple large uncolonized spots	1	70	ii
powdery, mostly bright white myc, with a few 'caves' around VW, thick iii myc on surface of substrate	2	90	i-ii-iii
same as 2, plus a pocket of yellow 'mushroom pee' and fewer 'caves'	3	95	i-ii-iii
mostly ii, a couple small 'caves' around VW	4	95	i-ii-iii
spots of either very fine or thick myc, no iis, just i and iii, solid white 'continents of myc	5	100	i-iii

Date: 06-Sept-2016

notes	Jar #	% growth	density
	1	40	i-ii
	2	45	i-ii
	3	65	i-ii
	4	65	i-ii
	5	75	i-ii
	1	65	i-ii
	2	75	i-ii
	3	95	i-ii
	4	85	i-ii
	5	100	i-ii
no contam	1	100	i-iii
no contam	2	100	i
no contam	3	100	i-iii
no contam	4	100	i
no contam	5	100?	o-i
no contam	1	100	i-ii
no contam	2	100	i-ii
no contam	3	100	i-ii
no contam	4	100	i-ii
no contam, one large white area with yellow liquid droplets	5	100	i-ii-iii
no contam, myc growing on germinated seeds	1	100	i-ii
no contam, base not colonized, very fine myc	2	85	i-ii
no contam	3	100	i
no contam	4	100	i-ii
no contam, some very fuzzy myc at top	5	100	i(-ii)
no contam, some very fuzzy myc at top	1	100	i-ii-iii
no contam, I think its trying to fruit at the top	2	100	i-ii-iii
no contam	3	100	i-iii
no contam, mostly i, some ii	4	100	i-ii-iii
no contam, = i:ii	5	100	i-ii-iii
a lot of green mold spots are growing throughout the jar, but not ON mycelium....	1	45	iii=ribbo
one large area of mold on front face of jar, and one small close by at basee	2	40	iii=ribbo
one small patch of green mold on surface, 2 'lines' of spots just above substrate on glass	3	75	i-ii-iii
one area of mold but myc is thick there too... thick myc at surface	4	95	i-ii-iii
very fine throughout, a bit thicker at surface	5	100	i-ii-iii
large areas of green mold	1	65	i-ii-iii
caves' showing mold growth, very thick myc on surface, a lot of iii	2	95	i-ii-iii
mold cave at base, mostly iii, a couple caves, thick surfaceshowing liquid droplets	3	95	i-iii
no green visible, but very suspect 'cave' at baseeeeeeee. Mostly iii. Liquid droplets at sruface	4	100	i-iii
no contam	5	100	i-iii

Date: 13-Sept-2016

notes	Jar #	% growth	density
no contam visible, growth more visible on sd than on vw	1	20	i
no contam visible, growth mostly on one half of jar	2	35	i
no contam visible	3	35	i
no contam visible	4	50	i
no contam visible	5	100	i-ii
no contam visible, perhaps slight preference for sd over vw	1	65	i-ii
no contam visible	2	75	i-ii
no contam visible	3	95	i-ii
no contam visible	4	50	i-ii
no contam visible	5	100	i-ii
no contam visible, mostly very thin mycelium, a few tiny spots of pink iii (fruiting?)	1	100	i
no contam visible, very fine	2	100	i
no contam visible, mostly very fine w a few tiny pink spots	3	100	i
no contam visible, very fine	4	100	i
no contam visible, so fine im almost not sure its in some areas... bit I think its 100%	5	100	i
no contam visible, a few myc threads climbing glass	1	100	i-ii
no contam visible, a few myc threads climbing glass	2	100	i-(ii)
no contam visible, a few myc threads climbing glass	3	100	i-(ii)
no contam visible, a few myc threads climbing glass	4	100	i-(ii)
no contam visible, one large and one small very dense area of myc. Fruiting?	5	100	i-ii-iii
no contam visible, myc climbing up wall	1	100	i-ii
no contam visible, most of base uncolonized, some small chalky white areas	2	90	i-ii
no contam visible	3	100	i-ii
no contam visible, some chalky spots	4	100	i-ii
no contam visible, very fine myc, except for one fuzzy spot on surface	5	100	i-ii
no contam visible, cottony cloud like area on surface=very dense iii	1	100	i-ii-iii
no contam visible, cottony cloud like area on surface=very dense iii	2	100	i-ii-iii
no contam visible, cottony cloud like area on surface=very dense iii, more dense areas	3	100	i-ii-iii
no contam visible	4	100	i-ii-iii
no contam visible	5	100	i-ii
looks like there are ribbons/ films of healthy myc, and large areas of trich. More trich than not.	1	30	iii
looks like there are ribbons/ films of healthy myc, and large areas of trich. More trich than not.	2	30	iii
ribbons' or 'skins' of myc, and fuzzy colonized areas as well. Lots of green trichoderma.	3	60	ii-iii
interesting: large area of ii, mostly free of trich with a distinct line/ wall of myc, then a less dense area with more trich. See photos.	4	85	i-ii-iii
no contaminants visible. Iii on top surface only	5	100	i-ii-iii
similar ribbons/ walls to sra, lots of green fuzzy trich	1	70	i-ii-iii
trich present, but seems myc has it 'corralled' and under control? Yellowish areas surrounding trich	2	95	i-ii-iii
half of jar=i, other half iii and very smooth against glass+ a little grey. A couple 'walled off' trich areas	3	98	iii-i
mostly very dense iii, and areas of i.	4	100	iii-i
mostly very dense iii, and areas of i, no contaminants visible.	5	100	iii-i

Date: 20-Sept-2016

notes	Jar #	% growth	density
a lot of green mold growing now, and a plant germinated in the jar too	1	10	i
lots of green mold	2	20	i
green mold all over	3	10	i
about = mold : mycelium	4	25	i
healthy looking, no contams, thick fuzzy top layer	5	100	ii-iii
some interesting walls/ ribbons of thick myc separating substrates into sections. Seed sprouting.	1	100	i
mold suspected, walls/ ribbons	2	100	i
mold suspected on surface, rest looks great, myc on glass	3	100	i-ii
myc wall splitting substrate in half, mold just starting on one side, other side noticeably whiter	4	40	i-ii
healthy looking, no contams	5	100	i-ii
no contams visible, very fine throughout, trying to fruit in a few tiny spots	1	100	i
no contams visible, very fine throughout, trying to fruit in a few tiny spots	2	100	i
no contams visible, very fine throughout, trying to fruit in a few tiny spots	3	100	i
no contams visible, very fine throughout	4	100	i
no contams visible, very fine throughout	5	100	i
no contams visible, looking great	1	100	i-ii
no contams visible, mostly pretty fine i myc, a few spots of ii, lightning myc on glass	2	100	i-ii
no contams visible, mostly i, a few spots of ii, climbing glass	3	100	i-ii
no contams visible, mostly i, a few spots of ii, climbing glass	4	100	i-ii
no contams visible, mostly i, and a big patch of iii at top	5	100	i-ii-iii
no contams visible. Climbing walls	1	100	i-ii
mold suspect at base	2	90	i-ii
no contams visible, looks healthy, but a bit fine	3	100	i-ii
no contams visible, looks great	4	100	i-ii
no contams visible, looks great	5	100	i-ii
no contams visible, cottony cloud like balls at surface, nicely colonized w different densities throughout	1	100	i-ii-iii
no contams visible, cottony cloud like balls at surface, nicely colonized w different densities throughout	2	100	i-ii-iii
no contams visible, lots of iii areas	3	100	i-ii-iii
no contams visible, lots of i and iii areas, looks good	4	100	i-ii-iii
no contams visible, mostly ii, looks great, healthy	5	100	i-ii
looking bleak for this jar... dark with trichoderma, but strong ribbons of white myc still present	1	10	iii
looking bleak for this jar... dark with trichoderma, but strong ribbons of white myc still present	2	20	iii
lots of trich, but still a few clean areas...	3	35	i-ii-iii
iii top surface, some walls/ ribbons, some i-ii myc mixed in w trich... lots of trich	4	70	i-ii-iii
looks great, very dense iii at surface, finer as you go down	5	100	i-ii-iii
some areas taken by trich, some myc-only areas, walls 'trying to seal out' trich?	1	70	i-ii-iii
some trich, but concentrated in 'walled off' areas, lots of clean myc areas	2	95	i-ii-iii
~70% very dense myc pressed against glass, other 30% is chalky fine myc	3	98	iii-i
~80% iii, 20% i, a couple dark areas w/o myc (contams but not seeing green)	4	100	iii-i
~80% iii, very similar growth pattern but no contams visible.	5	100	iii-i

Date: 20-Sept-2016

notes	Jar #	% growth	density
2 plants growing inside, not a lot o myc	1	10	i
lots of green mold	2	20	i
mold	3	15	i
mold	4	20	i
looks great, no contams, growing up glass	5	100	ii-iii
no green or blue, but suspected contam. Myc VERY fine, very dark color	1	100	i-ii
very fine, some areas look healthy, some moldy	2	100	i-ii
looks pretty good, one contam area at top	3	100	i-ii-iii
half paler and healthy, myc wall, other half dark and moldy	4	50	i-ii
healthy and white looking, no contams	5	100	i-ii
no contams visible, very fine throughout, fruiting in multiple spots	1	100	i
no contams visible, very fine throughout, fruiting in multiple spots	2	100	i
no contams visible, very fine throughout, fruiting in multiple spots	3	100	i
no contams visible, very fine throughout, fruiting in multiple spots	4	100	i
no contams visible, very fine throughout, fruiting in multiple spots	5	100	i
no contams visible, bright white myc, not that dense	1	100	i-ii-iii
no contams visible, bright white myc, not that dense	2	100	i-ii
no contams visible, bright white myc, not that dense	3	100	i-ii
no contams visible, bright white myc, not that dense	4	100	i-ii
no contams visible, mostly i, and a big patch of iii at top	5	100	i-ii-iii
no contams visible, still not very dense	1	100	ii-iii
contams suspect at base	2	95	i-ii
no contams visible, still not very dense	3	100	ii
no contams visible, still not very dense	4	100	ii
no contams visible, still not very dense	5	100	i-ii
no contams visible, big white globs/ coral like at top	1	100	i-ii-iii
no contams visible, big white globs/ coral like at top	2	100	i-ii-iii
no contams visible, more dense than 1&2, big white globs/ coral like at top	3	100	i-ii-iii
no contams visible, more dense than 1&2, big white globs/ coral like at top	4	100	i-ii-iii
no contams visible, more dense than 1&2, big white globs/ coral like at top	5	100	ii
very dark w mold (iii=ribbons)	1	10	iii
slightly more myc than 1, very green mold	2	20	iii
some fuzzy muc areas and ribbons too	3	35	i-ii-iii
some fuzzy muc areas and ribbons too	4	70	i-ii-iii
looks great, no contams	5	100	i-ii
pretty moldy but myc still 'hanging on'	1	65	ii-iii
moldy, but mostly ok looking myc	2	90	i-ii-iii
mostly myc w a couple coldy 'caves'	3	100	iii-i
some myc starting to look very grey... green... contam eating it?	4	100	iii-i
very dense iii, and some fine i.	5	100	iii-i

notes
pretty much taken over by mold, lots of black.
some areas of plain sd, some of myc and blackish mold
some areas of plain sd, some of myc and blackish mold
some areas of plain sd, some of myc and blackish mold
sd still visible and brown, but fully colonized, up jar sides too
cant tell between shiitake or contam myc, but jar very dark
~15% w/o mold (one area) is pale, the rest dark w/ spots of green and dark
almost contam-free, pale and white thick iii on surface, dark circle of contam at top
~ half pale, half dark w a thick 'wall' of myc between. Mold spots on dark half.
very blonde sd with stars of mycelium in various spots. No contams visible
several small pink coral like fruits, very fine myc throughout, pretty dark color throughout
3 coral fruits at surface, one is pretty big, fine myc throughout, slightly paler sd than jar1
1 fruit at surface, a couple along glass, no contams visible, fine i throughout
i throughout, 1 small fruit at surface
i throughout, very fine, appears a bit drier than 1-4
thick myc at surface, no sign of contams
pretty fine myc, a bit thicker at surface, no sign of contams
pretty fine myc, a bit thicker at surface, no sign of contams
pretty fine myc, a bit thicker at surface, a couple thick spots against glass, no sign of contams
very thick cottony myc at surface, fine throughout rest cept 2 spots, no sign of contams
ii throughout, iii at surace, and climbing glass, no contams
fine i throughout, some ii, 2 areas at base w no myc no contams
evenly ii, a couple tiny whiter areas no contams
evenly ii, a couple tiny whiter areasno contams
i throughout, surface center ii no contams
coral like fruits at surface, no contams
coral like fruits at surface, no contams
more iii than i or ii, no contams
more iii than i or ii, no contams
evenly ii, very fluffy looking between sd, no contams
still has white ribbons or myc layers, but very black w contams
still has white ribbons or myc layers, but very black and green w contams
thick ribbons, some fuzzy b/w sd particles, plenty of black and green
thick white surface myc, fuzz b/w sd, plenty of black and green
no contams, thich surface myc, finer throughout

Appendix E: Analytical Testing Results

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Spokane

11922 East 1st Ave

Spokane, WA 99206

Tel: (509)924-9200

TestAmerica Job ID: 590-3615-1

Client Project/Site: Vactor Waste

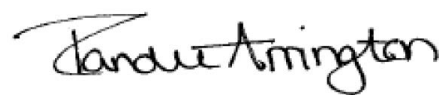
For:

City of Spokane

4401 N. A.L. White Parkway

Spokane, Washington 99205

Attn: Mike Cannon



Authorized for release by:

6/16/2016 1:41:29 PM

Randee Arrington, Project Manager II

(509)924-9200

randee.arrington@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Definitions	5
Client Sample Results	6
QC Sample Results	8
Chronicle	13
Certification Summary	14
Method Summary	15
Chain of Custody	16
Receipt Checklists	21



Case Narrative

Client: City of Spokane
Project/Site: Vactor Waste

TestAmerica Job ID: 590-3615-1

Job ID: 590-3615-1

Laboratory: TestAmerica Spokane

Narrative

Receipt

The samples were received on 6/7/2016 1:12 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.6° C.

GC/MS VOA

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

GC Semi VOA

Method 8081B: The %RPD between the primary and confirmation column exceeded 40% for Tetrachloro-m-xylene for the following samples: (590-3615-A-4-B MS) and (590-3615-A-4-C MSD). The lower values have been reported and qualified in accordance with the laboratory's SOP.

Method NWTPH-Dx: Detected hydrocarbons in the diesel range appear to be due to oil overlap in the following sample: Vactor Waste-NWTPH-Dx, Pesticides (590-3615-3).

Method NWTPH-Dx: The following sample required a dilution due to the nature of the sample matrix: Vactor Waste-NWTPH-Dx, Pesticides (590-3615-3). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

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

General Chemistry

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

Geotechnical

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

Organic Prep

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

VOA Prep

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

Sample Summary

Client: City of Spokane
Project/Site: Vactor Waste

TestAmerica Job ID: 590-3615-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-3615-1	Vactor Waste- Particle Size	Solid	06/02/16 11:30	06/07/16 13:12
590-3615-2	Vactor Waste-NWTPH-Gx	Waste	06/02/16 11:30	06/07/16 13:12
590-3615-3	Vactor Waste-NWTPH-Dx, Pesticides	Waste	06/02/16 11:30	06/07/16 13:12
590-3615-4	Vactor Waste	Solid	06/02/16 11:30	06/07/16 13:12

Definitions/Glossary

Client: City of Spokane
Project/Site: Vactor Waste

TestAmerica Job ID: 590-3615-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
F2	MS/MSD RPD exceeds control limits
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Glossary

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

Client Sample Results

Client: City of Spokane
Project/Site: Vactor Waste

TestAmerica Job ID: 590-3615-1

Client Sample ID: Vactor Waste- Particle Size

Lab Sample ID: 590-3615-1

Date Collected: 06/02/16 11:30

Matrix: Solid

Date Received: 06/07/16 13:12

Method: D422 - Grain Size

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	12.8				%			06/10/16 16:13	1
Sieve Size 3 inch - Percent Finer	100.0				% Passing			06/10/16 16:13	1
Sand	65.9				%			06/10/16 16:13	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			06/10/16 16:13	1
Coarse Sand	25.9				%			06/10/16 16:13	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			06/10/16 16:13	1
Medium Sand	21.8				%			06/10/16 16:13	1
Sieve Size 1 inch - Percent Finer	100.0				% Passing			06/10/16 16:13	1
Fine Sand	18.2				%			06/10/16 16:13	1
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing			06/10/16 16:13	1
Sieve Size 0.375 inch - Percent Finer	96.0				% Passing			06/10/16 16:13	1
Silt	15.6				%			06/10/16 16:13	1
Clay	5.7				%			06/10/16 16:13	1
Sieve Size #4 - Percent Finer	87.2				% Passing			06/10/16 16:13	1
Sieve Size #10 - Percent Finer	61.3				% Passing			06/10/16 16:13	1
Sieve Size #20 - Percent Finer	50.2				% Passing			06/10/16 16:13	1
Sieve Size #40 - Percent Finer	39.5				% Passing			06/10/16 16:13	1
Sieve Size #60 - Percent Finer	32.2				% Passing			06/10/16 16:13	1
Sieve Size #80 - Percent Finer	28.9				% Passing			06/10/16 16:13	1
Sieve Size #100 - Percent Finer	26.8				% Passing			06/10/16 16:13	1
Sieve Size #200 - Percent Finer	21.3				% Passing			06/10/16 16:13	1
Hydrometer Reading 1 - Percent Finer	13.1				% Passing			06/10/16 16:13	1
Hydrometer Reading 2 - Percent Finer	10.9				% Passing			06/10/16 16:13	1
Hydrometer Reading 3 - Percent Finer	8.7				% Passing			06/10/16 16:13	1
Hydrometer Reading 4 - Percent Finer	7.2				% Passing			06/10/16 16:13	1
Hydrometer Reading 5 - Percent Finer	5.7				% Passing			06/10/16 16:13	1
Hydrometer Reading 6 - Percent Finer	4.2				% Passing			06/10/16 16:13	1
Hydrometer Reading 7 - Percent Finer	2.8				% Passing			06/10/16 16:13	1

Client Sample ID: Vactor Waste-NWTPH-Gx

Lab Sample ID: 590-3615-2

Date Collected: 06/02/16 11:30

Matrix: Waste

Date Received: 06/07/16 13:12

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		5.9		mg/Kg		06/15/16 11:14	06/15/16 12:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		41.5 - 162				06/15/16 11:14	06/15/16 12:01	1

TestAmerica Spokane

Client Sample Results

Client: City of Spokane
Project/Site: Vactor Waste

TestAmerica Job ID: 590-3615-1

Client Sample ID: Vactor Waste-NWTPH-Dx, Pesticides

Lab Sample ID: 590-3615-3

Date Collected: 06/02/16 11:30

Matrix: Waste

Date Received: 06/07/16 13:12

Percent Solids: 83.1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	500		280		mg/Kg	☼	06/13/16 14:22	06/14/16 10:13	20
Residual Range Organics (RRO) (C25-C36)	2400		690		mg/Kg	☼	06/13/16 14:22	06/14/16 10:13	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	114		50 - 150				06/13/16 14:22	06/14/16 10:13	20
n-Triacontane-d62	124		50 - 150				06/13/16 14:22	06/14/16 10:13	20

Client Sample ID: Vactor Waste

Lab Sample ID: 590-3615-4

Date Collected: 06/02/16 11:30

Matrix: Solid

Date Received: 06/07/16 13:12

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:39	1
alpha-BHC	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:39	1
beta-BHC	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:39	1
delta-BHC	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:39	1
gamma-BHC (Lindane)	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:39	1
alpha-Chlordane	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:39	1
gamma-Chlordane	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:39	1
Chlordane (technical)	ND		0.049		mg/Kg		06/11/16 11:42	06/13/16 15:39	1
4,4'-DDD	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:39	1
4,4'-DDE	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:39	1
4,4'-DDT	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:39	1
Dieldrin	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:39	1
Endosulfan I	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:39	1
Endosulfan II	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:39	1
Endosulfan sulfate	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:39	1
Endrin	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:39	1
Endrin aldehyde	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:39	1
Endrin ketone	ND	F2	0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:39	1
Heptachlor	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:39	1
Heptachlor epoxide	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:39	1
Methoxychlor	ND		0.0032		mg/Kg		06/11/16 11:42	06/13/16 15:39	1
Toxaphene	ND		0.065		mg/Kg		06/11/16 11:42	06/13/16 15:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	28		21 - 145				06/11/16 11:42	06/13/16 15:39	1
DCB Decachlorobiphenyl (Surr)	32		25 - 150				06/11/16 11:42	06/13/16 15:39	1

TestAmerica Spokane

QC Sample Results

Client: City of Spokane
Project/Site: Vactor Waste

TestAmerica Job ID: 590-3615-1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS)

Lab Sample ID: MB 590-7039/1-A

Matrix: Waste

Analysis Batch: 7036

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7039

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		5.0		mg/Kg		06/15/16 11:14	06/15/16 10:49	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		41.5 - 162				06/15/16 11:14	06/15/16 10:49	1

Lab Sample ID: LCS 590-7039/4-A

Matrix: Waste

Analysis Batch: 7036

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7039

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline	49.9	49.9		mg/Kg		100	74.4 - 124		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	103		41.5 - 162						

Lab Sample ID: LCSD 590-7039/5-A

Matrix: Waste

Analysis Batch: 7036

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7039

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline	49.9	53.3		mg/Kg		107	74.4 - 124	7	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	100		41.5 - 162						

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 490-347059/1-A

Matrix: Solid

Analysis Batch: 347269

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 347059

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:01	1
alpha-BHC	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:01	1
beta-BHC	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:01	1
delta-BHC	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:01	1
gamma-BHC (Lindane)	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:01	1
alpha-Chlordane	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:01	1
gamma-Chlordane	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:01	1
Chlordane (technical)	ND		0.050		mg/Kg		06/11/16 11:42	06/13/16 15:01	1
4,4'-DDD	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:01	1
4,4'-DDE	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:01	1
4,4'-DDT	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:01	1
Dieldrin	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:01	1
Endosulfan I	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:01	1
Endosulfan II	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:01	1
Endosulfan sulfate	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:01	1

TestAmerica Spokane

QC Sample Results

Client: City of Spokane
Project/Site: Vactor Waste

TestAmerica Job ID: 590-3615-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 490-347059/1-A

Matrix: Solid

Analysis Batch: 347269

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 347059

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endrin	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:01	1
Endrin aldehyde	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:01	1
Endrin ketone	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:01	1
Heptachlor	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:01	1
Heptachlor epoxide	ND		0.0017		mg/Kg		06/11/16 11:42	06/13/16 15:01	1
Methoxychlor	ND		0.0033		mg/Kg		06/11/16 11:42	06/13/16 15:01	1
Toxaphene	ND		0.067		mg/Kg		06/11/16 11:42	06/13/16 15:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	77		21 - 145	06/11/16 11:42	06/13/16 15:01	1
DCB Decachlorobiphenyl (Surr)	82		25 - 150	06/11/16 11:42	06/13/16 15:01	1

Lab Sample ID: LCS 490-347059/2-A

Matrix: Solid

Analysis Batch: 347269

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 347059

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	0.0167	0.0113		mg/Kg		68	49 - 127
alpha-BHC	0.0167	0.0109		mg/Kg		66	49 - 127
beta-BHC	0.0167	0.0124		mg/Kg		75	44 - 130
delta-BHC	0.0167	0.0117		mg/Kg		70	48 - 129
gamma-BHC (Lindane)	0.0167	0.0111		mg/Kg		66	47 - 130
alpha-Chlordane	0.0167	0.0130		mg/Kg		78	51 - 133
gamma-Chlordane	0.0167	0.0126		mg/Kg		76	52 - 131
4,4'-DDD	0.0167	0.0131		mg/Kg		79	52 - 142
4,4'-DDE	0.0167	0.0130		mg/Kg		78	46 - 138
4,4'-DDT	0.0167	0.0120		mg/Kg		72	25 - 150
Dieldrin	0.0167	0.0126		mg/Kg		76	48 - 128
Endosulfan I	0.0167	0.0127		mg/Kg		76	51 - 124
Endosulfan II	0.0167	0.0123		mg/Kg		74	51 - 132
Endosulfan sulfate	0.0167	0.0110		mg/Kg		66	49 - 129
Endrin	0.0167	0.0119		mg/Kg		71	46 - 130
Endrin aldehyde	0.0167	0.0119		mg/Kg		72	46 - 130
Endrin ketone	0.0167	0.0130		mg/Kg		78	43 - 138
Heptachlor	0.0167	0.0106		mg/Kg		64	37 - 142
Heptachlor epoxide	0.0167	0.0124		mg/Kg		75	50 - 126
Methoxychlor	0.0167	0.0122		mg/Kg		73	20 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	63		21 - 145
DCB Decachlorobiphenyl (Surr)	77		25 - 150

Lab Sample ID: LCS 490-347059/6-A

Matrix: Solid

Analysis Batch: 347269

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 347059

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlordane (technical)	0.167	0.122		mg/Kg		73	49 - 130

TestAmerica Spokane

QC Sample Results

Client: City of Spokane
Project/Site: Vactor Waste

TestAmerica Job ID: 590-3615-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 490-347059/6-A

Matrix: Solid

Analysis Batch: 347269

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 347059

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toxaphene	0.333	0.207		mg/Kg		62	40 - 139
Surrogate	%Recovery	LCS Qualifier	Limits				
Tetrachloro-m-xylene	66		21 - 145				
DCB Decachlorobiphenyl (Surr)	67		25 - 150				

Lab Sample ID: 590-3615-4 MS

Matrix: Solid

Analysis Batch: 347269

Client Sample ID: Vactor Waste

Prep Type: Total/NA

Prep Batch: 347059

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	ND		0.0165	0.00741		mg/Kg		45	11 - 140
alpha-BHC	ND		0.0165	0.00774		mg/Kg		47	23 - 138
beta-BHC	ND		0.0165	0.00847		mg/Kg		51	12 - 150
delta-BHC	ND		0.0165	0.00645		mg/Kg		39	10 - 149
gamma-BHC (Lindane)	ND		0.0165	0.00849		mg/Kg		51	24 - 145
alpha-Chlordane	ND		0.0165	0.00746		mg/Kg		45	10 - 140
gamma-Chlordane	ND		0.0165	0.00739		mg/Kg		45	10 - 140
4,4'-DDD	ND		0.0165	0.00755		mg/Kg		46	10 - 154
4,4'-DDE	ND		0.0165	0.00782		mg/Kg		47	14 - 139
4,4'-DDT	ND		0.0165	0.00761		mg/Kg		46	10 - 152
Dieldrin	ND		0.0165	0.00759		mg/Kg		46	10 - 148
Endosulfan I	ND		0.0165	0.00775		mg/Kg		47	10 - 158
Endosulfan II	ND		0.0165	0.00753		mg/Kg		46	10 - 152
Endosulfan sulfate	ND		0.0165	0.00550		mg/Kg		33	10 - 148
Endrin	ND		0.0165	0.00801		mg/Kg		48	20 - 145
Endrin aldehyde	ND		0.0165	0.00505		mg/Kg		31	13 - 150
Endrin ketone	ND	F2	0.0165	0.00716		mg/Kg		43	13 - 150
Heptachlor	ND		0.0165	0.00806		mg/Kg		49	10 - 150
Heptachlor epoxide	ND		0.0165	0.00742		mg/Kg		45	15 - 139
Methoxychlor	ND		0.0165	0.00830		mg/Kg		50	10 - 150
Surrogate	%Recovery	MS Qualifier	Limits	MS					
Tetrachloro-m-xylene	51	p	21 - 145						
DCB Decachlorobiphenyl (Surr)	59		25 - 150						

Lab Sample ID: 590-3615-4 MSD

Matrix: Solid

Analysis Batch: 347269

Client Sample ID: Vactor Waste

Prep Type: Total/NA

Prep Batch: 347059

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Aldrin	ND		0.0166	0.00734		mg/Kg		44	11 - 140	1	40
alpha-BHC	ND		0.0166	0.00717		mg/Kg		43	23 - 138	8	40
beta-BHC	ND		0.0166	0.00697		mg/Kg		42	12 - 150	19	40
delta-BHC	ND		0.0166	0.00544		mg/Kg		33	10 - 149	17	40
gamma-BHC (Lindane)	ND		0.0166	0.00702		mg/Kg		42	24 - 145	19	40
alpha-Chlordane	ND		0.0166	0.00745		mg/Kg		45	10 - 140	0	40
gamma-Chlordane	ND		0.0166	0.00701		mg/Kg		42	10 - 140	5	40

TestAmerica Spokane

QC Sample Results

Client: City of Spokane
Project/Site: Vactor Waste

TestAmerica Job ID: 590-3615-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 590-3615-4 MSD

Matrix: Solid

Analysis Batch: 347269

Client Sample ID: Vactor Waste

Prep Type: Total/NA

Prep Batch: 347059

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		0.0166	0.00787		mg/Kg		48	10 - 154	4	40
4,4'-DDE	ND		0.0166	0.00801		mg/Kg		48	14 - 139	2	40
4,4'-DDT	ND		0.0166	0.00634		mg/Kg		38	10 - 152	18	40
Dieldrin	ND		0.0166	0.00734		mg/Kg		44	10 - 148	3	40
Endosulfan I	ND		0.0166	0.00752		mg/Kg		45	10 - 158	3	40
Endosulfan II	ND		0.0166	0.00685		mg/Kg		41	10 - 152	9	40
Endosulfan sulfate	ND		0.0166	0.00561		mg/Kg		34	10 - 148	2	40
Endrin	ND		0.0166	0.00766		mg/Kg		46	20 - 145	4	40
Endrin aldehyde	ND		0.0166	0.00501		mg/Kg		30	13 - 150	1	40
Endrin ketone	ND	F2	0.0166	0.0113	F2	mg/Kg		68	13 - 150	45	40
Heptachlor	ND		0.0166	0.00674		mg/Kg		41	10 - 150	18	40
Heptachlor epoxide	ND		0.0166	0.00718		mg/Kg		43	15 - 139	3	40
Methoxychlor	ND		0.0166	0.00631		mg/Kg		38	10 - 150	27	40

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	44	p	21 - 145
DCB Decachlorobiphenyl (Surr)	58		25 - 150

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 590-7001/1-A

Matrix: Waste

Analysis Batch: 7012

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7001

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		10		mg/Kg		06/13/16 14:22	06/14/16 08:41	1
Residual Range Organics (RRO) (C25-C36)	ND		25		mg/Kg		06/13/16 14:22	06/14/16 08:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	97		50 - 150	06/13/16 14:22	06/14/16 08:41	1
n-Triacontane-d62	89		50 - 150	06/13/16 14:22	06/14/16 08:41	1

Lab Sample ID: LCS 590-7001/2-A

Matrix: Waste

Analysis Batch: 7012

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7001

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (DRO) (C10-C25)	67.1	59.5		mg/Kg		89	50 - 150
Residual Range Organics (RRO) (C25-C36)	66.8	63.8		mg/Kg		95	50 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	98		50 - 150
n-Triacontane-d62	94		50 - 150

TestAmerica Spokane

QC Sample Results

Client: City of Spokane
Project/Site: Vactor Waste

TestAmerica Job ID: 590-3615-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: 590-3609-A-1-A DU

Matrix: Waste

Analysis Batch: 7012

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 7001

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Diesel Range Organics (DRO) (C10-C25)	1200		1110		mg/Kg	☼	7	40
Residual Range Organics (RRO) (C25-C36)	91		73.9		mg/Kg	☼	21	40
Surrogate	%Recovery	DU Qualifier	DU	Limits				
<i>o</i> -Terphenyl	190	X		50 - 150				
<i>n</i> -Triacontane-d62	101			50 - 150				

Lab Sample ID: 590-3664-C-1-A DU

Matrix: Waste

Analysis Batch: 7013

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 7001

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Diesel Range Organics (DRO) (C10-C25)	ND		ND		mg/Kg	☼	30	40
Residual Range Organics (RRO) (C25-C36)	ND		ND		mg/Kg	☼	28	40
Surrogate	%Recovery	DU Qualifier	DU	Limits				
<i>o</i> -Terphenyl	98			50 - 150				
<i>n</i> -Triacontane-d62	101			50 - 150				

Lab Chronicle

Client: City of Spokane
Project/Site: Vactor Waste

TestAmerica Job ID: 590-3615-1

Client Sample ID: Vactor Waste- Particle Size

Date Collected: 06/02/16 11:30

Date Received: 06/07/16 13:12

Lab Sample ID: 590-3615-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D422		1	133.57 g		105816	06/10/16 16:13	SML	TAL BUR

Client Sample ID: Vactor Waste-NWTPH-Gx

Date Collected: 06/02/16 11:30

Date Received: 06/07/16 13:12

Lab Sample ID: 590-3615-2

Matrix: Waste

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.244 g	5 mL	7039	06/15/16 11:14	MRS	TAL SPK
Total/NA	Analysis	NWTPH-Gx		1	4.244 g	5 mL	7036	06/15/16 12:01	MRS	TAL SPK
Total/NA	Analysis	Moisture		1			6945	06/09/16 09:02	NMI	TAL SPK

Client Sample ID: Vactor Waste-NWTPH-Dx, Pesticides

Date Collected: 06/02/16 11:30

Date Received: 06/07/16 13:12

Lab Sample ID: 590-3615-3

Matrix: Waste

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			6945	06/13/16 09:46	NMI	TAL SPK

Client Sample ID: Vactor Waste-NWTPH-Dx, Pesticides

Date Collected: 06/02/16 11:30

Date Received: 06/07/16 13:12

Lab Sample ID: 590-3615-3

Matrix: Waste

Percent Solids: 83.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			13.10 g	5 mL	7001	06/13/16 14:22	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		20	13.10 g	5 mL	7013	06/14/16 10:13	NMI	TAL SPK

Client Sample ID: Vactor Waste

Date Collected: 06/02/16 11:30

Date Received: 06/07/16 13:12

Lab Sample ID: 590-3615-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			30.56 g	10.00 mL	347059	06/11/16 11:42	MNM	TAL NSH
Total/NA	Analysis	8081B		1	30.56 g	10.00 mL	347269	06/13/16 15:39	JML	TAL NSH

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

TAL SPK = TestAmerica Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

TestAmerica Spokane

Certification Summary

Client: City of Spokane
Project/Site: Vactor Waste

TestAmerica Job ID: 590-3615-1

Laboratory: TestAmerica Spokane

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-071	10-31-16
Washington	State Program	10	C569	01-06-17

Laboratory: TestAmerica Burlington

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0751	09-30-17
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-02-17
Florida	NELAP	4	E87467	06-30-16 *
L-A-B	DoD ELAP		L2336	02-26-17
Maine	State Program	1	VT00008	04-17-17
Minnesota	NELAP	5	050-999-436	12-31-16
New Hampshire	NELAP	1	2006	12-18-16
New Jersey	NELAP	2	VT972	06-30-16 *
New York	NELAP	2	10391	04-01-17 *
Pennsylvania	NELAP	3	68-00489	04-30-17
Rhode Island	State Program	1	LAO00298	12-30-16
US Fish & Wildlife	Federal		LE-058448-0	10-31-16
USDA	Federal		P330-11-00093	10-28-16
Vermont	State Program	1	VT-4000	12-31-16
Virginia	NELAP	3	460209	12-14-16

Laboratory: TestAmerica Nashville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Washington	State Program	10	C789	07-19-16 *

Analysis Method	Prep Method	Matrix	Analyte
-----------------	-------------	--------	---------

* Certification renewal pending - certification considered valid.

TestAmerica Spokane

Method Summary

Client: City of Spokane
Project/Site: Vactor Waste

TestAmerica Job ID: 590-3615-1

Method	Method Description	Protocol	Laboratory
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC/MS)	NWTPH	TAL SPK
8081B	Organochlorine Pesticides (GC)	SW846	TAL NSH
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	TAL SPK
Moisture	Percent Moisture	EPA	TAL SPK
D422	Grain Size	ASTM	TAL BUR

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

NWTPH = Northwest Total Petroleum Hydrocarbon

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

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

TAL SPK = TestAmerica Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200



CHAIN OF CUSTODY RECORD

City of Spokane, Wastewater Management
Wastewater Laboratory
4401 N. Aubrey L. White Parkway
Spokane, WA 99205
(509) 625-4600

From: Name: _____
Address: _____
Phone: _____
Contact: _____
Email: _____

City of Spokane RPWRF
North 4401 A.L. White Parkway
Spokane, WA 99205
(509) 625-4638
Jeff Donovan
jdonovan@spokanacity.org



590-3615 Chain of Custody

To

Name:

Address:

Spokane Valley Wa. 99206

Phone:

Contact:

Purchase Order #

418122

Shipper Tracking Number

Sample Transfer (sign below)

1. Relinquished By:	Jeff Donovan	Date: 6/7/2016	Time: 1:00 PM
2. Received By:	Shelia Kratz	Date: 6/7/16	Time: 1:32
Storage Location (Refrigerator Location)			

Test Parameters (Include Method Number)

Sample Description	Sample Type	AWTP ID #	Collection Date	Time	Matrix (key below)	Preserv. (key below)	Reporting units	# of Cont	Comments	NWTPH-Dx	Particle Size Distribution (ASTM D422)	Pesticides (EPA 8061)	NWTPH-Gx
1 Vector Waste - NWTPH-Dx, Particle Size, Pesticides	G	16-09084	11:30A	6/2/2016	S	R	mg/kg	2		x	x	x	
2 Vector Waste - NWTPH-Gx	G	16-09085	11:30A	6/2/2016	S	Methanol	mg/kg	2					x
3													
4													
5													
6													
7													
8													
9													
10													

Matrix: DW = Drinking Water, GW = Ground Water, WW = Wastewater, L = Liquid, S = Solid/Sludge, SO = Soil

O = Other

Preservation: R = Refrigerate (4C), F = Freeze, N = Nitric Acid, H = Hydrochloric Acid, O = Other

SH = Sodium Hydroxide, S = Sulfuric Acid

Sample Type: G = Grab, C = Composite

Version: 71703

Upon Rec'd Data, Complete Following Steps:

() Data Original to Respective File

() Invoice to Warehouse for Payment

() Data file location

() Data Copy File With This Document

Invoice #:

Chain of Custody Record



tAmerica
ER IN ENVIRONMENTAL TESTING

[illegible]

ORIGIN ID:GEGA (509) 924-9200
CHRIS WILLIAMS
TESTAMERICA INC
11922 E 1ST AVENUE

SPOKANE, WA 992065302
UNITED STATES US

SHIP DATE: 08JUN16
ACTWGT: 8.1 LB MAN
CAD: 0906085/CAFE2912

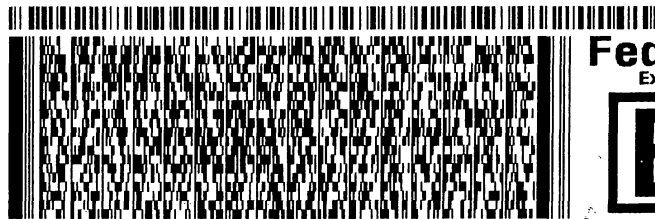
BILL RECIPIENT

TO **SAMPLE CONTROL**
TESTAMERICA BURLINGTON
30 COMMUNITY DRIVE, SUITE 11

SOUTH BURLINGTON VT 054036809

(802) 660-1990

REF: S590-1495



FedEx
Express



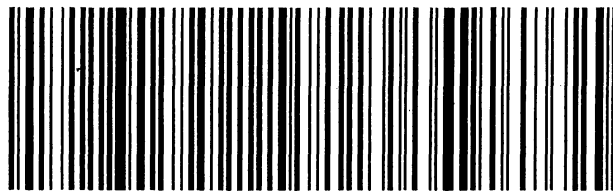
538C2/308D/2998
JT513150813010V

TRK# 6763 8057 7641
0201

THU - 09 JUN 10:30A
PRIORITY OVERNIGHT

XH BTVA

05403
VT-US BT.V



Part # 154254V-354 RJT2 03/17

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

11922 East 1st Ave
Spokane, WA 99206
Phone (509) 924-9200 Fax (509) 924-9290

Chain of Custody Record



TestAmerica

[illegible]

COOLER RECEIPT FORM

Cooler Received/Opened On 6/10/2016 @ 0945

Time Samples Removed From Cooler _____ Time Samples Placed In Storage _____ (2 Hour Window)

1. Tracking # 7733 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 17960353 pH Strip Lot HC574756 Chlorine Strip Lot 012516A

2. Temperature of rep. sample or temp blank when opened: 0.7 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler?

If yes, how many and where: 1 Side right

5. Were the seals intact, signed, and dated correctly?

6. Were custody papers inside cooler?

I certify that I opened the cooler and answered questions 1-6 (initial) BS

7. Were custody seals on containers:

YES NO and Intact

Were these signed and dated correctly?

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process:

Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)?

11. Were all container labels complete (#, date, signed, pres., etc)?

12. Did all container labels and tags agree with custody papers?

13a. Were VOA vials received?

b. Was there any observable headspace present in any VOA vial?

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #

I certify that I unloaded the cooler and answered questions 7-14 (initial) [Signature]

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used

16. Was residual chlorine present?

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) [Signature]

17. Were custody papers properly filled out (ink, signed, etc)?

18. Did you sign the custody papers in the appropriate place?

19. Were correct containers used for the analysis requested?

20. Was sufficient amount of sample sent in each container?

I certify that I entered this project into LIMS and answered questions 17-20 (initial) [Signature]

I certify that I attached a label with the unique LIMS number to each container (initial) [Signature]

21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES...NO...#

Login Sample Receipt Checklist

Client: City of Spokane

Job Number: 590-3615-1

Login Number: 3615

List Source: TestAmerica Spokane

List Number: 1

Creator: Kratz, Sheila J

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: City of Spokane

Job Number: 590-3615-1

Login Number: 3615

List Source: TestAmerica Burlington

List Number: 2

List Creation: 06/09/16 03:20 PM

Creator: Lavigne III, Scott M

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	241229
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.9°C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: City of Spokane

Job Number: 590-3615-1

Login Number: 3615

List Number: 3

Creator: Vest, Laura E

List Source: TestAmerica Nashville

List Creation: 06/10/16 05:36 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Mike Cannon
City of Spokane - RPWRF Laboratory
4401 North A.L. White Parkway
Spokane WA 99205
509 625 4642

Contact Person

Heidi Montez

Date/Time Notified

6/13/16 3:45 PM

Baseline Vector Waste

Parameter	Tested Value	Units	Flags	Method	
Total Solids	82.5	%		SM-2540 B-97	
Volatile Solids	7.3	%/dry wt.		SM-2540 B-97	
NO3/NO2-N	8.38	mg/kg dry wt.		SM-4500-NO3 E-00	
pH	6.90	pH units		SM-4500-NO3 E-00	
Total Recoverable Ag	<0.5	mg/kg dry wt.		EPA 200.7	
Total Recoverable Al	8,166	mg/kg dry wt.		EPA 200.7	
Total Recoverable As	3.71	mg/kg dry wt.		EPA 200.7	
Total Recoverable Ba	79.3	mg/kg dry wt.		EPA 200.7	
Total Recoverable Be	0.272	mg/kg dry wt.		EPA 200.7	
Total Recoverable Ca	7,553	mg/kg dry wt.		EPA 200.7	
Total Recoverable Cd	<0.2	mg/kg dry wt.		EPA 200.7	
Total Recoverable Cr	13.8	mg/kg dry wt.		EPA 200.7	
Total Recoverable Cu	32.9	mg/kg dry wt.		EPA 200.7	
Total Recoverable Mg	4,703	mg/kg dry wt.		EPA 200.7	
Total Recoverable Mo	<1.5	mg/kg dry wt.		EPA 200.7	
Total Recoverable Ni	9.11	mg/kg dry wt.		EPA 200.7	
Total Recoverable Pb	26.8	mg/kg dry wt.		EPA 200.7	
Total Recoverable Sb	<2.5	mg/kg dry wt.		EPA 200.7	
Total Recoverable Se	<2.5	mg/kg dry wt.		EPA 200.7	
Total Recoverable Tl	<3	mg/kg dry wt.		EPA 200.7	
Total Recoverable V	33.9	mg/kg dry wt.		EPA 200.7	
Total Recoverable Zn	172	mg/kg dry wt.		EPA 200.7	
Total Phosphorus	841	mg/kg dry wt.		SM 4500-P E-99	
Diesel Range Organics (C10-C25)	1200	mg/kg		NWTPH-Dx	
Residual Range Organics (C25-C36)	91	mg/kg		NWTPH-Dx	
Diesel Range Organics (C10-C25)	ND	mg/kg		NWTPH-Dx	
Residual Range Organics (C25-C36)	ND	mg/kg		NWTPH-Dx	
Diesel Range Organics (C10-C25)	500	mg/kg		NWTPH-Dx	
Residual Range Organics (C25-C36)	2400	mg/kg		NWTPH-Dx	

SAMPLE RECEIPT FORM / CHEMICAL ANALYSIS FORM

FILE #: PR162045

CLIENT: City of Spokane
N. 4401 A.L. White Parkway
Spokane, WA 99205
USA

Phone: (509) 625-4600
Email: jdonovan@spokanecity.org

RECEIVED BY: J. Wiebe
CONDITION: okay, 20.8°C

DATE/TIME: July 20, 2016 (12:00 p.m.)

# of Containers	Sample Type	Sample (Client Codes)	Lab Codes	Test Requested
1	Solids	Vactor Waste – PCBs 1 #16-09081	PR162045	209PCB
1	Solids	Vactor Waste – PCBs 2 #16-09082	PR162046	209PCB
1	Solids	Vactor Waste – PCBs 3 #16-09083	PR162047	209PCB
1	Solids	Hydrated Grain – PCBs 1 #16-11363	PR162048	209PCB
1	Solids	Hydrated Grain – PCBs 2 #16-11364	PR162049	209PCB
1	Solids	Hydrated Sawdust – PCBs 1 #16-11365	PR162050	209PCB
1	Solids	Hydrated Sawdust – PCBs 2 #16-11366	PR162051	209PCB

STORAGE: Stored at <-10°C.

ANALYTES: HRGC/HRMS analysis for polychlorinated biphenyls (209 congeners).

SPECIAL INSTRUCTIONS: none

METHODOLOGY

Reference Method: PCB: SOP LAB02; EPA Method 1668C

Data summarized in Data Report Attached

Report sent to: Jeffrey Donovan Date: August 17, 2016

Comments: Results relate only to items tested. Results are reported in dry weight.

The following flags or qualifiers have been used with this data set:

B: sample concentration is <5x concentration found in the blank

U: not detected at the concentration listed

J: sample concentration is less than lowest point on calibration curve

N: not detected due to incorrect ion ratio. Concentration report is EMPC.

David Hope PChem, CEO



DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste - PCBs 1
Field ID: #16-09081
PRL ID: PR162045
Moisture Content: 14.16%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/8/2016
HRMS File: FS08081607

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0031	0.0001		0.002
3-MoCB	PCB-002	2051-61-8	0.0021	0.0002		0.002
4-MoCB	PCB-003	2051-62-9	0.0035	0.0002		0.002
2,6-DiCB	PCB-010	33146-45-1	0.0003	0.0003	UJ	0.002
2,2'-DiCB	PCB-004	13029-08-8	0.0196	0.0005		0.002
2,5-DiCB	PCB-009	34883-39-1	0.0011	0.0003	NJ	0.002
2,4-DiCB	PCB-007	33284-50-3	0.0044	0.0004		0.002
2,3'-DiCB	PCB-006	25569-80-6	0.0138	0.0003		0.002
2,3/2,4'-DiCB	PCB-005/008		0.0361	0.0003		0.002
3,5-DiCB	PCB-014	34883-41-5	0.0012	0.0003	NJ	0.002
3,3'-DiCB	PCB-011	2050-67-1	0.134	0.0003		0.002
3,4/3,4'-DiCB	PCB-012/013		0.0095	0.0003	NJ	0.002
4,4'-DiCB	PCB-015	2050-68-2	0.123	0.0004		0.002
2,2',6-TrCB	PCB-019	38444-73-4	0.0306	0.0004		0.002
2,4,6-TrCB	PCB-030	35693-92-6	0.0011	0.0011	UJ	0.002
2,2',5-TrCB	PCB-018	37680-65-2	0.689	0.0014		0.002
2,2',4-TrCB	PCB-017	37680-66-3	0.252	0.0014		0.002
2,3,6-TrCB	PCB-024	55702-45-9	0.0127	0.0012		0.002
2,3',6-TrCB	PCB-027	38444-76-7	0.0821	0.0008		0.002
2,4',6-TrCB	PCB-032	38444-77-8	0.226	0.001		0.002
2,2',3-TrCB	PCB-016	38444-78-9	2.47	0.0032		0.002
2,3,5-TrCB	PCB-023	55720-44-0	0.0002	0.0002	UJ	0.002
2,3',5'-TrCB	PCB-034	37680-68-5	0.0012	0.0002	J	0.002
2,4,5-TrCB	PCB-029	15862-07-4	0.002	0.0001		0.002
2,3',5-TrCB	PCB-026	38444-81-4	0.042	0.0001		0.002
2,3',4-TrCB	PCB-025	55712-37-3	0.0276	0.0001		0.002
2,4',5-TrCB	PCB-031	16606-02-3	0.301	0.0001		0.002
2,4,4'-TrCB	PCB-028	7012-37-5	0.507	0.0002		0.002
2,3,4-TrCB	PCB-021	55702-46-0	0.0002	0.0002	UJ	0.002
	PCB-020/033		0.155	0.0002		0.002
2,3,4'-TrCB	PCB-022	38444-85-8	0.209	0.0002		0.002
3,3',5-TrCB	PCB-036	38444-87-0	0.0035	0.0001		0.002
3,4',5-TrCB	PCB-039	38444-88-1	0.0107	0.0001		0.002
3,4,5-TrCB	PCB-038	53555-66-1	0.0002	0.0002	UJ	0.002
3,3',4-TrCB	PCB-035	37680-69-6	0.0115	0.0002		0.002
3,4,4'-TrCB	PCB-037	38444-90-5	0.271	0.0003		0.002
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0016	0.0003	J	0.002
2,2',4,6'-TeCB	PCB-050	62796-65-0	0.0025	0.0006		0.002
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.166	0.0007		0.002
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0484	0.0007		0.002
2,2',3,6'-TeCB	PCB-045	70362-45-7	0.174	0.0007		0.002
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0777	0.0008		0.002
	PCB-052/069		0.951	0.0006		0.002
2,3',5',6'-TeCB	PCB-073	74338-23-1	0.0005	0.0005	UJ	0.002
	PCB-043/049		0.646	0.0007		0.002
	PCB-065/075		0.0006	0.0006	UJ	0.002
	PCB-047/048		0.284	0.0005		0.002
2,3,4,6'-TeCB	PCB-062	54230-22-7	0.0005	0.0005	UJ	0.002
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.897	0.0007		0.002
2,3,3',6'-TeCB	PCB-059	74472-33-6	0.0774	0.0005		0.002
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.286	0.0008		0.002
	PCB-064/072		0.716	0.0007		0.002

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste - PCBs 1
Field ID: #16-09081
PRL ID: PR162045
Moisture Content: 14.16%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/8/2016
HRMS File: FS08081607

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.231	0.0004		0.002
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0797	0.0007		0.002
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0004	0.0004	UJ	0.002
	PCB-040/057		0.166	0.0008		0.002
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0186	0.0004		0.002
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0252	0.0004		0.002
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0252	0.0004		0.002
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0004	0.0004	UJ	0.002
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.388	0.0005		0.002
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.714	0.0005		0.002
	PCB-055/080		0.0004	0.0004	UJ	0.002
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.651	0.0005		0.002
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0091	0.0005		0.002
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.16	0.0005		0.002
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.366	0.0005		0.002
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0004	0.0004	UJ	0.002
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0105	0.0005		0.002
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0036	0.0013		0.002
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.112	0.0013		0.002
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0004	0.0004	UJ	0.002
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0609	0.0031		0.002
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0224	0.0035		0.002
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0039	0.0039	U	0.002
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0271	0.0046		0.002
	PCB-093/098/102		0.142	0.004		0.002
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	3.12	0.0039		0.002
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.004	0.004	U	0.002
	PCB-091/121		0.488	0.0034		0.002
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	1.12	0.0044		0.002
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.48	0.0038		0.002
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0713	0.0039		0.002
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0049	0.0049	U	0.002
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	2.56	0.0035		0.002
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0031	0.0031	U	0.002
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	1.06	0.0036		0.002
	PCB-112/119		0.0538	0.0031		0.002
	PCB-083/109		0.202	0.0052		0.002
	PCB-086/117		0.0029	0.0029	U	0.002
	PCB-097/116		0.0053	0.0053		0.002
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0035	0.0035	U	0.002
	PCB-087/115		1.22	0.0036		0.002
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.003	0.003	U	0.002
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.577	0.0039		0.002
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.003	0.003	U	0.002
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	3.53	0.0033		0.002
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.47	0.005		0.002
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0314	0.0008		0.002
	PCB-107/108		0.0437	0.0009		0.002
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0269	0.0017		0.002
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.001	0.001	UJ	0.002
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.813	0.0017		0.002
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0269	0.002		0.002

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste - PCBs 1
Field ID: #16-09081
PRL ID: PR162045
Moisture Content: 14.16%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/8/2016
HRMS File: FS08081607

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.001	0.001	UJ	0.002
	PCB-105/127		0.477	0.0019		0.002
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0144	0.0022		0.002
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.0007	0.0007	UJ	0.002
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0029	0.0029	U	0.002
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0028	0.0028	U	0.002
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.0031	0.0031	U	0.002
	PCB-136/148		0.852	0.0033		0.002
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0365	0.0036		0.002
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	1.19	0.0046		0.002
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.682	0.0048		0.002
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.214	0.0041		0.002
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0646	0.0043		0.002
	PCB-139/149		1.59	0.001		0.002
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0009	0.0009	UJ	0.002
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0009	0.0009	UJ	0.002
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.105	0.0012		0.002
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0011	0.0011	UJ	0.002
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0232	0.0012		0.002
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0205	0.0011		0.002
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0009	0.0009	UJ	0.002
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.201	0.0009		0.002
	PCB-132/161		0.552	0.001		0.002
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	1.09	0.0008		0.002
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0009	0.0009	UJ	0.002
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.299	0.001		0.002
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0663	0.0012		0.002
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0948	0.0012		0.002
	PCB-163/164		0.386	0.0008		0.002
	PCB-138/160		1.11	0.0011		0.002
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.136	0.0008		0.002
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.0568	0.0012		0.002
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0039	0.0009		0.002
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.0009	0.0009	UJ	0.002
	PCB-128/162		0.196	0.0011		0.002
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0883	0.0014		0.002
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.137	0.0014		0.002
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0353	0.0015		0.002
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0022	0.0022	U	0.002
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.001	0.001	UJ	0.002
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0011	0.0011	UJ	0.002
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.245	0.001		0.002
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0731	0.0011		0.002
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0012	0.0012	UJ	0.002
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0951	0.0015		0.002
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0243	0.0015		0.002
	PCB-182/187		0.58	0.0015		0.002
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.256	0.0015		0.002
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0585	0.0018		0.002
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.465	0.0017		0.002
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0018	0.0018	UJ	0.002
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.236	0.0017		0.002

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste - PCBs 1
Field ID: #16-09081
PRL ID: PR162045
Moisture Content: 14.16%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/8/2016
HRMS File: FS08081607

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0017	0.0017	UJ	0.002
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0101	0.0019		0.002
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0648	0.002		0.002
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0017	0.0017	UJ	0.002
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.936	0.0021		0.002
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0424	0.0015		0.002
2,3,3',4,4',5',6-HpCB	PCB-191	74472-50-7	0.0149	0.0016		0.002
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.215	0.0012		0.002
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0464	0.001		0.002
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.024	0.0019		0.002
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.081	0.0008		0.002
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0456	0.0009		0.002
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0009	0.0009	UJ	0.002
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0113	0.001		0.002
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0469	0.0009		0.002
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0008	0.0008	UJ	0.002
2,2',3,3',4,5,5',6-OxCB	PCB-199	52663-75-9	0.271	0.0009		0.002
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.0864	0.0007		0.002
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.181	0.0009		0.002
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0693	0.001		0.002
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.196	0.0012		0.002
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0265	0.0014		0.002
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0662	0.0054		0.002
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0234	0.0053		0.002
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.203	0.0093		0.002
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0754	0.0038		0.002

Homologs	# of Congeners		
Monochlorobiphenyls	3	0.0087	0.0001
Dichlorobiphenyls	12	0.331	0.0003
Trichlorobiphenyls	24	5.3	0.0001
Tetrachlorobiphenyls	42	7.29	0.0003
Pentachlorobiphenyls	46	18.1	0.0004
Hexachlorobiphenyls	42	9.23	0.0007
Heptachlorobiphenyls	24	3.39	0.001
Octachlorobiphenyls	12	1.02	0.0007
Nonachlorobiphenyls	3	0.293	0.0053
Decachlorobiphenyl	1	0.0754	0.0038
Total PCB		45	0.0001

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste - PCBs 1
Field ID: #16-09081
PRL ID: PR162045
Moisture Content: 14.16%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/8/2016
HRMS File: FS08081607

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	38	5	145
¹³ C ₁₂ -4-MoCB	3L	28	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	81	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	72	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	89	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	46	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	94	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	40	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	41	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	137	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	79	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	76	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	73	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	70	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	52	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	97	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	66	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	60	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	157L	60	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	40	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	141	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	68	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	112	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	88	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	99	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	107	10	145
¹³ C ₁₂ -DeCB	209L	135	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	62	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	72	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	121	10	145

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste - PCBs 2
Field ID: #16-09082
PRL ID: PR162046
Moisture Content: 18.7%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/11/2016
HRMS File: FS08111605

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0042	0.0001		0.002
3-MoCB	PCB-002	2051-61-8	0.003	0.0002		0.002
4-MoCB	PCB-003	2051-62-9	0.0056	0.0003		0.002
2,6-DiCB	PCB-010	33146-45-1	0.0005	0.0005	UJ	0.002
2,2'-DiCB	PCB-004	13029-08-8	0.0215	0.0006		0.002
2,5-DiCB	PCB-009	34883-39-1	0.0028	0.0004		0.002
2,4-DiCB	PCB-007	33284-50-3	0.0059	0.0005		0.002
2,3'-DiCB	PCB-006	25569-80-6	0.0122	0.0005		0.002
2,3/2,4'-DiCB	PCB-005/008		0.0466	0.0005		0.002
3,5-DiCB	PCB-014	34883-41-5	0.0004	0.0004	UJ	0.002
3,3'-DiCB	PCB-011	2050-67-1	0.175	0.0004		0.002
3,4/3,4'-DiCB	PCB-012/013		0.0086	0.0004		0.002
4,4'-DiCB	PCB-015	2050-68-2	0.146	0.0006		0.002
2,2',6-TrCB	PCB-019	38444-73-4	0.0311	0.0032		0.002
2,4,6-TrCB	PCB-030	35693-92-6	0.0015	0.0015	UJ	0.002
2,2',5-TrCB	PCB-018	37680-65-2	0.0969	0.0019		0.002
2,2',4-TrCB	PCB-017	37680-66-3	0.0354	0.002		0.002
2,3,6-TrCB	PCB-024	55702-45-9	0.0034	0.0017		0.002
2,3',6-TrCB	PCB-027	38444-76-7	0.0125	0.0011		0.002
2,4',6-TrCB	PCB-032	38444-77-8	0.0933	0.0014		0.002
2,2',3-TrCB	PCB-016	38444-78-9	1.66	0.0046		0.002
2,3,5-TrCB	PCB-023	55720-44-0	0.0002	0.0002	UJ	0.002
2,3',5'-TrCB	PCB-034	37680-68-5	0.0002	0.0002	UJ	0.002
2,4,5-TrCB	PCB-029	15862-07-4	0.0002	0.0002	UJ	0.002
2,3',5-TrCB	PCB-026	38444-81-4	0.0718	0.0002		0.002
2,3',4-TrCB	PCB-025	55712-37-3	0.0386	0.0002		0.002
2,4',5-TrCB	PCB-031	16606-02-3	0.411	0.0002		0.002
2,4,4'-TrCB	PCB-028	7012-37-5	0.678	0.0002		0.002
2,3,4-TrCB	PCB-021	55702-46-0	0.0003	0.0003	UJ	0.002
	PCB-020/033		0.225	0.0002		0.002
2,3,4'-TrCB	PCB-022	38444-85-8	0.257	0.0003		0.002
3,3',5-TrCB	PCB-036	38444-87-0	0.0045	0.0002		0.002
3,4',5-TrCB	PCB-039	38444-88-1	0.0154	0.0002		0.002
3,4,5-TrCB	PCB-038	53555-66-1	0.0003	0.0003	UJ	0.002
3,3',4-TrCB	PCB-035	37680-69-6	0.0149	0.0002		0.002
3,4,4'-TrCB	PCB-037	38444-90-5	0.265	0.0003		0.002
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0026	0.0005		0.002
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0012	0.0012	UJ	0.002
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.204	0.0014		0.002
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0609	0.0013		0.002
2,2',3,6-TeCB	PCB-045	70362-45-7	0.21	0.0013		0.002
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.093	0.0016		0.002
	PCB-052/069		1.13	0.0011		0.002
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0009	0.0009	UJ	0.002
	PCB-043/049		0.794	0.0014		0.002
	PCB-065/075		0.0012	0.0012	UJ	0.002
	PCB-047/048		0.331	0.0009		0.002
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0011	0.0011	UJ	0.002
2,2',3,5'-TeCB	PCB-044	41464-39-5	1.06	0.0015		0.002
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0891	0.001		0.002
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.334	0.0015		0.002
	PCB-064/072		0.889	0.0014		0.002

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste - PCBs 2
Field ID: #16-09082
PRL ID: PR162046
Moisture Content: 18.7%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/11/2016
HRMS File: FS08111605

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.225	0.0009		0.002
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0933	0.0013		0.002
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0009	0.0009	UJ	0.002
	PCB-040/057		0.196	0.0016		0.002
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0194	0.0008		0.002
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0257	0.0009		0.002
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0257	0.0009		0.002
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0008	0.0008	UJ	0.002
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.401	0.001		0.002
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.781	0.0009		0.002
	PCB-055/080		0.0009	0.0009	UJ	0.002
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.681	0.0009		0.002
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0103	0.0009		0.002
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.15	0.0009		0.002
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.379	0.0009		0.002
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0008	0.0008	UJ	0.002
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0111	0.0009		0.002
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0027	0.0027	U	0.002
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.119	0.0028		0.002
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0022	0.0022	U	0.002
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0189	0.0046		0.002
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0052	0.0052	U	0.002
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0057	0.0057	U	0.002
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0071	0.0068	NJ	0.002
	PCB-093/098/102		0.0368	0.0059		0.002
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.961	0.0058		0.002
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0059	0.0059	U	0.002
	PCB-091/121		0.144	0.005		0.002
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.329	0.0065		0.002
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.149	0.0056		0.002
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0057	0.0057	U	0.002
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0072	0.0072	U	0.002
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.771	0.0052		0.002
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0045	0.0045	U	0.002
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.311	0.0052		0.002
	PCB-112/119		0.0045	0.0045	U	0.002
	PCB-083/109		0.0562	0.0076		0.002
	PCB-086/117		0.0043	0.0043	U	0.002
	PCB-097/116		0.395	0.0078		0.002
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0051	0.0051	U	0.002
	PCB-087/115		0.364	0.0053		0.002
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0045	0.0045	U	0.002
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.159	0.0058		0.002
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0044	0.0044	U	0.002
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	1.04	0.0048		0.002
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.128	0.0074		0.002
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0708	0.0013		0.002
	PCB-107/108		0.0736	0.0013		0.002
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0293	0.0016		0.002
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0014	0.0014	UJ	0.002
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.9	0.0015		0.002
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0248	0.0018		0.002

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste - PCBs 2
Field ID: #16-09082
PRL ID: PR162046
Moisture Content: 18.7%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/11/2016
HRMS File: FS08111605

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0014	0.0014	UJ	0.002
	PCB-105/127		0.515	0.0017		0.002
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0117	0.0018		0.002
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.0048	0.0048	U	0.002
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0051	0.0051	U	0.002
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.005	0.005	U	0.002
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.0054	0.0054	U	0.002
	PCB-136/148		0.215	0.0057		0.002
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0062	0.0062	U	0.002
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.334	0.0081		0.002
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.182	0.0084		0.002
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.0447	0.0071	NJ	0.002
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0076	0.0076	U	0.002
	PCB-139/149		1.95	0.0017		0.002
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0099	0.0016		0.002
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0051	0.0017	NJ	0.002
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.14	0.0022		0.002
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0019	0.0019	UJ	0.002
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0342	0.0021		0.002
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0205	0.0019		0.002
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0015	0.0015	UJ	0.002
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.263	0.0016		0.002
	PCB-132/161		0.725	0.0017		0.002
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	1.48	0.0015		0.002
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0015	0.0015	UJ	0.002
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.398	0.0018		0.002
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0915	0.002		0.002
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.122	0.0021		0.002
	PCB-163/164		0.553	0.0014		0.002
	PCB-138/160		1.52	0.0019		0.002
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.204	0.0014		0.002
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.0814	0.002		0.002
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0015	0.0015	UJ	0.002
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.0016	0.0016	UJ	0.002
	PCB-128/162		0.287	0.0019		0.002
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.1	0.0021		0.002
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.174	0.0021		0.002
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0376	0.0022		0.002
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0064	0.0017	NJ	0.002
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0024	0.0024	U	0.002
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0018	0.0018	UJ	0.002
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.204	0.0017		0.002
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0577	0.0018		0.002
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0019	0.0019	UJ	0.002
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0876	0.0025		0.002
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0192	0.0025		0.002
	PCB-182/187		0.512	0.0025		0.002
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.218	0.0025		0.002
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0581	0.003		0.002
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.444	0.0028		0.002
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0029	0.0029	U	0.002
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.214	0.0028		0.002

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste - PCBs 2
Field ID: #16-09082
PRL ID: PR162046
Moisture Content: 18.7%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/11/2016
HRMS File: FS08111605

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.106	0.0028		0.002
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0085	0.0032		0.002
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0675	0.0033		0.002
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0028	0.0028	U	0.002
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.897	0.0035		0.002
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0307	0.0026		0.002
2,3,3',4,4',5',6-HpCB	PCB-191	74472-50-7	0.0163	0.0026		0.002
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.42	0.002		0.002
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0944	0.0017		0.002
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.0202	0.0019		0.002
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0947	0.0029		0.002
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.047	0.0019		0.002
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0021	0.0021	U	0.002
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0021	0.0021	U	0.002
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0273	0.002		0.002
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0019	0.0019	UJ	0.002
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.423	0.002		0.002
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.179	0.0017		0.002
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.245	0.002		0.002
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0963	0.0022		0.002
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.329	0.0026		0.002
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.002	0.002	U	0.002
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0736	0.0112		0.002
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0203	0.01	NJ	0.002
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.19	0.0152		0.002
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0645	0.0081		0.002

Homologs	# of Congeners		
Monochlorobiphenyls	3	0.0128	0.0001
Dichlorobiphenyls	12	0.419	0.0004
Trichlorobiphenyls	24	3.91	0.0002
Tetrachlorobiphenyls	42	8.32	0.0005
Pentachlorobiphenyls	46	6.49	0.0013
Hexachlorobiphenyls	42	8.92	0.0014
Heptachlorobiphenyls	24	3.48	0.0017
Octachlorobiphenyls	12	1.44	0.0017
Nonachlorobiphenyls	3	0.264	0.01
Decachlorobiphenyl	1	0.0645	0.0081
Total PCB		33.3	0.0001

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste - PCBs 2
Field ID: #16-09082
PRL ID: PR162046
Moisture Content: 18.7%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/11/2016
HRMS File: FS08111605

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	130	5	145
¹³ C ₁₂ -4-MoCB	3L	97	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	89	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	75	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	45	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	113	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	100	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	38	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	39	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	144	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	135	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	131	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	126	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	123	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	96	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	73	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	68	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	62	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HxCB	157L	64	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	83	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	72	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	110	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	35	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	85	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	55	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	72	10	145
¹³ C ₁₂ -DeCB	209L	56	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	143	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	74	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	68	10	145

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste - PCBs 2
Field ID: #16-09082
PRL ID: PR162046D
Moisture Content: 18.7%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/11/2016
HRMS File: FS08111606

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0032	0.0001		0.002
3-MoCB	PCB-002	2051-61-8	0.0023	0.0001		0.002
4-MoCB	PCB-003	2051-62-9	0.0052	0.0002		0.002
2,6-DiCB	PCB-010	33146-45-1	0.0004	0.0004	UJ	0.002
2,2'-DiCB	PCB-004	13029-08-8	0.0194	0.0006		0.002
2,5-DiCB	PCB-009	34883-39-1	0.0031	0.0003		0.002
2,4-DiCB	PCB-007	33284-50-3	0.0054	0.0004		0.002
2,3'-DiCB	PCB-006	25569-80-6	0.0141	0.0004		0.002
2,3/2,4'-DiCB	PCB-005/008		0.0429	0.0004		0.002
3,5-DiCB	PCB-014	34883-41-5	0.0012	0.0003	NJ	0.002
3,3'-DiCB	PCB-011	2050-67-1	0.161	0.0003		0.002
3,4/3,4'-DiCB	PCB-012/013		0.0116	0.0004		0.002
4,4'-DiCB	PCB-015	2050-68-2	0.155	0.0004		0.002
2,2',6-TrCB	PCB-019	38444-73-4	0.0294	0.0025		0.002
2,4,6-TrCB	PCB-030	35693-92-6	0.0013	0.0013	UJ	0.002
2,2',5-TrCB	PCB-018	37680-65-2	0.123	0.0016		0.002
2,2',4-TrCB	PCB-017	37680-66-3	0.0433	0.0017		0.002
2,3,6-TrCB	PCB-024	55702-45-9	0.0023	0.0015		0.002
2,3',6-TrCB	PCB-027	38444-76-7	0.0141	0.001		0.002
2,4',6-TrCB	PCB-032	38444-77-8	0.112	0.0012		0.002
2,2',3-TrCB	PCB-016	38444-78-9	1.92	0.004		0.002
2,3,5-TrCB	PCB-023	55720-44-0	0.0002	0.0002	UJ	0.002
2,3',5'-TrCB	PCB-034	37680-68-5	0.0025	0.0002		0.002
2,4,5-TrCB	PCB-029	15862-07-4	0.0039	0.0002		0.002
2,3',5-TrCB	PCB-026	38444-81-4	0.0918	0.0002		0.002
2,3',4-TrCB	PCB-025	55712-37-3	0.0467	0.0002		0.002
2,4',5-TrCB	PCB-031	16606-02-3	0.491	0.0001		0.002
2,4,4'-TrCB	PCB-028	7012-37-5	0.807	0.0002		0.002
2,3,4-TrCB	PCB-021	55702-46-0	0.0002	0.0002	UJ	0.002
	PCB-020/033		0.266	0.0002		0.002
2,3,4'-TrCB	PCB-022	38444-85-8	0.316	0.0002		0.002
3,3',5-TrCB	PCB-036	38444-87-0	0.0052	0.0002		0.002
3,4',5-TrCB	PCB-039	38444-88-1	0.0171	0.0002		0.002
3,4,5-TrCB	PCB-038	53555-66-1	0.0002	0.0002	UJ	0.002
3,3',4-TrCB	PCB-035	37680-69-6	0.0155	0.0002		0.002
3,4,4'-TrCB	PCB-037	38444-90-5	0.277	0.0002		0.002
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0023	0.0004		0.002
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0033	0.0009	NJ	0.002
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.231	0.0011		0.002
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.072	0.001		0.002
2,2',3,6-TeCB	PCB-045	70362-45-7	0.239	0.001		0.002
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.113	0.0012		0.002
	PCB-052/069		1.2	0.0009		0.002
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0007	0.0007	UJ	0.002
	PCB-043/049		0.813	0.0011		0.002
	PCB-065/075		0.0009	0.0009	UJ	0.002
	PCB-047/048		0.341	0.0007		0.002
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0008	0.0008	UJ	0.002
2,2',3,5'-TeCB	PCB-044	41464-39-5	1.06	0.0012		0.002
2,3,3',6-TeCB	PCB-059	74472-33-6	0.1	0.0008		0.002
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.351	0.0012		0.002
	PCB-064/072		0.942	0.0011		0.002

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste - PCBs 2
Field ID: #16-09082
PRL ID: PR162046D
Moisture Content: 18.7%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/11/2016
HRMS File: FS08111606

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.205	0.0007		0.002
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.095	0.001		0.002
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0007	0.0007	UJ	0.002
	PCB-040/057		0.196	0.0013		0.002
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.02	0.0006		0.002
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0256	0.0007		0.002
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0256	0.0007		0.002
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0006	0.0006	UJ	0.002
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.391	0.0008		0.002
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.73	0.0007		0.002
	PCB-055/080		0.0007	0.0007	UJ	0.002
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.653	0.0007		0.002
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0104	0.0007		0.002
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.142	0.0007		0.002
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.376	0.0007		0.002
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0007	0.0007	UJ	0.002
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0096	0.0007		0.002
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0026	0.0026	U	0.002
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.137	0.0029		0.002
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0019	0.0019	UJ	0.002
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0245	0.005		0.002
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0082	0.0056	NJ	0.002
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0062	0.0062	U	0.002
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0135	0.0073	NJ	0.002
	PCB-093/098/102		0.0475	0.0064		0.002
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	1.13	0.0063		0.002
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0064	0.0064	U	0.002
	PCB-091/121		0.176	0.0054		0.002
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.378	0.007		0.002
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.153	0.0061		0.002
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0181	0.0062	NJ	0.002
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0078	0.0078	U	0.002
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.846	0.0056		0.002
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0049	0.0049	U	0.002
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.348	0.0057		0.002
	PCB-112/119		0.0049	0.0049	U	0.002
	PCB-083/109		0.073	0.0082		0.002
	PCB-086/117		0.0046	0.0046	U	0.002
	PCB-097/116		0.435	0.0084		0.002
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0055	0.0055	U	0.002
	PCB-087/115		0.387	0.0057		0.002
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0048	0.0048	U	0.002
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.172	0.0063		0.002
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0048	0.0048	U	0.002
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	1.13	0.0052		0.002
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.147	0.008		0.002
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0658	0.0015		0.002
	PCB-107/108		0.0632	0.0014		0.002
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0284	0.0017		0.002
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0016	0.0016	UJ	0.002
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.8	0.0017		0.002
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0267	0.002		0.002

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste - PCBs 2
Field ID: #16-09082
PRL ID: PR162046D
Moisture Content: 18.7%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/11/2016
HRMS File: FS08111606

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0173	0.0015	NJ	0.002
	PCB-105/127		0.479	0.0019		0.002
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0107	0.0021		0.002
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.0048	0.0048	U	0.002
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0055	0.0055	U	0.002
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0054	0.0054	U	0.002
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.0059	0.0059	U	0.002
	PCB-136/148		0.256	0.0062		0.002
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0067	0.0067	U	0.002
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.363	0.0088		0.002
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.195	0.009		0.002
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.0697	0.0077	NJ	0.002
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0082	0.0082	U	0.002
	PCB-139/149		2.06	0.0019		0.002
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0096	0.0017		0.002
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0018	0.0018	UJ	0.002
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.137	0.0024		0.002
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.002	0.002	U	0.002
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0304	0.0022		0.002
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0255	0.002		0.002
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0016	0.0016	UJ	0.002
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.254	0.0017		0.002
	PCB-132/161		0.73	0.0018		0.002
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	1.44	0.0016		0.002
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0016	0.0016	UJ	0.002
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.399	0.0019		0.002
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0877	0.0022		0.002
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.118	0.0023		0.002
	PCB-163/164		0.507	0.0015		0.002
	PCB-138/160		1.44	0.002		0.002
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.181	0.0015		0.002
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.0835	0.0022		0.002
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0045	0.0016	NJ	0.002
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.0017	0.0017	UJ	0.002
	PCB-128/162		0.273	0.002		0.002
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0884	0.0023		0.002
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.15	0.0024		0.002
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0427	0.0024		0.002
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0079	0.0017	NJ	0.002
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0027	0.0027	U	0.002
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0021	0.0021	U	0.002
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.219	0.002		0.002
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0589	0.0021		0.002
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0023	0.0023	U	0.002
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0782	0.003		0.002
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0186	0.003		0.002
	PCB-182/187		0.496	0.003		0.002
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.222	0.003		0.002
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0428	0.0036		0.002
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.408	0.0033		0.002
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0035	0.0035	U	0.002
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.194	0.0033		0.002

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste - PCBs 2
Field ID: #16-09082
PRL ID: PR162046D
Moisture Content: 18.7%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/11/2016
HRMS File: FS08111606

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.101	0.0034		0.002
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0087	0.0037		0.002
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0721	0.0039		0.002
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0034	0.0034	U	0.002
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.895	0.0042		0.002
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0433	0.003		0.002
2,3,3',4,4',5',6-HpCB	PCB-191	74472-50-7	0.0116	0.0031		0.002
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.402	0.0024		0.002
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0885	0.002		0.002
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.0191	0.0024		0.002
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0961	0.0052		0.002
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0362	0.0032		0.002
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0035	0.0035	U	0.002
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0085	0.0036	NJ	0.002
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0313	0.0034		0.002
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0031	0.0031	U	0.002
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.483	0.0033		0.002
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.21	0.0028		0.002
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.254	0.0033		0.002
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.122	0.0036		0.002
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.357	0.0044		0.002
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0032	0.0032	U	0.002
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0929	0.0139		0.002
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0281	0.0129	NJ	0.002
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.202	0.0207		0.002
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.058	0.0089		0.002

Homologs	# of Congeners		
Monochlorobiphenyls	3	0.0107	0.0001
Dichlorobiphenyls	12	0.413	0.0003
Trichlorobiphenyls	24	4.58	0.0001
Tetrachlorobiphenyls	42	8.48	0.0004
Pentachlorobiphenyls	46	6.92	0.0014
Hexachlorobiphenyls	42	8.87	0.0015
Heptachlorobiphenyls	24	3.38	0.002
Octachlorobiphenyls	12	1.59	0.0028
Nonachlorobiphenyls	3	0.295	0.0129
Decachlorobiphenyl	1	0.058	0.0089
Total PCB		34.6	0.0001

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste - PCBs 2
Field ID: #16-09082
PRL ID: PR162046D
Moisture Content: 18.7%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/11/2016
HRMS File: FS08111606

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	145	5	145
¹³ C ₁₂ -4-MoCB	3L	102	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	90	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	79	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	44	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	97	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	108	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	31	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	30	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	144	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	132	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	127	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	126	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	120	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	96	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	69	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	63	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	62	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	157L	58	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	85	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	71	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	107	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	31	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	85	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	51	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	64	10	145
¹³ C ₁₂ -DeCB	209L	68	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	143	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	68	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	60	10	145

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste - PCBs 3
Field ID: #16-09083
PRL ID: PR162047
Moisture Content: 18.66%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081611

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0027	0.0001		0.002
3-MoCB	PCB-002	2051-61-8	0.002	0.0001		0.002
4-MoCB	PCB-003	2051-62-9	0.0048	0.0002		0.002
2,6-DiCB	PCB-010	33146-45-1	0.0003	0.0003	UJ	0.002
2,2'-DiCB	PCB-004	13029-08-8	0.019	0.0004		0.002
2,5-DiCB	PCB-009	34883-39-1	0.0022	0.0002		0.002
2,4-DiCB	PCB-007	33284-50-3	0.0041	0.0003		0.002
2,3'-DiCB	PCB-006	25569-80-6	0.0115	0.0003		0.002
2,3/2,4'-DiCB	PCB-005/008		0.0379	0.0003		0.002
3,5-DiCB	PCB-014	34883-41-5	0.0002	0.0002	UJ	0.002
3,3'-DiCB	PCB-011	2050-67-1	0.141	0.0002		0.002
3,4/3,4'-DiCB	PCB-012/013		0.0059	0.0002		0.002
4,4'-DiCB	PCB-015	2050-68-2	0.0977	0.0003		0.002
2,2',6-TrCB	PCB-019	38444-73-4	0.0272	0.0003		0.002
2,4,6-TrCB	PCB-030	35693-92-6	0.001	0.001	UJ	0.002
2,2',5-TrCB	PCB-018	37680-65-2	0.695	0.0013		0.002
2,2',4-TrCB	PCB-017	37680-66-3	0.242	0.0013		0.002
2,3,6-TrCB	PCB-024	55702-45-9	0.0139	0.0011		0.002
2,3',6-TrCB	PCB-027	38444-76-7	0.0696	0.0007		0.002
2,4',6-TrCB	PCB-032	38444-77-8	0.366	0.0009		0.002
2,2',3-TrCB	PCB-016	38444-78-9	0.892	0.0029		0.002
2,3,5-TrCB	PCB-023	55720-44-0	0.0001	0.0001	UJ	0.002
2,3',5'-TrCB	PCB-034	37680-68-5	0.001	0.0001	J	0.002
2,4,5-TrCB	PCB-029	15862-07-4	0.0017	0.0001	J	0.002
2,3',5-TrCB	PCB-026	38444-81-4	0.0387	0.0001		0.002
2,3',4-TrCB	PCB-025	55712-37-3	0.0226	0.0001		0.002
2,4',5-TrCB	PCB-031	16606-02-3	0.239	0.0001		0.002
2,4,4'-TrCB	PCB-028	7012-37-5	0.376	0.0001		0.002
2,3,4-TrCB	PCB-021	55702-46-0	0.0002	0.0002	UJ	0.002
	PCB-020/033		0.136	0.0002		0.002
2,3,4'-TrCB	PCB-022	38444-85-8	0.156	0.0002		0.002
3,3',5-TrCB	PCB-036	38444-87-0	0.0027	0.0001		0.002
3,4',5-TrCB	PCB-039	38444-88-1	0.0104	0.0001		0.002
3,4,5-TrCB	PCB-038	53555-66-1	0.0002	0.0002	UJ	0.002
3,3',4-TrCB	PCB-035	37680-69-6	0.0093	0.0001		0.002
3,4,4'-TrCB	PCB-037	38444-90-5	0.214	0.0003		0.002
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0011	0.0003	J	0.002
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0006	0.0006	UJ	0.002
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.12	0.0007		0.002
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.039	0.0007		0.002
2,2',3,6-TeCB	PCB-045	70362-45-7	0.125	0.0007		0.002
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0595	0.0008		0.002
	PCB-052/069		0.714	0.0006		0.002
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0005	0.0005	UJ	0.002
	PCB-043/049		0.464	0.0007		0.002
	PCB-065/075		0.0006	0.0006	UJ	0.002
	PCB-047/048		0.204	0.0005		0.002
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0006	0.0006	UJ	0.002
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.626	0.0008		0.002
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0558	0.0005		0.002
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.196	0.0008		0.002
	PCB-064/072		0.486	0.0007		0.002

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste - PCBs 3
Field ID: #16-09083
PRL ID: PR162047
Moisture Content: 18.66%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081611

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.153	0.0005		0.002
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0537	0.0007		0.002
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0117	0.0005		0.002
	PCB-040/057		0.112	0.0009		0.002
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0133	0.0004		0.002
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0167	0.0005		0.002
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0167	0.0005		0.002
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0004	0.0004	UJ	0.002
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.241	0.0005		0.002
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.501	0.0005		0.002
	PCB-055/080		0.0005	0.0005	UJ	0.002
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.442	0.0005		0.002
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0067	0.0005		0.002
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.112	0.0005		0.002
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.253	0.0005		0.002
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0022	0.0004		0.002
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0096	0.0005		0.002
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0034	0.0013		0.002
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0914	0.0014		0.002
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0005	0.0005	UJ	0.002
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0396	0.0029		0.002
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0144	0.0033		0.002
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0058	0.0036	NJ	0.002
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0204	0.0043		0.002
	PCB-093/098/102		0.108	0.0037		0.002
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	2.47	0.0037		0.002
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0037	0.0037	U	0.002
	PCB-091/121		0.363	0.0032		0.002
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.838	0.0041		0.002
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.392	0.0036		0.002
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0554	0.0036		0.002
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0046	0.0046	U	0.002
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	2.17	0.0033		0.002
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0028	0.0028	U	0.002
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.876	0.0033		0.002
	PCB-112/119		0.0452	0.0028		0.002
	PCB-083/109		0.18	0.0048		0.002
	PCB-086/117		0.0027	0.0027	U	0.002
	PCB-097/116		0.0049	0.0049		0.002
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0032	0.0032	U	0.002
	PCB-087/115		1.02	0.0034		0.002
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0028	0.0028	U	0.002
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.463	0.0037		0.002
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0028	0.0028	U	0.002
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	3.13	0.003		0.002
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.379	0.0047		0.002
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0265	0.0006		0.002
	PCB-107/108		0.0428	0.0008		0.002
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0211	0.0015		0.002
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0009	0.0009	UJ	0.002
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.775	0.0014		0.002
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0232	0.0017		0.002

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste - PCBs 3
Field ID: #16-09083
PRL ID: PR162047
Moisture Content: 18.66%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081611

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0089	0.0009		0.002
	PCB-105/127		0.443	0.0016		0.002
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0094	0.0016		0.002
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.0009	0.0009	UJ	0.002
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0028	0.0028	U	0.002
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0027	0.0027	U	0.002
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.003	0.003	U	0.002
	PCB-136/148		0.587	0.0032		0.002
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0297	0.0034		0.002
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.923	0.0045		0.002
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.544	0.0046		0.002
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.196	0.0039		0.002
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0612	0.0042		0.002
	PCB-139/149		1.25	0.0009		0.002
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0009	0.0009	UJ	0.002
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0009	0.0009	UJ	0.002
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.092	0.0012		0.002
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.001	0.001	UJ	0.002
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0177	0.0011		0.002
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0178	0.0011		0.002
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0008	0.0008	UJ	0.002
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.184	0.0009		0.002
	PCB-132/161		0.462	0.0009		0.002
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	1.06	0.0008		0.002
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0008	0.0008	UJ	0.002
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.282	0.001		0.002
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0713	0.0011		0.002
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0882	0.0012		0.002
	PCB-163/164		0.378	0.0008		0.002
	PCB-138/160		1.16	0.001		0.002
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.145	0.0008		0.002
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.0642	0.0011		0.002
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0008	0.0008	UJ	0.002
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.0009	0.0009	UJ	0.002
	PCB-128/162		0.216	0.001		0.002
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0889	0.0011		0.002
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.174	0.0013		0.002
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.044	0.0013		0.002
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0061	0.0018	NJ	0.002
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.001	0.001	UJ	0.002
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.001	0.001	UJ	0.002
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.193	0.0009		0.002
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0608	0.0009		0.002
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.001	0.001	UJ	0.002
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0881	0.0013		0.002
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0211	0.0014		0.002
	PCB-182/187		0.556	0.0013		0.002
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.255	0.0013		0.002
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0527	0.0016		0.002
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.448	0.0015		0.002
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0016	0.0016	UJ	0.002
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.219	0.0015		0.002

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste - PCBs 3
Field ID: #16-09083
PRL ID: PR162047
Moisture Content: 18.66%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081611

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0015	0.0015	UJ	0.002
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.011	0.0017		0.002
2,2',3,3',4,5,5',6-HpCB	PCB-172	52663-74-8	0.0728	0.0017		0.002
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0015	0.0015	UJ	0.002
2,2',3,4,4',5,5',6-HpCB	PCB-180	35065-29-3	1.02	0.0019		0.002
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0396	0.0014		0.002
2,3,3',4,4',5',6-HpCB	PCB-191	74472-50-7	0.0162	0.0014		0.002
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.223	0.0011		0.002
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0516	0.0009		0.002
2,3,3',4,4',5,5',6-HpCB	PCB-189	39635-31-9	0.0226	0.0014		0.002
2,2',3,3',5,5',6,6'-OoCB	PCB-202	2136-99-4	0.0761	0.0009		0.002
2,2',3,3',4,5',6,6'-OoCB	PCB-201	40186-71-8	0.0467	0.0009		0.002
2,2',3,4,4',5,6,6'-OoCB	PCB-204	74472-52-9	0.001	0.001	UJ	0.002
2,2',3,3',4,4',6,6'-OoCB	PCB-197	33091-17-7	0.0142	0.001		0.002
2,2',3,3',4,5,6,6'-OoCB	PCB-200	52663-73-7	0.0389	0.001		0.002
2,2',3,3',4,5,5',6-OoCB	PCB-198	68194-17-2	0.0009	0.0009	UJ	0.002
2,2',3,3',4,5,5',6-OoCB	PCB-199	52663-75-9	0.233	0.0009		0.002
2,2',3,3',4,4',5,6'-OoCB	PCB-196	42740-50-1	0.0795	0.0008		0.002
2,2',3,4,4',5,5',6-OoCB	PCB-203	52663-76-0	0.164	0.001		0.002
2,2',3,3',4,4',5,6-OoCB	PCB-195	52663-78-2	0.0605	0.001		0.002
2,2',3,3',4,4',5,5'-OoCB	PCB-194	35694-08-7	0.192	0.0013		0.002
2,3,3',4,4',5,5',6-OoCB	PCB-205	74472-53-0	0.0191	0.0015		0.002
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0587	0.0024		0.002
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.028	0.0024		0.002
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.171	0.0044		0.002
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0778	0.004		0.002

Homologs	# of Congeners		
Monochlorobiphenyls	3	0.0095	0.0001
Dichlorobiphenyls	12	0.319	0.0002
Trichlorobiphenyls	24	3.51	0.0001
Tetrachlorobiphenyls	42	5.13	0.0003
Pentachlorobiphenyls	46	15.1	0.0005
Hexachlorobiphenyls	42	8.14	0.0008
Heptachlorobiphenyls	24	3.35	0.0009
Octachlorobiphenyls	12	0.924	0.0008
Nonachlorobiphenyls	3	0.258	0.0024
Decachlorobiphenyl	1	0.0778	0.004
Total PCB		36.8	0.0001

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste - PCBs 3
Field ID: #16-09083
PRL ID: PR162047
Moisture Content: 18.66%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081611

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	40	5	145
¹³ C ₁₂ -4-MoCB	3L	27	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	85	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	69	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	93	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	46	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	103	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	44	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	47	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	131	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	67	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	66	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	64	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	61	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	53	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	100	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	72	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	63	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	157L	64	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	49	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	124	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	69	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	120	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	80	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	98	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	110	10	145
¹³ C ₁₂ -DeCB	209L	142	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	61	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	75	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	118	10	145

DATA REPORT

Client: City of Spokane
Client ID: Hydrated Grain - PCBs 1
Field ID: #16-11363
PRL ID: PR162048
Moisture Content: 47.77%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081612

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0003	0.0001	NJ	0.0021
3-MoCB	PCB-002	2051-61-8	0.0003	0.0001	J	0.0021
4-MoCB	PCB-003	2051-62-9	0.0007	0.0001	BJ	0.0021
2,6-DiCB	PCB-010	33146-45-1	0.0002	0.0002	UJ	0.0021
2,2'-DiCB	PCB-004	13029-08-8	0.0003	0.0003	UJ	0.0021
2,5-DiCB	PCB-009	34883-39-1	0.0002	0.0002	UJ	0.0021
2,4-DiCB	PCB-007	33284-50-3	0.0002	0.0002	UJ	0.0021
2,3'-DiCB	PCB-006	25569-80-6	0.0008	0.0002	J	0.0021
2,3/2,4'-DiCB	PCB-005/008		0.0027	0.0002	B	0.0021
3,5-DiCB	PCB-014	34883-41-5	0.0001	0.0001	UJ	0.0021
3,3'-DiCB	PCB-011	2050-67-1	0.0124	0.0001	B	0.0021
3,4/3,4'-DiCB	PCB-012/013		0.0002	0.0002	UJ	0.0021
4,4'-DiCB	PCB-015	2050-68-2	0.0002	0.0002	UJ	0.0021
2,2',6-TrCB	PCB-019	38444-73-4	0.0001	0.0001	UJ	0.0021
2,4,6-TrCB	PCB-030	35693-92-6	0.0003	0.0003	UJ	0.0021
2,2',5-TrCB	PCB-018	37680-65-2	0.0124	0.0003		0.0021
2,2',4-TrCB	PCB-017	37680-66-3	0.004	0.0003	B	0.0021
2,3,6-TrCB	PCB-024	55702-45-9	0.0003	0.0003	UJ	0.0021
2,3',6-TrCB	PCB-027	38444-76-7	0.0007	0.0002	NJ	0.0021
2,4',6-TrCB	PCB-032	38444-77-8	0.003	0.0002		0.0021
2,2',3-TrCB	PCB-016	38444-78-9	0.0057	0.0008		0.0021
2,3,5-TrCB	PCB-023	55720-44-0	0.0001	0.0001	UJ	0.0021
2,3',5'-TrCB	PCB-034	37680-68-5	0.0002	0.0001	UJ	0.0021
2,4,5-TrCB	PCB-029	15862-07-4	0.0001	0.0001	UJ	0.0021
2,3',5-TrCB	PCB-026	38444-81-4	0.0004	0.0001	J	0.0021
2,3',4-TrCB	PCB-025	55712-37-3	0.0002	0.0001	J	0.0021
2,4',5-TrCB	PCB-031	16606-02-3	0.002	0.0001	BJ	0.0021
2,4,4'-TrCB	PCB-028	7012-37-5	0.0022	0.0001	B	0.0021
2,3,4-TrCB	PCB-021	55702-46-0	0.0001	0.0001	UJ	0.0021
	PCB-020/033		0.0015	0.0001	BJ	0.0021
2,3,4'-TrCB	PCB-022	38444-85-8	0.0011	0.0001	BJ	0.0021
3,3',5-TrCB	PCB-036	38444-87-0	0.0001	0.0001	UJ	0.0021
3,4',5-TrCB	PCB-039	38444-88-1	0.0001	0.0001	UJ	0.0021
3,4,5-TrCB	PCB-038	53555-66-1	0.0001	0.0001	UJ	0.0021
3,3',4-TrCB	PCB-035	37680-69-6	0.0004	0.0001	J	0.0021
3,4,4'-TrCB	PCB-037	38444-90-5	0.0011	0.0001	BJ	0.0021
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0001	0.0001	UJ	0.0021
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0001	0.0001	UJ	0.0021
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0004	0.0001	J	0.0021
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0001	0.0001	UJ	0.0021
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0001	0.0001	UJ	0.0021
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0001	0.0001	UJ	0.0021
	PCB-052/069		0.0035	0.0001	B	0.0021
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0001	0.0001	UJ	0.0021
	PCB-043/049		0.0016	0.0001	BJ	0.0021
	PCB-065/075		0.0001	0.0001	UJ	0.0021
	PCB-047/048		0.0011	0.0001	BJ	0.0021
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0001	0.0001	UJ	0.0021
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.0023	0.0001	B	0.0021
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0001	0.0001	NJ	0.0021
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.0007	0.0001	J	0.0021
	PCB-064/072		0.0001	0.0001	UJ	0.0021

DATA REPORT

Client: City of Spokane
Client ID: Hydrated Grain - PCBs 1
Field ID: #16-11363
PRL ID: PR162048
Moisture Content: 47.77%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081612

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.0017	0.0001	BJ	0.0021
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0001	0.0001	UJ	0.0021
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0001	0.0001	UJ	0.0021
	PCB-040/057		0.0002	0.0002	UJ	0.0021
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0001	0.0001	UJ	0.0021
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0001	0.0001	UJ	0.0021
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0001	0.0001	UJ	0.0021
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0001	0.0001	UJ	0.0021
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.0015	0.0001	BJ	0.0021
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.0025	0.0001	B	0.0021
	PCB-055/080		0.0001	0.0001	UJ	0.0021
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.0019	0.0001	BJ	0.0021
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0001	0.0001	UJ	0.0021
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.0008	0.0001	NJ	0.0021
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.0009	0.0001	J	0.0021
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0001	0.0001	UJ	0.0021
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0001	0.0001	UJ	0.0021
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0001	0.0001	UJ	0.0021
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0002	0.0002	UJ	0.0021
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0001	0.0001	UJ	0.0021
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0005	0.0005	UJ	0.0021
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0005	0.0005	UJ	0.0021
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0006	0.0006	UJ	0.0021
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0007	0.0007	UJ	0.0021
	PCB-093/098/102		0.0006	0.0006	UJ	0.0021
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.0098	0.0006		0.0021
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0006	0.0006	UJ	0.0021
	PCB-091/121		0.0008	0.0005	NJ	0.0021
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.0032	0.0007	NJ	0.0021
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.0006	0.0006	UJ	0.0021
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0006	0.0006	UJ	0.0021
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0008	0.0008	UJ	0.0021
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.0081	0.0005	B	0.0021
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0005	0.0005	UJ	0.0021
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.0036	0.0006		0.0021
	PCB-112/119		0.0005	0.0005	UJ	0.0021
	PCB-083/109		0.0008	0.0008	UJ	0.0021
	PCB-086/117		0.0004	0.0004	UJ	0.0021
	PCB-097/116		0.0008	0.0008		0.0021
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0005	0.0005	UJ	0.0021
	PCB-087/115		0.0048	0.0006		0.0021
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0005	0.0005	UJ	0.0021
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.0006	0.0006	UJ	0.0021
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0005	0.0005	UJ	0.0021
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.0118	0.0005	B	0.0021
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.0008	0.0008	UJ	0.0021
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0001	0.0001	UJ	0.0021
	PCB-107/108		0.0001	0.0001	UJ	0.0021
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0002	0.0002	UJ	0.0021
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0002	0.0002	UJ	0.0021
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.0021	0.0002	B	0.0021
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0002	0.0002	UJ	0.0021

DATA REPORT

Client: City of Spokane
Client ID: Hydrated Grain - PCBs 1
Field ID: #16-11363
PRL ID: PR162048
Moisture Content: 47.77%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081612

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0001	0.0001	UJ	0.0021
	PCB-105/127		0.0014	0.0002	BJ	0.0021
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0001	0.0001	UJ	0.0021
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.0001	0.0001	UJ	0.0021
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0002	0.0002	UJ	0.0021
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0002	0.0002	UJ	0.0021
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.0002	0.0002	UJ	0.0021
	PCB-136/148		0.0007	0.0002	NJ	0.0021
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0002	0.0002	UJ	0.0021
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.0003	0.0003	UJ	0.0021
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.0003	0.0003	UJ	0.0021
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.0003	0.0003	UJ	0.0021
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0003	0.0003	UJ	0.0021
	PCB-139/149		0.0012	0.0001	BJ	0.0021
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0001	0.0001	UJ	0.0021
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0001	0.0001	UJ	0.0021
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.0001	0.0001	UJ	0.0021
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0001	0.0001	UJ	0.0021
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0001	0.0001	UJ	0.0021
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0001	0.0001	UJ	0.0021
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0001	0.0001	UJ	0.0021
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.0001	0.0001	UJ	0.0021
	PCB-132/161		0.0005	0.0001	BJ	0.0021
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	0.0009	0.0001	BJ	0.0021
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0001	0.0001	UJ	0.0021
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.0001	0.0001	UJ	0.0021
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0001	0.0001	UJ	0.0021
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0001	0.0001	UJ	0.0021
	PCB-163/164		0.0003	0.0001	J	0.0021
	PCB-138/160		0.0012	0.0001	J	0.0021
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.0001	0.0001	UJ	0.0021
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.0001	0.0001	UJ	0.0021
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0001	0.0001	UJ	0.0021
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.0001	0.0001	UJ	0.0021
	PCB-128/162		0.0001	0.0001	UJ	0.0021
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0001	0.0001	UJ	0.0021
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.0001	0.0001	UJ	0.0021
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0001	0.0001	UJ	0.0021
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0001	0.0001	UJ	0.0021
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0002	0.0002	UJ	0.0021
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0001	0.0001	UJ	0.0021
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.0001	0.0001	UJ	0.0021
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0001	0.0001	UJ	0.0021
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0001	0.0001	UJ	0.0021
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0002	0.0002	UJ	0.0021
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0002	0.0002	UJ	0.0021
	PCB-182/187		0.0011	0.0002	J	0.0021
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.0002	0.0002	UJ	0.0021
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0002	0.0002	UJ	0.0021
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.0002	0.0002	UJ	0.0021
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0002	0.0002	UJ	0.0021
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.0003	0.0002	NJ	0.0021

DATA REPORT

Client: City of Spokane
Client ID: Hydrated Grain - PCBs 1
Field ID: #16-11363
PRL ID: PR162048
Moisture Content: 47.77%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081612

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0002	0.0002	UJ	0.0021
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0002	0.0002	UJ	0.0021
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0002	0.0002	UJ	0.0021
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0002	0.0002	UJ	0.0021
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.0011	0.0002	BJ	0.0021
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0002	0.0002	UJ	0.0021
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.0002	0.0002	UJ	0.0021
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.0001	0.0001	UJ	0.0021
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0001	0.0001	UJ	0.0021
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.0001	0.0001	UJ	0.0021
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0002	0.0002	UJ	0.0021
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0002	0.0002	UJ	0.0021
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0002	0.0002	UJ	0.0021
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0002	0.0002	UJ	0.0021
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0003	0.0002	NJ	0.0021
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0002	0.0002	UJ	0.0021
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.0002	0.0002	UJ	0.0021
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.0006	0.0001	NJ	0.0021
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.0008	0.0002	NJ	0.0021
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0008	0.0002	NJ	0.0021
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.0002	0.0002	UJ	0.0021
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0002	0.0002	UJ	0.0021
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0003	0.0003	UJ	0.0021
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0003	0.0003	UJ	0.0021
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.0006	0.0006	UJ	0.0021
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0006	0.0006	UJ	0.0021

Homologs	# of Congeners			
Monochlorobiphenyls	3	0.001	0.0001	BJ
Dichlorobiphenyls	12	0.0159	0.0001	B
Trichlorobiphenyls	24	0.034	0.0001	
Tetrachlorobiphenyls	42	0.0182	0.0001	B
Pentachlorobiphenyls	46	0.046	0.0001	
Hexachlorobiphenyls	42	0.0041	0.0001	B
Heptachlorobiphenyls	24	0.0022	0.0001	
Octachlorobiphenyls	12	0.0001	0.0001	UJ
Nonachlorobiphenyls	3	0.0003	0.0003	UJ
Decachlorobiphenyl	1	0.0006	0.0006	UJ
Total PCB		0.121	0.0001	B

DATA REPORT

Client: City of Spokane
Client ID: Hydrated Grain - PCBs 1
Field ID: #16-11363
PRL ID: PR162048
Moisture Content: 47.77%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081612

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	25	5	145
¹³ C ₁₂ -4-MoCB	3L	18	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	59	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	72	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	94	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	50	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	87	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	80	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	78	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	67	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	52	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	52	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	50	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	52	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	67	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	90	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	105	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	103	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	157L	106	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	86	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	108	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	61	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	141	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	81	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	98	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	111	10	145
¹³ C ₁₂ -DeCB	209L	136	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	56	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	78	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	125	10	145

DATA REPORT

Client: City of Spokane
Client ID: Hydrated Grain - PCBs 2
Field ID: #16-11364
PRL ID: PR162049
Moisture Content: 47.71%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081613

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0004	0.0001	J	0.002
3-MoCB	PCB-002	2051-61-8	0.0005	0.0001	NJ	0.002
4-MoCB	PCB-003	2051-62-9	0.0005	0.0001	BJ	0.002
2,6-DiCB	PCB-010	33146-45-1	0.0002	0.0002	UJ	0.002
2,2'-DiCB	PCB-004	13029-08-8	0.0009	0.0004	NJ	0.002
2,5-DiCB	PCB-009	34883-39-1	0.0002	0.0002	UJ	0.002
2,4-DiCB	PCB-007	33284-50-3	0.0002	0.0002	UJ	0.002
2,3'-DiCB	PCB-006	25569-80-6	0.0002	0.0002	UJ	0.002
2,3/2,4'-DiCB	PCB-005/008		0.0031	0.0002	B	0.002
3,5-DiCB	PCB-014	34883-41-5	0.0002	0.0002	UJ	0.002
3,3'-DiCB	PCB-011	2050-67-1	0.0121	0.0002	B	0.002
3,4/3,4'-DiCB	PCB-012/013		0.0002	0.0002	UJ	0.002
4,4'-DiCB	PCB-015	2050-68-2	0.0013	0.0002	NJ	0.002
2,2',6-TrCB	PCB-019	38444-73-4	0.0005	0.0001	J	0.002
2,4,6-TrCB	PCB-030	35693-92-6	0.0003	0.0003	UJ	0.002
2,2',5-TrCB	PCB-018	37680-65-2	0.0152	0.0003		0.002
2,2',4-TrCB	PCB-017	37680-66-3	0.0057	0.0004		0.002
2,3,6-TrCB	PCB-024	55702-45-9	0.0003	0.0003	UJ	0.002
2,3',6-TrCB	PCB-027	38444-76-7	0.0009	0.0002	J	0.002
2,4',6-TrCB	PCB-032	38444-77-8	0.0027	0.0003		0.002
2,2',3-TrCB	PCB-016	38444-78-9	0.012	0.0009		0.002
2,3,5-TrCB	PCB-023	55720-44-0	0.0001	0.0001	UJ	0.002
2,3',5'-TrCB	PCB-034	37680-68-5	0.0001	0.0001	UJ	0.002
2,4,5-TrCB	PCB-029	15862-07-4	0.0001	0.0001	UJ	0.002
2,3',5-TrCB	PCB-026	38444-81-4	0.0004	0.0001	J	0.002
2,3',4-TrCB	PCB-025	55712-37-3	0.0003	0.0001	J	0.002
2,4',5-TrCB	PCB-031	16606-02-3	0.0022	0.0001	B	0.002
2,4,4'-TrCB	PCB-028	7012-37-5	0.0023	0.0001	B	0.002
2,3,4-TrCB	PCB-021	55702-46-0	0.0001	0.0001	UJ	0.002
	PCB-020/033		0.0018	0.0001	BJ	0.002
2,3,4'-TrCB	PCB-022	38444-85-8	0.0012	0.0001	BJ	0.002
3,3',5-TrCB	PCB-036	38444-87-0	0.0001	0.0001	UJ	0.002
3,4',5-TrCB	PCB-039	38444-88-1	0.0001	0.0001	UJ	0.002
3,4,5-TrCB	PCB-038	53555-66-1	0.0001	0.0001	UJ	0.002
3,3',4-TrCB	PCB-035	37680-69-6	0.0001	0.0001	UJ	0.002
3,4,4'-TrCB	PCB-037	38444-90-5	0.0012	0.0001	BJ	0.002
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0001	0.0001	UJ	0.002
2,2',4,6'-TeCB	PCB-050	62796-65-0	0.0001	0.0001	UJ	0.002
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0004	0.0001	J	0.002
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0001	0.0001	UJ	0.002
2,2',3,6'-TeCB	PCB-045	70362-45-7	0.0001	0.0001	UJ	0.002
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0002	0.0002	UJ	0.002
	PCB-052/069		0.0036	0.0001	B	0.002
2,3',5',6'-TeCB	PCB-073	74338-23-1	0.0001	0.0001	UJ	0.002
	PCB-043/049		0.0017	0.0001	BJ	0.002
	PCB-065/075		0.0001	0.0001	UJ	0.002
	PCB-047/048		0.0014	0.0001	BJ	0.002
2,3,4,6'-TeCB	PCB-062	54230-22-7	0.0001	0.0001	UJ	0.002
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.0023	0.0002	B	0.002
2,3,3',6'-TeCB	PCB-059	74472-33-6	0.0001	0.0001	UJ	0.002
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.0008	0.0002	J	0.002
	PCB-064/072		0.0019	0.0002	J	0.002

DATA REPORT

Client: City of Spokane
Client ID: Hydrated Grain - PCBs 2
Field ID: #16-11364
PRL ID: PR162049
Moisture Content: 47.71%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081613

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.0004	0.0001	BJ	0.002
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0001	0.0001	UJ	0.002
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0001	0.0001	UJ	0.002
	PCB-040/057		0.0006	0.0002	J	0.002
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0001	0.0001	UJ	0.002
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0001	0.0001	UJ	0.002
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0001	0.0001	UJ	0.002
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0001	0.0001	UJ	0.002
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.0014	0.0001	BJ	0.002
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.0021	0.0001	B	0.002
	PCB-055/080		0.0001	0.0001	UJ	0.002
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.0019	0.0001	BJ	0.002
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0001	0.0001	UJ	0.002
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.0006	0.0001	NJ	0.002
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.0007	0.0001	J	0.002
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0001	0.0001	UJ	0.002
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0001	0.0001	UJ	0.002
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0002	0.0002	UJ	0.002
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0002	0.0002	UJ	0.002
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0001	0.0001	UJ	0.002
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0005	0.0005	UJ	0.002
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0006	0.0006	UJ	0.002
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0007	0.0007	UJ	0.002
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0008	0.0008	UJ	0.002
	PCB-093/098/102		0.0007	0.0007	UJ	0.002
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.0092	0.0007		0.002
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0007	0.0007	UJ	0.002
	PCB-091/121		0.0021	0.0006		0.002
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.0031	0.0008		0.002
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.0007	0.0007	UJ	0.002
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0007	0.0007	UJ	0.002
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0008	0.0008	UJ	0.002
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.0093	0.0006		0.002
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0005	0.0005	UJ	0.002
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.004	0.0006		0.002
	PCB-112/119		0.0005	0.0005	UJ	0.002
	PCB-083/109		0.0009	0.0009	UJ	0.002
	PCB-086/117		0.0005	0.0005	UJ	0.002
	PCB-097/116		0.0009	0.0009		0.002
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0006	0.0006	UJ	0.002
	PCB-087/115		0.0044	0.0006		0.002
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0005	0.0005	UJ	0.002
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.0007	0.0007	UJ	0.002
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0005	0.0005	UJ	0.002
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.0082	0.0006	B	0.002
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.0009	0.0009	UJ	0.002
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0001	0.0001	UJ	0.002
	PCB-107/108		0.0002	0.0002	UJ	0.002
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0002	0.0002	UJ	0.002
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0002	0.0002	UJ	0.002
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.0021	0.0002	B	0.002
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0002	0.0002	UJ	0.002

DATA REPORT

Client: City of Spokane
Client ID: Hydrated Grain - PCBs 2
Field ID: #16-11364
PRL ID: PR162049
Moisture Content: 47.71%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081613

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0002	0.0002	UJ	0.002
	PCB-105/127		0.0009	0.0002	BJ	0.002
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0002	0.0002	UJ	0.002
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.0001	0.0001	UJ	0.002
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0002	0.0002	UJ	0.002
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0002	0.0002	UJ	0.002
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.0002	0.0002	UJ	0.002
	PCB-136/148		0.0002	0.0002	UJ	0.002
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0002	0.0002	UJ	0.002
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.0003	0.0003	UJ	0.002
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.0003	0.0003	UJ	0.002
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.0002	0.0002	UJ	0.002
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0003	0.0003	UJ	0.002
	PCB-139/149		0.001	0.0001	BJ	0.002
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0001	0.0001	UJ	0.002
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0001	0.0001	UJ	0.002
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.0001	0.0001	UJ	0.002
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0001	0.0001	UJ	0.002
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0001	0.0001	UJ	0.002
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0001	0.0001	UJ	0.002
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0001	0.0001	UJ	0.002
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.0001	0.0001	UJ	0.002
	PCB-132/161		0.0004	0.0001	BJ	0.002
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	0.0008	0.0001	BJ	0.002
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0001	0.0001	UJ	0.002
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.0003	0.0001	BJ	0.002
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0001	0.0001	UJ	0.002
	PCB-163/164		0.0001	0.0001	UJ	0.002
	PCB-138/160		0.0012	0.0001	J	0.002
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.0001	0.0001	UJ	0.002
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0001	0.0001	UJ	0.002
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.0001	0.0001	UJ	0.002
	PCB-128/162		0.0003	0.0001	J	0.002
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0001	0.0001	UJ	0.002
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.0005	0.0001	J	0.002
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0001	0.0001	UJ	0.002
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0001	0.0001	UJ	0.002
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0002	0.0002	UJ	0.002
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0001	0.0001	UJ	0.002
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.0001	0.0001	UJ	0.002
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0001	0.0001	UJ	0.002
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0001	0.0001	UJ	0.002
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0001	0.0001	UJ	0.002
	PCB-182/187		0.0001	0.0001	UJ	0.002
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.0001	0.0001	UJ	0.002
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0002	0.0002	UJ	0.002
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.0004	0.0001	J	0.002
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0002	0.0002	UJ	0.002
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.0001	0.0001	UJ	0.002

DATA REPORT

Client: City of Spokane
Client ID: Hydrated Grain - PCBs 2
Field ID: #16-11364
PRL ID: PR162049
Moisture Content: 47.71%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081613

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0002	0.0002	UJ	0.002
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0002	0.0002	UJ	0.002
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0001	0.0001	UJ	0.002
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.001	0.0002	BJ	0.002
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0001	0.0001	UJ	0.002
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.0001	0.0001	UJ	0.002
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.0001	0.0001	UJ	0.002
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0001	0.0001	UJ	0.002
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.0001	0.0001	UJ	0.002
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0002	0.0002	UJ	0.002
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0001	0.0001	UJ	0.002
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0001	0.0001	UJ	0.002
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.0001	0.0001	UJ	0.002
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.0001	0.0001	UJ	0.002
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.0001	0.0001	UJ	0.002
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0001	0.0001	UJ	0.002
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.0002	0.0002	UJ	0.002
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0003	0.0003	UJ	0.002
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0003	0.0003	UJ	0.002
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.0005	0.0005	UJ	0.002
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0006	0.0006	UJ	0.002

Homologs	# of Congeners			
Monochlorobiphenyls	3	0.0009	0.0001	BJ
Dichlorobiphenyls	12	0.0152	0.0002	B
Trichlorobiphenyls	24	0.0464	0.0001	
Tetrachlorobiphenyls	42	0.0192	0.0001	B
Pentachlorobiphenyls	46	0.0469	0.0001	
Hexachlorobiphenyls	42	0.0045	0.0001	B
Heptachlorobiphenyls	24	0.0014	0.0001	BJ
Octachlorobiphenyls	12	0.0001	0.0001	UJ
Nonachlorobiphenyls	3	0.0003	0.0003	UJ
Decachlorobiphenyl	1	0.0006	0.0006	UJ
Total PCB		0.135	0.0001	

DATA REPORT

Client: City of Spokane
Client ID: Hydrated Grain - PCBs 2
Field ID: #16-11364
PRL ID: PR162049
Moisture Content: 47.71%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081613

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	22	5	145
¹³ C ₁₂ -4-MoCB	3L	20	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	58	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	76	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	97	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	52	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	91	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	88	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	87	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	61	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	53	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	52	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	52	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	52	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	61	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	87	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	100	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	105	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	157L	105	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	105	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	107	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	62	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	140	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	81	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	92	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	117	10	145
¹³ C ₁₂ -DeCB	209L	143	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	56	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	71	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	116	10	145

DATA REPORT

Client: City of Spokane
Client ID: Hydrated Sawdust - PCBs 1
Field ID: #16-11365
PRL ID: PR162050
Moisture Content: 68.69%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081614

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0012	0.0001	J	0.0029
3-MoCB	PCB-002	2051-61-8	0.0005	0.0001	J	0.0029
4-MoCB	PCB-003	2051-62-9	0.0013	0.0001	BJ	0.0029
2,6-DiCB	PCB-010	33146-45-1	0.0003	0.0003	UJ	0.0029
2,2'-DiCB	PCB-004	13029-08-8	0.0038	0.0005		0.0029
2,5-DiCB	PCB-009	34883-39-1	0.0002	0.0002	UJ	0.0029
2,4-DiCB	PCB-007	33284-50-3	0.001	0.0003	NJ	0.0029
2,3'-DiCB	PCB-006	25569-80-6	0.0024	0.0003	J	0.0029
2,3/2,4'-DiCB	PCB-005/008		0.01	0.0003		0.0029
3,5-DiCB	PCB-014	34883-41-5	0.0002	0.0002	UJ	0.0029
3,3'-DiCB	PCB-011	2050-67-1	0.0244	0.0002	B	0.0029
3,4/3,4'-DiCB	PCB-012/013		0.0002	0.0002	UJ	0.0029
4,4'-DiCB	PCB-015	2050-68-2	0.0043	0.0003		0.0029
2,2',6-TrCB	PCB-019	38444-73-4	0.0013	0.0002	J	0.0029
2,4,6-TrCB	PCB-030	35693-92-6	0.0004	0.0004	UJ	0.0029
2,2',5-TrCB	PCB-018	37680-65-2	0.0494	0.0004		0.0029
2,2',4-TrCB	PCB-017	37680-66-3	0.0164	0.0005		0.0029
2,3,6-TrCB	PCB-024	55702-45-9	0.0005	0.0005	UJ	0.0029
2,3',6-TrCB	PCB-027	38444-76-7	0.0029	0.0003		0.0029
2,4',6-TrCB	PCB-032	38444-77-8	0.0086	0.0004		0.0029
2,2',3-TrCB	PCB-016	38444-78-9	0.0196	0.0012		0.0029
2,3,5-TrCB	PCB-023	55720-44-0	0.0001	0.0001	UJ	0.0029
2,3',5'-TrCB	PCB-034	37680-68-5	0.0001	0.0001	UJ	0.0029
2,4,5-TrCB	PCB-029	15862-07-4	0.0001	0.0001	UJ	0.0029
2,3',5-TrCB	PCB-026	38444-81-4	0.0015	0.0001	J	0.0029
2,3',4-TrCB	PCB-025	55712-37-3	0.0007	0.0001	J	0.0029
2,4',5-TrCB	PCB-031	16606-02-3	0.0075	0.0001		0.0029
2,4,4'-TrCB	PCB-028	7012-37-5	0.0082	0.0001		0.0029
2,3,4-TrCB	PCB-021	55702-46-0	0.0001	0.0001	UJ	0.0029
	PCB-020/033		0.006	0.0001		0.0029
2,3,4'-TrCB	PCB-022	38444-85-8	0.0037	0.0001		0.0029
3,3',5-TrCB	PCB-036	38444-87-0	0.0001	0.0001	UJ	0.0029
3,4',5-TrCB	PCB-039	38444-88-1	0.0001	0.0001	UJ	0.0029
3,4,5-TrCB	PCB-038	53555-66-1	0.0001	0.0001	UJ	0.0029
3,3',4-TrCB	PCB-035	37680-69-6	0.0004	0.0001	NJ	0.0029
3,4,4'-TrCB	PCB-037	38444-90-5	0.003	0.0001	B	0.0029
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0001	0.0001	UJ	0.0029
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0002	0.0002	UJ	0.0029
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0011	0.0002	J	0.0029
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0006	0.0002	J	0.0029
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0006	0.0002	NJ	0.0029
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0003	0.0003	UJ	0.0029
	PCB-052/069		0.0132	0.0002		0.0029
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0002	0.0002	UJ	0.0029
	PCB-043/049		0.0058	0.0002		0.0029
	PCB-065/075		0.0002	0.0002	UJ	0.0029
	PCB-047/048		0.0035	0.0002		0.0029
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0002	0.0002	UJ	0.0029
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.0083	0.0003		0.0029
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0002	0.0002	UJ	0.0029
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.0023	0.0003	J	0.0029
	PCB-064/072		0.0052	0.0002		0.0029

DATA REPORT

Client: City of Spokane
Client ID: Hydrated Sawdust - PCBs 1
Field ID: #16-11365
PRL ID: PR162050
Moisture Content: 68.69%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081614

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.0018	0.0001	BJ	0.0029
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0006	0.0002	NJ	0.0029
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0002	0.0002	UJ	0.0029
	PCB-040/057		0.0013	0.0003	J	0.0029
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0001	0.0001	UJ	0.0029
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0001	0.0001	UJ	0.0029
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0001	0.0001	UJ	0.0029
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0001	0.0001	UJ	0.0029
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.005	0.0002		0.0029
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.01	0.0002		0.0029
	PCB-055/080		0.0001	0.0001	UJ	0.0029
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.006	0.0002		0.0029
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0002	0.0002	UJ	0.0029
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.0022	0.0002	NJ	0.0029
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.002	0.0002	NJ	0.0029
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0001	0.0001	UJ	0.0029
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0002	0.0002	UJ	0.0029
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0002	0.0002	UJ	0.0029
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0002	0.0002	UJ	0.0029
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0002	0.0002	UJ	0.0029
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0008	0.0008	UJ	0.0029
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0009	0.0009	UJ	0.0029
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.001	0.001	UJ	0.0029
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0012	0.0012	UJ	0.0029
	PCB-093/098/102		0.0011	0.0011	UJ	0.0029
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.0408	0.001		0.0029
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0011	0.0011	UJ	0.0029
	PCB-091/121		0.0052	0.0009		0.0029
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.0183	0.0012		0.0029
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.0084	0.001		0.0029
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.001	0.001	UJ	0.0029
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0013	0.0013	UJ	0.0029
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.048	0.0009		0.0029
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0008	0.0008	UJ	0.0029
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.0151	0.0009		0.0029
	PCB-112/119		0.0008	0.0008	UJ	0.0029
	PCB-083/109		0.0014	0.0014	UJ	0.0029
	PCB-086/117		0.0008	0.0008	UJ	0.0029
	PCB-097/116		0.0014	0.0014		0.0029
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0009	0.0009	UJ	0.0029
	PCB-087/115		0.0146	0.0009		0.0029
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0008	0.0008	UJ	0.0029
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.001	0.001	UJ	0.0029
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0008	0.0008	UJ	0.0029
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.0373	0.0009		0.0029
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.0013	0.0013	UJ	0.0029
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0001	0.0001	UJ	0.0029
	PCB-107/108		0.0002	0.0002	UJ	0.0029
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0003	0.0003	UJ	0.0029
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0003	0.0003	UJ	0.0029
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.006	0.0003		0.0029
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0004	0.0004	UJ	0.0029

DATA REPORT

Client: City of Spokane
Client ID: Hydrated Sawdust - PCBs 1
Field ID: #16-11365
PRL ID: PR162050
Moisture Content: 68.69%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081614

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0003	0.0003	UJ	0.0029
	PCB-105/127		0.0027	0.0004	J	0.0029
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0003	0.0003	UJ	0.0029
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.0001	0.0001	UJ	0.0029
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0003	0.0003	UJ	0.0029
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0003	0.0003	UJ	0.0029
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.0003	0.0003	UJ	0.0029
	PCB-136/148		0.0049	0.0003		0.0029
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0003	0.0003	UJ	0.0029
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.0048	0.0004		0.0029
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.0004	0.0004	UJ	0.0029
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.0004	0.0004	UJ	0.0029
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0004	0.0004	UJ	0.0029
	PCB-139/149		0.0049	0.0001		0.0029
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0001	0.0001	UJ	0.0029
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0001	0.0001	UJ	0.0029
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.0001	0.0001	UJ	0.0029
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0001	0.0001	UJ	0.0029
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0001	0.0001	UJ	0.0029
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0001	0.0001	UJ	0.0029
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0001	0.0001	UJ	0.0029
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.0001	0.0001	UJ	0.0029
	PCB-132/161		0.0015	0.0001	J	0.0029
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	0.0034	0.0001		0.0029
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0001	0.0001	UJ	0.0029
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.0003	0.0001	BJ	0.0029
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0003	0.0001	J	0.0029
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0001	0.0001	UJ	0.0029
	PCB-163/164		0.0009	0.0001	J	0.0029
	PCB-138/160		0.0035	0.0001		0.0029
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.0005	0.0001	J	0.0029
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.0001	0.0001	UJ	0.0029
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0001	0.0001	UJ	0.0029
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.0001	0.0001	UJ	0.0029
	PCB-128/162		0.0008	0.0001	J	0.0029
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0001	0.0001	UJ	0.0029
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.001	0.0001	J	0.0029
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0001	0.0001	UJ	0.0029
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0001	0.0001	UJ	0.0029
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0002	0.0002	UJ	0.0029
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0001	0.0001	UJ	0.0029
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.0008	0.0001	J	0.0029
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0001	0.0001	UJ	0.0029
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0001	0.0001	UJ	0.0029
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0002	0.0002	UJ	0.0029
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0002	0.0002	UJ	0.0029
	PCB-182/187		0.002	0.0002	J	0.0029
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.0004	0.0002	NJ	0.0029
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0002	0.0002	UJ	0.0029
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.0014	0.0002	J	0.0029
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0002	0.0002	UJ	0.0029
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.0007	0.0002	J	0.0029

DATA REPORT

Client: City of Spokane
Client ID: Hydrated Sawdust - PCBs 1
Field ID: #16-11365
PRL ID: PR162050
Moisture Content: 68.69%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081614

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0002	0.0002	UJ	0.0029
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0002	0.0002	UJ	0.0029
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0002	0.0002	UJ	0.0029
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0002	0.0002	UJ	0.0029
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.0036	0.0003		0.0029
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0004	0.0002	J	0.0029
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.0002	0.0002	UJ	0.0029
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.0002	0.0002	UJ	0.0029
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0001	0.0001	UJ	0.0029
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.0001	0.0001	UJ	0.0029
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0002	0.0002	UJ	0.0029
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0001	0.0001	UJ	0.0029
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0002	0.0002	UJ	0.0029
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0002	0.0002	UJ	0.0029
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0002	0.0002	UJ	0.0029
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0001	0.0001	UJ	0.0029
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.0002	0.0002	UJ	0.0029
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.0001	0.0001	UJ	0.0029
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.0002	0.0002	UJ	0.0029
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0002	0.0002	UJ	0.0029
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.0014	0.0002	NJ	0.0029
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0002	0.0002	UJ	0.0029
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0004	0.0004	UJ	0.0029
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0004	0.0004	UJ	0.0029
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.0006	0.0006	UJ	0.0029
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0007	0.0007	UJ	0.0029

Homologs	# of Congeners		
Monochlorobiphenyls	3	0.003	0.0001
Dichlorobiphenyls	12	0.0449	0.0002
Trichlorobiphenyls	24	0.129	0.0001
Tetrachlorobiphenyls	42	0.0641	0.0001
Pentachlorobiphenyls	46	0.21	0.0001
Hexachlorobiphenyls	42	0.0268	0.0001
Heptachlorobiphenyls	24	0.0089	0.0001
Octachlorobiphenyls	12	0.0001	0.0001 UJ
Nonachlorobiphenyls	3	0.0004	0.0004 UJ
Decachlorobiphenyl	1	0.0007	0.0007 UJ
Total PCB		0.487	0.0001

DATA REPORT

Client: City of Spokane
Client ID: Hydrated Sawdust - PCBs 1
Field ID: #16-11365
PRL ID: PR162050
Moisture Content: 68.69%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081614

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	22	5	145
¹³ C ₁₂ -4-MoCB	3L	24	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	50	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	63	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	91	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	53	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	79	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	89	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	89	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	53	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	52	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	51	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	51	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	49	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	59	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	88	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	90	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	94	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HxCB	157L	97	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	93	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	108	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	60	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	145	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	82	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	85	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	114	10	145
¹³ C ₁₂ -DeCB	209L	144	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	56	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	70	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	117	10	145

DATA REPORT

Client: City of Spokane
Client ID: Hydrated Sawdust - PCBs 2
Field ID: #16-11366
PRL ID: PR162051
Moisture Content: 68.73%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081615

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0011	0.0001	J	0.0029
3-MoCB	PCB-002	2051-61-8	0.0001	0.0001	UJ	0.0029
4-MoCB	PCB-003	2051-62-9	0.0012	0.0001	BJ	0.0029
2,6-DiCB	PCB-010	33146-45-1	0.0003	0.0003	UJ	0.0029
2,2'-DiCB	PCB-004	13029-08-8	0.0042	0.0005		0.0029
2,5-DiCB	PCB-009	34883-39-1	0.0003	0.0003	UJ	0.0029
2,4-DiCB	PCB-007	33284-50-3	0.0003	0.0003	UJ	0.0029
2,3'-DiCB	PCB-006	25569-80-6	0.0003	0.0003	UJ	0.0029
2,3/2,4'-DiCB	PCB-005/008		0.0087	0.0003		0.0029
3,5-DiCB	PCB-014	34883-41-5	0.0003	0.0003	UJ	0.0029
3,3'-DiCB	PCB-011	2050-67-1	0.0273	0.0003		0.0029
3,4/3,4'-DiCB	PCB-012/013		0.0003	0.0003	UJ	0.0029
4,4'-DiCB	PCB-015	2050-68-2	0.0033	0.0003		0.0029
2,2',6-TrCB	PCB-019	38444-73-4	0.0013	0.0002	J	0.0029
2,4,6-TrCB	PCB-030	35693-92-6	0.0004	0.0004	UJ	0.0029
2,2',5-TrCB	PCB-018	37680-65-2	0.0479	0.0005		0.0029
2,2',4-TrCB	PCB-017	37680-66-3	0.0163	0.0006		0.0029
2,3,6-TrCB	PCB-024	55702-45-9	0.0005	0.0005	UJ	0.0029
2,3',6-TrCB	PCB-027	38444-76-7	0.0021	0.0003	J	0.0029
2,4',6-TrCB	PCB-032	38444-77-8	0.0087	0.0004		0.0029
2,2',3-TrCB	PCB-016	38444-78-9	0.0274	0.0013		0.0029
2,3,5-TrCB	PCB-023	55720-44-0	0.0001	0.0001	UJ	0.0029
2,3',5'-TrCB	PCB-034	37680-68-5	0.0001	0.0001	UJ	0.0029
2,4,5-TrCB	PCB-029	15862-07-4	0.0001	0.0001	UJ	0.0029
2,3',5-TrCB	PCB-026	38444-81-4	0.0013	0.0001	J	0.0029
2,3',4-TrCB	PCB-025	55712-37-3	0.0007	0.0001	J	0.0029
2,4',5-TrCB	PCB-031	16606-02-3	0.0075	0.0001		0.0029
2,4,4'-TrCB	PCB-028	7012-37-5	0.008	0.0001		0.0029
2,3,4-TrCB	PCB-021	55702-46-0	0.0001	0.0001	UJ	0.0029
	PCB-020/033		0.0054	0.0001		0.0029
2,3,4'-TrCB	PCB-022	38444-85-8	0.0037	0.0001		0.0029
3,3',5-TrCB	PCB-036	38444-87-0	0.0001	0.0001	UJ	0.0029
3,4',5-TrCB	PCB-039	38444-88-1	0.0001	0.0001	UJ	0.0029
3,4,5-TrCB	PCB-038	53555-66-1	0.0001	0.0001	UJ	0.0029
3,3',4-TrCB	PCB-035	37680-69-6	0.0012	0.0001	J	0.0029
3,4,4'-TrCB	PCB-037	38444-90-5	0.0031	0.0001	B	0.0029
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0001	0.0001	UJ	0.0029
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0002	0.0002	UJ	0.0029
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0012	0.0002	J	0.0029
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0007	0.0002	J	0.0029
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0011	0.0002	J	0.0029
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0003	0.0003	UJ	0.0029
	PCB-052/069		0.0119	0.0002		0.0029
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0002	0.0002	UJ	0.0029
	PCB-043/049		0.0054	0.0002		0.0029
	PCB-065/075		0.0002	0.0002	UJ	0.0029
	PCB-047/048		0.0032	0.0002		0.0029
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0002	0.0002	UJ	0.0029
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.0072	0.0003		0.0029
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0002	0.0002	UJ	0.0029
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.002	0.0003	J	0.0029
	PCB-064/072		0.0054	0.0002		0.0029

DATA REPORT

Client: City of Spokane
Client ID: Hydrated Sawdust - PCBs 2
Field ID: #16-11366
PRL ID: PR162051
Moisture Content: 68.73%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081615

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.0016	0.0001	BJ	0.0029
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0007	0.0002	J	0.0029
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0002	0.0002	UJ	0.0029
	PCB-040/057		0.0015	0.0003	J	0.0029
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0001	0.0001	UJ	0.0029
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0001	0.0001	UJ	0.0029
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0001	0.0001	UJ	0.0029
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0001	0.0001	UJ	0.0029
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.0048	0.0002		0.0029
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.0105	0.0002		0.0029
	PCB-055/080		0.0001	0.0001	UJ	0.0029
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.0062	0.0002		0.0029
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0002	0.0002	UJ	0.0029
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.003	0.0002		0.0029
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.0025	0.0002	J	0.0029
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0001	0.0001	UJ	0.0029
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0002	0.0002	UJ	0.0029
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0002	0.0002	UJ	0.0029
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0002	0.0002	UJ	0.0029
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0002	0.0002	UJ	0.0029
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0008	0.0008	UJ	0.0029
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0009	0.0009	UJ	0.0029
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.001	0.001	UJ	0.0029
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0012	0.0012	UJ	0.0029
	PCB-093/098/102		0.0011	0.0011	UJ	0.0029
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.0377	0.001		0.0029
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0011	0.0011	UJ	0.0029
	PCB-091/121		0.0048	0.0009		0.0029
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.0162	0.0012		0.0029
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.0095	0.001		0.0029
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.001	0.001	UJ	0.0029
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0013	0.0013	UJ	0.0029
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.0457	0.0009		0.0029
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0008	0.0008	UJ	0.0029
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.0158	0.0009		0.0029
	PCB-112/119		0.0008	0.0008	UJ	0.0029
	PCB-083/109		0.0014	0.0014	UJ	0.0029
	PCB-086/117		0.0008	0.0008	UJ	0.0029
	PCB-097/116		0.0014	0.0014		0.0029
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0009	0.0009	UJ	0.0029
	PCB-087/115		0.0149	0.0009		0.0029
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0008	0.0008	UJ	0.0029
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.001	0.001	UJ	0.0029
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0008	0.0008	UJ	0.0029
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.0376	0.0009		0.0029
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.0035	0.0013	NJ	0.0029
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0001	0.0001	UJ	0.0029
	PCB-107/108		0.0002	0.0002	UJ	0.0029
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0003	0.0003	UJ	0.0029
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0003	0.0003	UJ	0.0029
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.0063	0.0003		0.0029
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0004	0.0004	UJ	0.0029

DATA REPORT

Client: City of Spokane
Client ID: Hydrated Sawdust - PCBs 2
Field ID: #16-11366
PRL ID: PR162051
Moisture Content: 68.73%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081615

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0003	0.0003	UJ	0.0029
	PCB-105/127		0.0028	0.0004	J	0.0029
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0002	0.0002	UJ	0.0029
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.0001	0.0001	UJ	0.0029
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0002	0.0002	UJ	0.0029
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0002	0.0002	UJ	0.0029
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.0003	0.0003	UJ	0.0029
	PCB-136/148		0.0049	0.0003		0.0029
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0003	0.0003	UJ	0.0029
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.0053	0.0004		0.0029
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.0019	0.0004	NJ	0.0029
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.0003	0.0003	UJ	0.0029
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0004	0.0004	UJ	0.0029
	PCB-139/149		0.0056	0.0001		0.0029
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0001	0.0001	UJ	0.0029
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0001	0.0001	UJ	0.0029
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.0001	0.0001	UJ	0.0029
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0001	0.0001	UJ	0.0029
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0001	0.0001	UJ	0.0029
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0001	0.0001	UJ	0.0029
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0001	0.0001	UJ	0.0029
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.0001	0.0001	UJ	0.0029
	PCB-132/161		0.0015	0.0001	J	0.0029
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	0.0031	0.0001		0.0029
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0001	0.0001	UJ	0.0029
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.0006	0.0001	J	0.0029
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0001	0.0001	UJ	0.0029
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0001	0.0001	UJ	0.0029
	PCB-163/164		0.0009	0.0001	J	0.0029
	PCB-138/160		0.004	0.0001		0.0029
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.0003	0.0001	BJ	0.0029
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.0001	0.0001	UJ	0.0029
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0001	0.0001	UJ	0.0029
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.0001	0.0001	UJ	0.0029
	PCB-128/162		0.0005	0.0001	NJ	0.0029
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0002	0.0001	NJ	0.0029
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.001	0.0001	J	0.0029
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0001	0.0001	UJ	0.0029
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0001	0.0001	UJ	0.0029
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0002	0.0002	UJ	0.0029
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0001	0.0001	UJ	0.0029
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.0001	0.0001	UJ	0.0029
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0001	0.0001	UJ	0.0029
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0001	0.0001	UJ	0.0029
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0002	0.0002	UJ	0.0029
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0002	0.0002	UJ	0.0029
	PCB-182/187		0.0021	0.0002	J	0.0029
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.0008	0.0002	J	0.0029
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0002	0.0002	UJ	0.0029
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.0013	0.0002	J	0.0029
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0002	0.0002	UJ	0.0029
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.0003	0.0002	NJ	0.0029

DATA REPORT

Client: City of Spokane
Client ID: Hydrated Sawdust - PCBs 2
Field ID: #16-11366
PRL ID: PR162051
Moisture Content: 68.73%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081615

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0002	0.0002	UJ	0.0029
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0002	0.0002	UJ	0.0029
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0003	0.0003	UJ	0.0029
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0002	0.0002	UJ	0.0029
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.0032	0.0003		0.0029
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0002	0.0002	UJ	0.0029
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.0002	0.0002	UJ	0.0029
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.0009	0.0002	J	0.0029
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0001	0.0001	UJ	0.0029
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.0001	0.0001	UJ	0.0029
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0002	0.0002	UJ	0.0029
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0001	0.0001	UJ	0.0029
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0001	0.0001	UJ	0.0029
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0001	0.0001	UJ	0.0029
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0001	0.0001	UJ	0.0029
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0001	0.0001	UJ	0.0029
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.0001	0.0001	UJ	0.0029
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.0001	0.0001	UJ	0.0029
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.0001	0.0001	UJ	0.0029
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0001	0.0001	UJ	0.0029
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.0002	0.0002	UJ	0.0029
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0001	0.0001	UJ	0.0029
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0004	0.0004	UJ	0.0029
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0004	0.0004	UJ	0.0029
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.0005	0.0005	UJ	0.0029
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0006	0.0006	UJ	0.0029

Homologs	# of Congeners			
Monochlorobiphenyls	3	0.0023	0.0001	J
Dichlorobiphenyls	12	0.0435	0.0003	
Trichlorobiphenyls	24	0.135	0.0001	
Tetrachlorobiphenyls	42	0.0689	0.0001	
Pentachlorobiphenyls	46	0.208	0.0001	
Hexachlorobiphenyls	42	0.0272	0.0001	
Heptachlorobiphenyls	24	0.0083	0.0001	
Octachlorobiphenyls	12	0.0001	0.0001	UJ
Nonachlorobiphenyls	3	0.0004	0.0004	UJ
Decachlorobiphenyl	1	0.0006	0.0006	UJ
Total PCB		0.493	0.0001	

DATA REPORT

Client: City of Spokane
Client ID: Hydrated Sawdust - PCBs 2
Field ID: #16-11366
PRL ID: PR162051
Moisture Content: 68.73%

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/9/2016
HRMS File: FS08081615

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	18	5	145
¹³ C ₁₂ -4-MoCB	3L	18	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	47	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	62	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	90	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	55	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	78	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	98	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	95	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	45	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	57	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	56	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	54	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	54	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	64	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	85	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	97	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	103	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	157L	101	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	94	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	120	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	59	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	141	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	85	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	81	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	115	10	145
¹³ C ₁₂ -DeCB	209L	141	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	55	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	67	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	122	10	145

QC REPORT - BLANK

Client: City of Spokane
 Client ID: BLANK
 Field ID:
 PRL ID: PC160632B

Contact: Jeff Donovan
 Date Extracted: 7/21/2016
 Date Analysed: 8/8/2016
 HRMS File: FS08081605

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0006	0.0001	NJ	0.002
3-MoCB	PCB-002	2051-61-8	0.0001	0.0001	UJ	0.002
4-MoCB	PCB-003	2051-62-9	0.0003	0.0001	J	0.002
2,6-DiCB	PCB-010	33146-45-1	0.0002	0.0002	UJ	0.002
2,2'-DiCB	PCB-004	13029-08-8	0.0003	0.0003	UJ	0.002
2,5-DiCB	PCB-009	34883-39-1	0.0001	0.0001	UJ	0.002
2,4-DiCB	PCB-007	33284-50-3	0.0002	0.0002	UJ	0.002
2,3'-DiCB	PCB-006	25569-80-6	0.0002	0.0002	UJ	0.002
2,3/2,4'-DiCB	PCB-005/008		0.0007	0.0002	J	0.002
3,5-DiCB	PCB-014	34883-41-5	0.0001	0.0001	UJ	0.002
3,3'-DiCB	PCB-011	2050-67-1	0.0053	0.0001		0.002
3,4/3,4'-DiCB	PCB-012/013		0.0002	0.0002	UJ	0.002
4,4'-DiCB	PCB-015	2050-68-2	0.0002	0.0002	UJ	0.002
2,2',6-TrCB	PCB-019	38444-73-4	0.0002	0.0002	UJ	0.002
2,4,6-TrCB	PCB-030	35693-92-6	0.0003	0.0003	UJ	0.002
2,2',5-TrCB	PCB-018	37680-65-2	0.0019	0.0002	J	0.002
2,2',4-TrCB	PCB-017	37680-66-3	0.0009	0.0003	J	0.002
2,3,6-TrCB	PCB-024	55702-45-9	0.0003	0.0003	UJ	0.002
2,3',6-TrCB	PCB-027	38444-76-7	0.0001	0.0001	UJ	0.002
2,4',6-TrCB	PCB-032	38444-77-8	0.0002	0.0002	UJ	0.002
2,2',3-TrCB	PCB-016	38444-78-9	0.0008	0.0008	UJ	0.002
2,3,5-TrCB	PCB-023	55720-44-0	0.0001	0.0001	UJ	0.002
2,3',5'-TrCB	PCB-034	37680-68-5	0.0001	0.0001	UJ	0.002
2,4,5-TrCB	PCB-029	15862-07-4	0.0001	0.0001	UJ	0.002
2,3',5-TrCB	PCB-026	38444-81-4	0.0001	0.0001	UJ	0.002
2,3',4-TrCB	PCB-025	55712-37-3	0.0001	0.0001	UJ	0.002
2,4',5-TrCB	PCB-031	16606-02-3	0.0007	0.0001	J	0.002
2,4,4'-TrCB	PCB-028	7012-37-5	0.0009	0.0001	J	0.002
2,3,4-TrCB	PCB-021	55702-46-0	0.0001	0.0001	UJ	0.002
	PCB-020/033		0.0006	0.0001	J	0.002
2,3,4'-TrCB	PCB-022	38444-85-8	0.0005	0.0001	J	0.002
3,3',5-TrCB	PCB-036	38444-87-0	0.0001	0.0001	UJ	0.002
3,4',5-TrCB	PCB-039	38444-88-1	0.0001	0.0001	UJ	0.002
3,4,5-TrCB	PCB-038	53555-66-1	0.0001	0.0001	UJ	0.002
3,3',4-TrCB	PCB-035	37680-69-6	0.0001	0.0001	UJ	0.002
3,4,4'-TrCB	PCB-037	38444-90-5	0.0008	0.0001	J	0.002
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0001	0.0001	UJ	0.002
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0001	0.0001	UJ	0.002
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0001	0.0001	UJ	0.002
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0001	0.0001	UJ	0.002
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0001	0.0001	UJ	0.002
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0001	0.0001	UJ	0.002
	PCB-052/069		0.0009	0.0001	J	0.002
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0001	0.0001	UJ	0.002
	PCB-043/049		0.0005	0.0001	J	0.002
	PCB-065/075		0.0001	0.0001	UJ	0.002
	PCB-047/048		0.0006	0.0001	J	0.002
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0001	0.0001	UJ	0.002
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.0006	0.0001	J	0.002
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0001	0.0001	UJ	0.002
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.0001	0.0001	UJ	0.002
	PCB-064/072		0.0001	0.0001	UJ	0.002

QC REPORT - BLANK

Client: City of Spokane
Client ID: BLANK
Field ID:
PRL ID: PC160632B

Contact: Jeff Donovan
Date Extracted: 7/21/2016
Date Analysed: 8/8/2016
HRMS File: FS08081605

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.0007	0.0001	J	0.002
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0001	0.0001	UJ	0.002
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0001	0.0001	UJ	0.002
	PCB-040/057		0.0001	0.0001	UJ	0.002
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0001	0.0001	UJ	0.002
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0001	0.0001	UJ	0.002
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0001	0.0001	UJ	0.002
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0001	0.0001	UJ	0.002
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.0006	0.0001	J	0.002
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.001	0.0001	J	0.002
	PCB-055/080		0.0001	0.0001	UJ	0.002
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.0009	0.0001	J	0.002
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0001	0.0001	UJ	0.002
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.0004	0.0001	J	0.002
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.0004	0.0001	NJ	0.002
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0001	0.0001	UJ	0.002
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0001	0.0001	UJ	0.002
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0001	0.0001	UJ	0.002
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0001	0.0001	UJ	0.002
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0001	0.0001	UJ	0.002
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0003	0.0003	UJ	0.002
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0003	0.0003	UJ	0.002
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0004	0.0004	UJ	0.002
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0005	0.0005	UJ	0.002
	PCB-093/098/102		0.0004	0.0004	UJ	0.002
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.0023	0.0004	NJ	0.002
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0004	0.0004	UJ	0.002
	PCB-091/121		0.0003	0.0003	UJ	0.002
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.0008	0.0004	NJ	0.002
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.0004	0.0004	UJ	0.002
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0004	0.0004	UJ	0.002
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0005	0.0005	UJ	0.002
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.0018	0.0003	J	0.002
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0003	0.0003	UJ	0.002
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.0004	0.0004	UJ	0.002
	PCB-112/119		0.0003	0.0003	UJ	0.002
	PCB-083/109		0.0005	0.0005	UJ	0.002
	PCB-086/117		0.0003	0.0003	UJ	0.002
	PCB-097/116		0.0005	0.0005	UJ	0.002
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0003	0.0003	UJ	0.002
	PCB-087/115		0.0004	0.0004	UJ	0.002
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0003	0.0003	UJ	0.002
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.0004	0.0004	UJ	0.002
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0003	0.0003	UJ	0.002
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.0028	0.0003		0.002
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.0005	0.0005	UJ	0.002
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0001	0.0001	UJ	0.002
	PCB-107/108		0.0001	0.0001	UJ	0.002
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0001	0.0001	UJ	0.002
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0001	0.0001	UJ	0.002
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.0008	0.0001	J	0.002
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0001	0.0001	UJ	0.002

QC REPORT - BLANK

Client: City of Spokane
 Client ID: BLANK
 Field ID:
 PRL ID: PC160632B

Contact: Jeff Donovan
 Date Extracted: 7/21/2016
 Date Analysed: 8/8/2016
 HRMS File: FS08081605

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0001	0.0001	UJ	0.002
	PCB-105/127		0.0004	0.0001	J	0.002
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0001	0.0001	UJ	0.002
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.0001	0.0001	UJ	0.002
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0001	0.0001	UJ	0.002
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0001	0.0001	UJ	0.002
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.0001	0.0001	UJ	0.002
	PCB-136/148		0.0001	0.0001	UJ	0.002
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0001	0.0001	UJ	0.002
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.0001	0.0001	UJ	0.002
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.0001	0.0001	UJ	0.002
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.0001	0.0001	UJ	0.002
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0001	0.0001	UJ	0.002
	PCB-139/149		0.0005	0.0001	J	0.002
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0001	0.0001	UJ	0.002
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0001	0.0001	UJ	0.002
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.0001	0.0001	UJ	0.002
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0001	0.0001	UJ	0.002
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0001	0.0001	UJ	0.002
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0001	0.0001	UJ	0.002
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0001	0.0001	UJ	0.002
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.0001	0.0001	NJ	0.002
	PCB-132/161		0.0002	0.0001	J	0.002
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	0.0005	0.0001	J	0.002
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0001	0.0001	UJ	0.002
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.0001	0.0001	NJ	0.002
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0001	0.0001	UJ	0.002
	PCB-163/164		0.0001	0.0001	NJ	0.002
	PCB-138/160		0.0004	0.0001	NJ	0.002
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.0001	0.0001	NJ	0.002
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.0001	0.0001	UJ	0.002
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0001	0.0001	UJ	0.002
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.0001	0.0001	UJ	0.002
	PCB-128/162		0.0002	0.0001	NJ	0.002
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0001	0.0001	UJ	0.002
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.0001	0.0001	UJ	0.002
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0001	0.0001	UJ	0.002
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0001	0.0001	UJ	0.002
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0001	0.0001	UJ	0.002
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0001	0.0001	UJ	0.002
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.0001	0.0001	UJ	0.002
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0001	0.0001	UJ	0.002
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0001	0.0001	UJ	0.002
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0001	0.0001	UJ	0.002
	PCB-182/187		0.0001	0.0001	UJ	0.002
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.0001	0.0001	UJ	0.002
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.0001	0.0001	UJ	0.002
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.0001	0.0001	UJ	0.002

QC REPORT - BLANK

Client: City of Spokane
 Client ID: BLANK
 Field ID:
 PRL ID: PC160632B

Contact: Jeff Donovan
 Date Extracted: 7/21/2016
 Date Analysed: 8/8/2016
 HRMS File: FS08081605

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0001	0.0001	UJ	0.002
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0001	0.0001	UJ	0.002
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.0003	0.0001	J	0.002
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0001	0.0001	UJ	0.002
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.0001	0.0001	UJ	0.002
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.0001	0.0001	UJ	0.002
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0001	0.0001	UJ	0.002
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.0001	0.0001	UJ	0.002
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0001	0.0001	UJ	0.002
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0001	0.0001	UJ	0.002
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.0001	0.0001	UJ	0.002
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.0001	0.0001	UJ	0.002
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.0001	0.0001	UJ	0.002
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0001	0.0001	UJ	0.002
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.0001	0.0001	UJ	0.002
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0003	0.0003	UJ	0.002
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0003	0.0003	UJ	0.002
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.0004	0.0004	UJ	0.002
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0002	0.0002	UJ	0.002

Homologs	# of Congeners			
Monochlorobiphenyls	3	0.0003	0.0001	J
Dichlorobiphenyls	12	0.006	0.0001	
Trichlorobiphenyls	24	0.0063	0.0001	
Tetrachlorobiphenyls	42	0.0062	0.0001	
Pentachlorobiphenyls	46	0.0058	0.0001	
Hexachlorobiphenyls	42	0.0015	0.0001	J
Heptachlorobiphenyls	24	0.0003	0.0001	J
Octachlorobiphenyls	12	0.0001	0.0001	UJ
Nonachlorobiphenyls	3	0.0003	0.0003	UJ
Decachlorobiphenyl	1	0.0002	0.0002	UJ
Total PCB		0.0264	0.0001	

QC REPORT - BLANK

Client: City of Spokane
 Client ID: BLANK
 Field ID:
 PRL ID: PC160632B

Contact: Jeff Donovan
 Date Extracted: 7/21/2016
 Date Analysed: 8/8/2016
 HRMS File: FS08081605

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	19	5	145
¹³ C ₁₂ -4-MoCB	3L	20	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	40	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	51	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	60	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	45	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	50	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	82	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	85	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	56	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	56	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	56	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	56	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	57	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	60	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	78	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	84	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	80	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	157L	82	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	64	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	102	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	67	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	128	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	87	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	100	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	111	10	145
¹³ C ₁₂ -DeCB	209L	139	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	48	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	87	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	119	10	145

QC REPORT - SPIKE

Client: City of Spokane
 Client ID: SPIKE (LCS)
 Field ID:
 PRL ID: PC160633S

Contact: Jeff Donovan
 Date Extracted: 7/21/2016
 Date Analysed: 8/11/2016
 HRMS File: FS08111602

Polychlorinated Biphenyls			Accept. Recovery		Pass/Fail		Surrogate
Chemical Name	IUPAC #	CAS No.	LOF ug/Kg	Recovery %	Min %	Max %	Recoveries %
2-MoCB	PCB-001	2051-60-7	0.1	77.6	60	135	43
4-MoCB	PCB-003	2051-62-9	0.1	86.3	60	135	49
2,6-DiCB	PCB-010	33146-45-1	0.1	74.7			-
2,2'-DiCB	PCB-004	13029-08-8	0.1	97.6	60	135	37
	PCB-005/008		0.1	106.2			-
4,4'-DiCB	PCB-015	2050-68-2	0.1	114.4	60	135	53
2,2',6-TrCB	PCB-019	38444-73-4	0.1	103.9	60	135	34
2,2',5-TrCB	PCB-018	37680-65-2	0.1	67.5			-
2,4,4'-TrCB	PCB-028	7012-37-5	0.1	81.8			-
	PCB-020/033		0.1	89.7			-
2,3,4'-TrCB	PCB-022	38444-85-8	0.1	102.9			-
3,4,4'-TrCB	PCB-037	38444-90-5	0.1	97.1	60	135	84
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.1	107.3	60	135	55
	PCB-052/069		0.1	108.9			-
	PCB-043/049		0.1	127.2			-
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.1	137.8			-
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.1	81.8			-
2,2',3,3'-TeCB	PCB-040	38444-93-8	0.1	102.8			-
2,4,4',5-TeCB	PCB-074	32690-93-0	0.1	107.9			-
2,3',4',5-TeCB	PCB-070	32598-11-1	0.1	97.2			-
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.1	94.0			-
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.1	100.1			-
3,4,4',5-TeCB	PCB-081	70362-50-4	0.1	101.1	60	135	54
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.1	94.1	60	135	55
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.1	104.0	60	135	79
2,2',3,5',6-PeCB	PCB-095	38379-99-6	0.1	71.5			-
2,2',3,4',5-PeCB	PCB-090	68194-07-0	0.1	87.2			-
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.1	64.8			-
2,2',4,4',5-PeCB	PCB-099	38380-01-7	0.1	72.0			-
2,3',4,4',6-PeCB	PCB-119	56558-17-9	0.1	69.3			-
	PCB-087/115		0.1	59.6			-
2,3,3',4',6-PeCB	PCB-110	38380-03-9	0.1	89.8			-
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.1	92.8	60	135	109
2,3',4,4',5-PeCB	PCB-118	31508-00-6	0.1	91.1	60	135	106
2,3,4,4',5-PeCB	PCB-114	74472-37-0	0.1	94.0	60	135	104
2,3,3',4,4'-PeCB	PCB-105	32598-14-4	0.1	95.0	60	135	107
3,3',4,4',5-PeCB	PCB-126	57465-28-8	0.1	96.5	60	135	112
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.1	90.8	60	135	59
2,2',3,5,5',6-HxCB	PCB-151	52663-63-5	0.1	62.8			-
	PCB-139/149		0.1	105.2			-
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	0.1	88.8			-
2,3',4,4',5',6-HxCB	PCB-168	59291-65-5	0.1	96.1			-
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.1	94.0			-
2,2',3,4,4',5-HxCB	PCB-137	35694-06-5	0.1	93.7			-
2,2',3,4,4',5'-HxCB	PCB-138	35065-28-2	0.1	95.1			-
2,3,3',4,4',6-HxCB	PCB-158	74472-42-7	0.1	82.3			-
2,2',3,3',4,5-HxCB	PCB-129	55215-18-4	0.1	70.6			-
2,2',3,3',4,4'-HxCB	PCB-128	38380-07-3	0.1	77.5			-
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.1	109.7	60	135	80
2,3,3',4,4',5-HxCB	PCB-156	38380-08-4	0.1	107.0	60	135	78
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.1	117.0	60	135	82
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.1	93.4	60	135	123

QC REPORT - SPIKE

Client: City of Spokane
 Client ID: SPIKE (LCS)
 Field ID:
 PRL ID: PC160633S

Contact: Jeff Donovan
 Date Extracted: 7/21/2016
 Date Analysed: 8/11/2016
 HRMS File: FS08111602

Polychlorinated Biphenyls				Accept. Recovery			Pass/Fail	Surrogate
			LOF	Recovery	Min	Max		Recoveries
Chemical Name	IUPAC #	CAS No.	ug/Kg	%	%	%		%
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.1	95.6	60	135	Pass	63
2,2',3,3',5,5',6-HpCB	PCB-178	52663-67-9	0.1	72.4				-
	PCB-182/187		0.1	70.7				-
2,2',3,4,4',5',6-HpCB	PCB-183	52663-69-1	0.1	72.4				-
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.1	76.8				-
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.1	69.2				-
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.1	83.1				-
2,3,3',4',5,5',6-HpCB	PCB-193	69782-91-8	0.1	77.8				-
2,3,3',4,4',5',6-HpCB	PCB-191	74472-50-7	0.1	78.7				-
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.1	95.3				-
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.1	100.2	60	135	Pass	109
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.1	106.2	60	135	Pass	46
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.1	68.9				-
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.1	104.8				-
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.1	104.3				-
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.1	101.3				-
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.1	102.0	60	135	Pass	86
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.1	89.1	60	135	Pass	61
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.1	98.3	60	135	Pass	67
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.1	84.2	60	135	Pass	68

LOF - level of fortification

Acronyms used in reporting Polychlorinated Biphenyls (PCBs)

MoCB = Monochlorobiphenyl

HxCB = Hexachlorobiphenyl

DiCB = Dichlorobiphenyl

HpCB = Heptachlorobiphenyl

TrCB = Trichlorobiphenyl

OcCB = Octachlorobiphenyl

TeCB = Tetrachlorobiphenyl

NoCB = Nonachlorobiphenyl

PeCB = Pentachlorobiphenyl

DeCB = Decachlorobiphenyl

Acceptable recoveries for PCB Internal Standards - EPA 1668C

Chemical Name	IUPAC #	Min	Max
¹³ C ₁₂ -2-MoCB	1L	5	145
¹³ C ₁₂ -4-MoCB	3L	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	10	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	157L	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OcCB	202L	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6'-OcCB	205L	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6'-NoCB	206L	10	145
¹³ C ₁₂ -DeCB	209L	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6'-HpCB	178L	10	145

CHAIN OF

BODY RECORD / ANALYSIS REQUEST

Pacific Rim Laboratories Inc. #103, 19575 - 55A Avenue, Surrey, BC V3S 8P8 Tel: 604-532-8711

Fax: 604-532-8712

COMPANY: City of Spokane RPWRF
4401 N. Aubrey L. White Parkway
Spokane, WA 99205

CONTACT: Jeff Donovan

3 of 4

PHONE: 509-625-4638

Date:

7/19/2016

[illegible]

Sample's Signature 	Relinquished by: Jeff Donovan	Company City of Spokane RR&ET	Date 7/19/16	Time 1:00P	Received by:
Comments: 	Method of Shipment Fed ex	Weight No. 601423086830	Rec'd for PRL	Date 20 JUL 16	Time 12PM
	Shipment Condition good	Temp 20.8°C	Cooler Opened By: JW		

CHAIN OF CUSTODY RECORD

City of Spokane, Wastewater Management
Wastewater Laboratory
4401 N. Aubrey L. White Parkway
Spokane, WA 99205
(509) 625-4600

Page 1 of 4

From:	Name:	City of Spokane	RPWRF
	Address:	North 4401 A.L. White Parkway Spokane, WA 99205	
	Phone:	(509)-625-4600	
	Contact:	Mike Cannon	
	Email:	mcannon@spokanecity.org	

To:	Name:	Pacific Rim Laboratories Inc.
	Address:	#103, 19575 55A Ave
		Surrey, BC V3S 8P8
	Phone:	604-532-8711
	Contact:	Dave Hope
	Purchase Order # :	OPR 2012-0841
	Shipper Tracking Number:	601473086830

Sample Transfer (sign below)

Test Parameters (include Method Number)

[illegible]

Matrix: DW = Drinking Water, GW = Ground Water, WW = Wastewater, L = Liquid, S= Solid/Sludge, SO = Soil
O = Other

Preservation: R = Refrigerate (4C), F = Freeze, N = Nitric Acid, H = Hydrochloric Acid, O = Other
SH = Sodium Hydroxide, S = Sulfuric Acid

Sample Type: G = Grab, C = Composite

Upon Rec'd Data, Complete Following Steps:

() Data Original to Respective File () Data Copy File With This Document
() Invoice to Warehouse for Payment Invoice #:
() Data file location

Version: 71703

Vactor Water Post Jar Samples - Moisture Content

PRL ID	Client ID	Field ID	Moisture Content %
PR164206	L.E. Bell Jar #4	#16-18396	73.87
PR164207	G.F. Olga Jar #2	#16-18397	51.11
PR164208	P. Ost. Colum. Jar #2	#16-18398	59.56
PR164209	P. Ost. Brat Jar #2	#16-18399	54.85
PR164210	Vactor Waste Control	#16-18400	20.68
PR164211	G.F. Olga Jar #1	#16-18401	52.29
PR164212	SRA Jar #1	#16-18402	42.38
PR164213	P. Wild CA Creek Jar #1	#16-18403	64.13
PR164214	L.E. Bell Jar #3	#16-18404	69.5
PR164215	VW+Sawdust Control	#16-18404	26.46
PR164216	P. Wild CA Jar #2	#16-17817	58
PR164217	P. Wild CA Jar #2 Dup	#16-17818	57.44
PR164218	P. Wild CA Jar #2 Trip	#16-17819	68.15
PR164219	P. Ost. Colum. Jar #1	#16-17820	49
PR164220	T.V. Black Jar #2	#16-17821	67.39
PR164221	P. Djamor Jar #1	#16-17822	54.2
PR164222	P. Ost. Brat Jar #1	#16-17823	44.7
PR164223	S. RA. Jar #3	#16-17824	66.28
PR164224	TV Black Jar #3	#16-18394	71.18
PR164225	P. Djamor Jar #2	#16-18395	65.24

SAMPLE RECEIPT FORM / CHEMICAL ANALYSIS FORM

FILE #: PR164206

CLIENT: City of Spokane
N. 4401 A.L. White Parkway
Spokane, WA 99205
USA

Phone: (509) 625-4600
Email: jdonovan@spokanecity.org

RECEIVED BY: M.A. Wright
CONDITION: okay, 10.2°C

DATE/TIME: December 6, 2016 (12:30 p.m.)

# of Containers	Sample Type	Sample (Client Codes)	Lab Codes	Test Requested
1	Solid	L.E. Bell Jar #4 #16-18396	PR164206	209PCB
1	Solid	G.F. Olga Jar #2 #16-18397	PR164207	209PCB
1	Solid	P. Ost. Colum. Jar #2 #16-18398	PR164208	209PCB
1	Solid	P. Ost. Brat Jar #2 #16-18399	PR164209	209PCB
1	Solid	Vactor Waste Control #16-18400	PR164210	209PCB
1	Solid	G.F. Olga Jar #1 #16-18401	PR164211	209PCB
1	Solid	SRA Jar #1 #16-18402	PR164212	209PCB
1	Solid	P. Wild CA Creek Jar #1 #16-18403	PR164213	209PCB
1	Solid	L.E. Bell Jar #3 #16-18404	PR164214	209PCB
1	Solid	VW + Sawdust Control #16-18405	PR164215	209PCB
1	Solid	P. Wild CA Jar #2 #16-17817	PR164216	209PCB
1	Solid	P. Wild CA Jar #2 Dup #16-17818	PR164217	209PCB
1	Solid	P. Wild CA Jar #2 Trip #16-17819	PR164218	209PCB
1	Solid	P. Ost. Colum. Jar #1 #16-17820	PR164219	209PCB
1	Solid	T.V. Black Jar #2 #16-17821	PR164220	209PCB
1	Solid	P. Djamor Jar #1 #16-17822	PR164221	209PCB
1	Solid	P. Ost. Brat Jar #1 #16-17823	PR164222	209PCB
1	Solid	S. RA. Jar #3 #16-17824	PR164223	209PCB
1	Solid	TV Black Jar #3 #16-18394	PR164224	209PCB
1	Solid	P. Djamor Jar #2 #16-18395	PR164225	209PCB

STORAGE: Stored at 4°C.



ANALYTES: HRGC/HRMS analysis for polychlorinated biphenyls (209 congeners).

SPECIAL INSTRUCTIONS: None.

METHODOLOGY

Reference Method: PCB: SOP LAB02; EPA Method 1668C

Data summarized in Data Report Attached

Report sent to: Jeffrey Donovan Date: February 21, 2017

Comments: Results relate only to items tested.

The following flags or qualifiers have been used with this data set:

B: sample concentration is <5x concentration found in the blank

U: not detected at the concentration listed

J: sample concentration is less than lowest point on calibration curve

N: not detected due to incorrect ion ratio. Concentration report is EMPC.

David Hope PChem, CEO

DATA REPORT

Client: City of Spokane
Client ID: L.E. Bell Jar #4
Field ID: #16-18396
PRL ID: PR164206

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/13/2017
HRMS File: DF02121724

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0024	0.0003	J	0.0063
3-MoCB	PCB-002	2051-61-8	0.0003	0.0003	UJ	0.0063
4-MoCB	PCB-003	2051-62-9	0.0044	0.0003	J	0.0063
2,6-DiCB	PCB-010	33146-45-1	0.0005	0.0005	UJ	0.0063
2,2'-DiCB	PCB-004	13029-08-8	0.0009	0.0009	UJ	0.0063
2,5-DiCB	PCB-009	34883-39-1	0.0005	0.0005	UJ	0.0063
2,4-DiCB	PCB-007	33284-50-3	0.0005	0.0005	UJ	0.0063
2,3'-DiCB	PCB-006	25569-80-6	0.0047	0.0005	J	0.0063
2,3/2,4'-DiCB	PCB-005/008		0.0257	0.0005		0.0063
3,5-DiCB	PCB-014	34883-41-5	0.0005	0.0005	UJ	0.0063
3,3'-DiCB	PCB-011	2050-67-1	0.116	0.0005		0.0063
3,4/3,4'-DiCB	PCB-012/013		0.0005	0.0005	UJ	0.0063
4,4'-DiCB	PCB-015	2050-68-2	0.0505	0.0005		0.0063
2,2',6-TrCB	PCB-019	38444-73-4	0.0037	0.0006	J	0.0063
2,4,6-TrCB	PCB-030	35693-92-6	0.0003	0.0003	UJ	0.0063
2,2',5-TrCB	PCB-018	37680-65-2	0.0206	0.0005		0.0063
2,2',4-TrCB	PCB-017	37680-66-3	0.0079	0.0005		0.0063
2,3,6-TrCB	PCB-024	55702-45-9	0.0004	0.0004	UJ	0.0063
2,3',6-TrCB	PCB-027	38444-76-7	0.0025	0.0003	J	0.0063
2,4',6-TrCB	PCB-032	38444-77-8	0.0144	0.0003		0.0063
2,2',3-TrCB	PCB-016	38444-78-9	0.035	0.0009		0.0063
2,3,5-TrCB	PCB-023	55720-44-0	0.0003	0.0002	NJ	0.0063
2,3',5'-TrCB	PCB-034	37680-68-5	0.0002	0.0002	UJ	0.0063
2,4,5-TrCB	PCB-029	15862-07-4	0.0002	0.0002	UJ	0.0063
2,3',5-TrCB	PCB-026	38444-81-4	0.0199	0.0001		0.0063
2,3',4-TrCB	PCB-025	55712-37-3	0.0143	0.0002		0.0063
2,4',5-TrCB	PCB-031	16606-02-3	0.125	0.0001		0.0063
2,4,4'-TrCB	PCB-028	7012-37-5	0.2	0.0002		0.0063
2,3,4-TrCB	PCB-021	55702-46-0	0.0002	0.0002	UJ	0.0063
	PCB-020/033		0.043	0.0002		0.0063
2,3,4'-TrCB	PCB-022	38444-85-8	0.0659	0.0002		0.0063
3,3',5-TrCB	PCB-036	38444-87-0	0.0043	0.0002	J	0.0063
3,4',5-TrCB	PCB-039	38444-88-1	0.0002	0.0002	UJ	0.0063
3,4,5-TrCB	PCB-038	53555-66-1	0.001	0.0002	UJ	0.0063
3,3',4-TrCB	PCB-035	37680-69-6	0.0078	0.0002		0.0063
3,4,4'-TrCB	PCB-037	38444-90-5	0.112	0.0003		0.0063
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0005	0.0005	UJ	0.0063
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0007	0.0007	UJ	0.0063
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0143	0.0007		0.0063
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0045	0.0007	J	0.0063
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0154	0.0008		0.0063
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0078	0.0009	NJ	0.0063
	PCB-052/069		0.153	0.0006		0.0063
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0009	0.0009	UJ	0.0063
	PCB-043/049		0.137	0.0009		0.0063
	PCB-065/075		0.0006	0.0006	UJ	0.0063
	PCB-047/048		0.0638	0.0006		0.0063
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0008	0.0008	UJ	0.0063
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.109	0.0008		0.0063
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0201	0.0007		0.0063
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.0428	0.0009		0.0063
	PCB-064/072		0.105	0.0006		0.0063

DATA REPORT

Client: City of Spokane
Client ID: L.E. Bell Jar #4
Field ID: #16-18396
PRL ID: PR164206

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/13/2017
HRMS File: DF02121724

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.0314	0.0005		0.0063
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0229	0.0015		0.0063
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0007	0.0007	UJ	0.0063
	PCB-040/057		0.029	0.0012		0.0063
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0007	0.0007	UJ	0.0063
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0007	0.0007	UJ	0.0063
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0007	0.0007	UJ	0.0063
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0008	0.0008	UJ	0.0063
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.163	0.0009		0.0063
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.295	0.0008		0.0063
	PCB-055/080		0.0009	0.0009	UJ	0.0063
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.258	0.0007		0.0063
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0008	0.0008	UJ	0.0063
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.0668	0.0007		0.0063
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.131	0.0009		0.0063
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0008	0.0008	UJ	0.0063
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0009	0.0009	UJ	0.0063
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0008	0.0008	UJ	0.0063
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0332	0.0009		0.0063
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0007	0.0007	UJ	0.0063
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.001	0.001	UJ	0.0063
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0014	0.0014	UJ	0.0063
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0016	0.0016	UJ	0.0063
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0018	0.0018	UJ	0.0063
	PCB-093/098/102		0.0018	0.0018	UJ	0.0063
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.184	0.0018		0.0063
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0016	0.0016	UJ	0.0063
	PCB-091/121		0.0319	0.002		0.0063
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.0905	0.0019		0.0063
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.0905	0.0019	UJ	0.0063
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0023	0.0023	UJ	0.0063
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0022	0.0022	UJ	0.0063
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.221	0.0018		0.0063
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0014	0.0014	UJ	0.0063
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.116	0.0019		0.0063
	PCB-112/119		0.0018	0.0018	UJ	0.0063
	PCB-083/109		0.0011	0.0011	UJ	0.0063
	PCB-086/117		0.0029	0.0029	UJ	0.0063
	PCB-097/116		0.0658	0.0017		0.0063
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0018	0.0018	UJ	0.0063
	PCB-087/115		0.111	0.0018		0.0063
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0548	0.0018	UJ	0.0063
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.0548	0.0018		0.0063
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0015	0.0015	UJ	0.0063
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.288	0.0016		0.0063
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.0362	0.0025		0.0063
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0119	0.0008	NJ	0.0063
	PCB-107/108		0.0159	0.0009		0.0063
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0011	0.0011	UJ	0.0063
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0009	0.0009	UJ	0.0063
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.281	0.0011		0.0063
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0012	0.0012	UJ	0.0063

DATA REPORT

Client: City of Spokane
Client ID: L.E. Bell Jar #4
Field ID: #16-18396
PRL ID: PR164206

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/13/2017
HRMS File: DF02121724

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0008	0.0008	UJ	0.0063
	PCB-105/127		0.149	0.0009		0.0063
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0008	0.0008	UJ	0.0063
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.0006	0.0006	UJ	0.0063
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0008	0.0008	UJ	0.0063
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0007	0.0007	UJ	0.0063
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.0008	0.0008	UJ	0.0063
	PCB-136/148		0.0505	0.0008		0.0063
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.001	0.001	UJ	0.0063
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.0982	0.0011		0.0063
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.0493	0.0012		0.0063
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.0219	0.0013	NJ	0.0063
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0009	0.0009	UJ	0.0063
	PCB-139/149		0.358	0.0012		0.0063
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.001	0.001	UJ	0.0063
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0006	0.0006	UJ	0.0063
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.0326	0.0008		0.0063
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0011	0.0007	NJ	0.0063
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0007	0.0007	UJ	0.0063
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0006	0.0006	UJ	0.0063
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0006	0.0006	UJ	0.0063
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.0595	0.0005		0.0063
	PCB-132/161		0.172	0.0006		0.0063
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	0.566	0.0006		0.0063
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0004	0.0004	UJ	0.0063
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.0848	0.0006		0.0063
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0234	0.0006		0.0063
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0327	0.0006		0.0063
	PCB-163/164		0.156	0.0004		0.0063
	PCB-138/160		0.426	0.0006		0.0063
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.0496	0.0003		0.0063
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.0185	0.0006		0.0063
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0004	0.0004	UJ	0.0063
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.0709	0.0005	UJ	0.0063
	PCB-128/162		0.0004	0.0004		0.0063
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0153	0.0004		0.0063
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.0401	0.0004		0.0063
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.01	0.0004		0.0063
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0005	0.0005	UJ	0.0063
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0005	0.0005	UJ	0.0063
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0004	0.0004	UJ	0.0063
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.0527	0.0004		0.0063
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0147	0.0004		0.0063
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0004	0.0004	UJ	0.0063
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0209	0.0005		0.0063
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0005	0.0005	UJ	0.0063
	PCB-182/187		0.147	0.0005		0.0063
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.06	0.0005		0.0063
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0111	0.0005		0.0063
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.0925	0.0005		0.0063
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0005	0.0005	UJ	0.0063
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.0587	0.0005		0.0063

DATA REPORT

Client: City of Spokane
Client ID: L.E. Bell Jar #4
Field ID: #16-18396
PRL ID: PR164206

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/13/2017
HRMS File: DF02121724

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0273	0.0005		0.0063
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0005	0.0005	UJ	0.0063
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.019	0.0005		0.0063
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0004	0.0004	UJ	0.0063
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.202	0.0004		0.0063
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0004	0.0004	UJ	0.0063
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.0034	0.0003	J	0.0063
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.0851	0.0005		0.0063
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0204	0.0004		0.0063
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.0044	0.0003	NJ	0.0063
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0002	0.0002		0.0063
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0002	0.0002		0.0063
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0002	0.0002	UJ	0.0063
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0025	0.0002	J	0.0063
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0053	0.0002	NJ	0.0063
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0003	0.0003	UJ	0.0063
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.0857	0.0003		0.0063
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.0473	0.0003		0.0063
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.0411	0.0003		0.0063
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0243	0.0003		0.0063
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.0703	0.0003		0.0063
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0002	0.0002	UJ	0.0063
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0184	0.0019		0.0063
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.002	0.002	UJ	0.0063
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.0028	0.0028		0.0063
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.024	0.0004		0.0063

Homologs	# of Congeners		
Monochlorobiphenyls	3	0.0068	0.0003
Dichlorobiphenyls	12	0.197	0.0005
Trichlorobiphenyls	24	0.676	0.0001
Tetrachlorobiphenyls	42	1.7	0.0005
Pentachlorobiphenyls	46	1.65	0.0007
Hexachlorobiphenyls	42	2.31	0.0003
Heptachlorobiphenyls	24	0.815	0.0003
Octachlorobiphenyls	12	0.302	0.0002
Nonachlorobiphenyls	3	0.0604	0.0019
Decachlorobiphenyl	1	0.024	0.0004
Total PCB		7.73	0.0001

DATA REPORT

Client: City of Spokane
 Client ID: L.E. Bell Jar #4
 Field ID: #16-18396
 PRL ID: PR164206

Contact: Jeff Donovan
 Date Extracted: 12/28/2016
 Date Analysed: 2/13/2017
 HRMS File: DF02121724

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	42	5	145
¹³ C ₁₂ -4-MoCB	3L	49	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	51	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	74	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	61	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	114	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	61	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	128	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	129	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	57	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	110	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	104	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	107	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	103	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	86	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	64	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	65	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	59	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HxCB	157L	58	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	45	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	82	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	106	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	62	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	87	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	108	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	92	10	145
¹³ C ₁₂ -DeCB	209L	82	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	103	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	135	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	80	10	145

DATA REPORT

Client: City of Spokane
Client ID: G.F. Olga Jar #2
Field ID: #16-18397
PRL ID: PR164207

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/13/2017
HRMS File: DF02121725

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0031	0.0001	J	0.0033
3-MoCB	PCB-002	2051-61-8	0.0013	0.0001	J	0.0033
4-MoCB	PCB-003	2051-62-9	0.0033	0.0001		0.0033
2,6-DiCB	PCB-010	33146-45-1	0.0001	0.0001	UJ	0.0033
2,2'-DiCB	PCB-004	13029-08-8	0.0071	0.0001		0.0033
2,5-DiCB	PCB-009	34883-39-1	0.0019	0.0001	J	0.0033
2,4-DiCB	PCB-007	33284-50-3	0.0032	0.0001	J	0.0033
2,3'-DiCB	PCB-006	25569-80-6	0.0067	0.0001		0.0033
2,3/2,4'-DiCB	PCB-005/008		0.0316	0.0001		0.0033
3,5-DiCB	PCB-014	34883-41-5	0.0001	0.0001	UJ	0.0033
3,3'-DiCB	PCB-011	2050-67-1	0.0528	0.0001		0.0033
3,4/3,4'-DiCB	PCB-012/013		0.0001	0.0001	UJ	0.0033
4,4'-DiCB	PCB-015	2050-68-2	0.051	0.0001		0.0033
2,2',6-TrCB	PCB-019	38444-73-4	0.0078	0.0001		0.0033
2,4,6-TrCB	PCB-030	35693-92-6	0.0001	0.0001	UJ	0.0033
2,2',5-TrCB	PCB-018	37680-65-2	0.0551	0.0001		0.0033
2,2',4-TrCB	PCB-017	37680-66-3	0.0232	0.0001		0.0033
2,3,6-TrCB	PCB-024	55702-45-9	0.0017	0.0001	J	0.0033
2,3',6-TrCB	PCB-027	38444-76-7	0.0069	0.0001		0.0033
2,4',6-TrCB	PCB-032	38444-77-8	0.0207	0.0001		0.0033
2,2',3-TrCB	PCB-016	38444-78-9	0.0624	0.0003		0.0033
2,3,5-TrCB	PCB-023	55720-44-0	0.0001	0.0001	UJ	0.0033
2,3',5'-TrCB	PCB-034	37680-68-5	0.0001	0.0001	UJ	0.0033
2,4,5-TrCB	PCB-029	15862-07-4	0.0006	0.0001	NJ	0.0033
2,3',5-TrCB	PCB-026	38444-81-4	0.0216	0.0001		0.0033
2,3',4-TrCB	PCB-025	55712-37-3	0.0098	0.0001		0.0033
2,4',5-TrCB	PCB-031	16606-02-3	0.113	0.0001		0.0033
2,4,4'-TrCB	PCB-028	7012-37-5	0.211	0.0001		0.0033
2,3,4-TrCB	PCB-021	55702-46-0	0.0001	0.0001	UJ	0.0033
	PCB-020/033		0.0475	0.0001		0.0033
2,3,4'-TrCB	PCB-022	38444-85-8	0.0708	0.0001		0.0033
3,3',5-TrCB	PCB-036	38444-87-0	0.0053	0.0001		0.0033
3,4',5-TrCB	PCB-039	38444-88-1	0.0001	0.0001	UJ	0.0033
3,4,5-TrCB	PCB-038	53555-66-1	0.0001	0.0001	UJ	0.0033
3,3',4-TrCB	PCB-035	37680-69-6	0.0051	0.0001		0.0033
3,4,4'-TrCB	PCB-037	38444-90-5	0.118	0.0001		0.0033
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0006	0.0001	J	0.0033
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0002	0.0002	UJ	0.0033
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0542	0.0002		0.0033
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0196	0.0002		0.0033
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0563	0.0002		0.0033
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0257	0.0003		0.0033
	PCB-052/069		0.257	0.0002		0.0033
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0003	0.0003	UJ	0.0033
	PCB-043/049		0.194	0.0003		0.0033
	PCB-065/075		0.0002	0.0002	UJ	0.0033
	PCB-047/048		0.0932	0.0002		0.0033
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0002	0.0002	UJ	0.0033
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.227	0.0003		0.0033
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0359	0.0002		0.0033
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.0671	0.0003		0.0033
	PCB-064/072		0.186	0.0002		0.0033

DATA REPORT

Client: City of Spokane
Client ID: G.F. Olga Jar #2
Field ID: #16-18397
PRL ID: PR164207

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/13/2017
HRMS File: DF02121725

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.0726	0.0002		0.0033
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0475	0.0005		0.0033
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0002	0.0002	UJ	0.0033
	PCB-040/057		0.0581	0.0004		0.0033
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0076	0.0002		0.0033
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0202	0.0002		0.0033
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0202	0.0002		0.0033
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0002	0.0002	UJ	0.0033
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.176	0.0003		0.0033
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.296	0.0002		0.0033
	PCB-055/080		0.0003	0.0003	UJ	0.0033
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.269	0.0002		0.0033
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0002	0.0002	UJ	0.0033
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.0636	0.0002		0.0033
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.164	0.0003		0.0033
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0002	0.0002	UJ	0.0033
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0003	0.0003	UJ	0.0033
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0005	0.0005	UJ	0.0033
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0464	0.0005		0.0033
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0002	0.0002	UJ	0.0033
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0006	0.0006		0.0033
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0008	0.0008	UJ	0.0033
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0009	0.0009	UJ	0.0033
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.001	0.001	UJ	0.0033
	PCB-093/098/102		0.001	0.001	UJ	0.0033
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.572	0.001		0.0033
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0009	0.0009	UJ	0.0033
	PCB-091/121		0.103	0.0011		0.0033
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.243	0.001		0.0033
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.243	0.001	UJ	0.0033
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0013	0.0013	UJ	0.0033
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0012	0.0012	UJ	0.0033
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.472	0.001		0.0033
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0008	0.0008	UJ	0.0033
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.197	0.001		0.0033
	PCB-112/119		0.001	0.001	UJ	0.0033
	PCB-083/109		0.0006	0.0006		0.0033
	PCB-086/117		0.0016	0.0016	UJ	0.0033
	PCB-097/116		0.157	0.001		0.0033
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.001	0.001	UJ	0.0033
	PCB-087/115		0.209	0.001		0.0033
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0913	0.001	UJ	0.0033
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.0913	0.001		0.0033
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0008	0.0008	UJ	0.0033
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.685	0.0009		0.0033
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.0935	0.0014		0.0033
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0364	0.0007		0.0033
	PCB-107/108		0.0259	0.0005		0.0033
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0007	0.0007	UJ	0.0033
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0005	0.0005	UJ	0.0033
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.373	0.0008		0.0033
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0235	0.0008		0.0033

DATA REPORT

Client: City of Spokane
Client ID: G.F. Olga Jar #2
Field ID: #16-18397
PRL ID: PR164207

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/13/2017
HRMS File: DF02121725

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0339	0.0004		0.0033
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0019	0.0005	J	0.0033
2,2',3,3',4,5,5',6-HpCB	PCB-172	52663-74-8	0.0182	0.0005		0.0033
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0004	0.0004	UJ	0.0033
2,2',3,4,4',5,5',6-HpCB	PCB-180	35065-29-3	0.266	0.0004		0.0033
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0004	0.0004	UJ	0.0033
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.0041	0.0003	NJ	0.0033
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.116	0.0005		0.0033
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0232	0.0004		0.0033
2,3,3',4,4',5,5',6-HpCB	PCB-189	39635-31-9	0.0055	0.0004	NJ	0.0033
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0003	0.0003		0.0033
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0003	0.0003		0.0033
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0003	0.0003	UJ	0.0033
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0039	0.0003	NJ	0.0033
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0132	0.0003		0.0033
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0005	0.0005	UJ	0.0033
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.14	0.0005		0.0033
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.051	0.0005		0.0033
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.0879	0.0005		0.0033
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0427	0.0004		0.0033
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.104	0.0005		0.0033
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0004	0.0004	UJ	0.0033
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0249	0.0019		0.0033
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0019	0.0019		0.0033
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.0026	0.0026		0.0033
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.031	0.0005		0.0033

Homologs	# of Congeners		
Monochlorobiphenyls	3	0.0077	0.0001
Dichlorobiphenyls	12	0.154	0.0001
Trichlorobiphenyls	24	0.78	0.0001
Tetrachlorobiphenyls	42	2.46	0.0001
Pentachlorobiphenyls	46	3.55	0.0002
Hexachlorobiphenyls	42	5.11	0.0003
Heptachlorobiphenyls	24	1.28	0.0003
Octachlorobiphenyls	12	0.493	0.0003
Nonachlorobiphenyls	3	0.117	0.0019
Decachlorobiphenyl	1	0.031	0.0005
Total PCB		14	0.0001

DATA REPORT

Client: City of Spokane
Client ID: G.F. Olga Jar #2
Field ID: #16-18397
PRL ID: PR164207

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/13/2017
HRMS File: DF02121725

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	62	5	145
¹³ C ₁₂ -4-MoCB	3L	69	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	63	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	65	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	66	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	99	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	92	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	66	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	68	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	90	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	139	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	123	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	127	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	114	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	80	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	66	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	56	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	45	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HxCB	157L	47	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	34	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	105	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	103	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	57	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	86	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	104	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	92	10	145
¹³ C ₁₂ -DeCB	209L	85	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	122	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	134	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	77	10	145

DATA REPORT

Client: City of Spokane
Client ID: G.F. Olga Jar #2
Field ID: #16-18397
PRL ID: PR164207D

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/14/2017
HRMS File: DF02121726

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0022	0.0001	NJ	0.003
3-MoCB	PCB-002	2051-61-8	0.0001	0.0001	UJ	0.003
4-MoCB	PCB-003	2051-62-9	0.0019	0.0001	J	0.003
2,6-DiCB	PCB-010	33146-45-1	0.0002	0.0002	UJ	0.003
2,2'-DiCB	PCB-004	13029-08-8	0.0025	0.0002	J	0.003
2,5-DiCB	PCB-009	34883-39-1	0.0009	0.0002	J	0.003
2,4-DiCB	PCB-007	33284-50-3	0.0025	0.0002	J	0.003
2,3'-DiCB	PCB-006	25569-80-6	0.0021	0.0002	J	0.003
2,3/2,4'-DiCB	PCB-005/008		0.0132	0.0002		0.003
3,5-DiCB	PCB-014	34883-41-5	0.0002	0.0002	UJ	0.003
3,3'-DiCB	PCB-011	2050-67-1	0.0504	0.0002		0.003
3,4/3,4'-DiCB	PCB-012/013		0.0002	0.0002	UJ	0.003
4,4'-DiCB	PCB-015	2050-68-2	0.0408	0.0002		0.003
2,2',6-TrCB	PCB-019	38444-73-4	0.0062	0.0002		0.003
2,4,6-TrCB	PCB-030	35693-92-6	0.0002	0.0002	UJ	0.003
2,2',5-TrCB	PCB-018	37680-65-2	0.037	0.0003		0.003
2,2',4-TrCB	PCB-017	37680-66-3	0.0173	0.0003		0.003
2,3,6-TrCB	PCB-024	55702-45-9	0.0013	0.0003	J	0.003
2,3',6-TrCB	PCB-027	38444-76-7	0.0061	0.0002		0.003
2,4',6-TrCB	PCB-032	38444-77-8	0.0163	0.0002		0.003
2,2',3-TrCB	PCB-016	38444-78-9	0.0382	0.0006		0.003
2,3,5-TrCB	PCB-023	55720-44-0	0.0001	0.0001	UJ	0.003
2,3',5'-TrCB	PCB-034	37680-68-5	0.0001	0.0001	UJ	0.003
2,4,5-TrCB	PCB-029	15862-07-4	0.0001	0.0001	UJ	0.003
2,3',5-TrCB	PCB-026	38444-81-4	0.0173	0.0001		0.003
2,3',4-TrCB	PCB-025	55712-37-3	0.0101	0.0001		0.003
2,4',5-TrCB	PCB-031	16606-02-3	0.0951	0.0001		0.003
2,4,4'-TrCB	PCB-028	7012-37-5	0.188	0.0001		0.003
2,3,4-TrCB	PCB-021	55702-46-0	0.0001	0.0001	UJ	0.003
	PCB-020/033		0.0322	0.0001		0.003
2,3,4'-TrCB	PCB-022	38444-85-8	0.0644	0.0001		0.003
3,3',5-TrCB	PCB-036	38444-87-0	0.0058	0.0001		0.003
3,4',5-TrCB	PCB-039	38444-88-1	0.0001	0.0001	UJ	0.003
3,4,5-TrCB	PCB-038	53555-66-1	0.0001	0.0001	UJ	0.003
3,3',4-TrCB	PCB-035	37680-69-6	0.0049	0.0001		0.003
3,4,4'-TrCB	PCB-037	38444-90-5	0.112	0.0002		0.003
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0003	0.0003	UJ	0.003
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0005	0.0005	UJ	0.003
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0506	0.0006		0.003
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0176	0.0006		0.003
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0512	0.0006		0.003
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.029	0.0007		0.003
	PCB-052/069		0.242	0.0004		0.003
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0007	0.0007	UJ	0.003
	PCB-043/049		0.186	0.0007		0.003
	PCB-065/075		0.0005	0.0005	UJ	0.003
	PCB-047/048		0.0916	0.0005		0.003
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0007	0.0007	UJ	0.003
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.201	0.0007		0.003
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0308	0.0005		0.003
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.066	0.0007		0.003
	PCB-064/072		0.172	0.0005		0.003

DATA REPORT

Client: City of Spokane
Client ID: G.F. Olga Jar #2
Field ID: #16-18397
PRL ID: PR164207D

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/14/2017
HRMS File: DF02121726

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.0677	0.0004		0.003
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0509	0.0012		0.003
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0005	0.0005	UJ	0.003
	PCB-040/057		0.0512	0.0009		0.003
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0005	0.0005	UJ	0.003
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0224	0.0006		0.003
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0224	0.0006		0.003
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0006	0.0006	UJ	0.003
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.182	0.0007		0.003
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.344	0.0006		0.003
	PCB-055/080		0.0007	0.0007	UJ	0.003
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.262	0.0006		0.003
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0093	0.0006		0.003
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.0864	0.0006		0.003
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.145	0.0007		0.003
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0006	0.0006	UJ	0.003
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0007	0.0007	UJ	0.003
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0011	0.0011	UJ	0.003
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0439	0.0011		0.003
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0005	0.0005	UJ	0.003
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0011	0.0011		0.003
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0015	0.0015	UJ	0.003
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0017	0.0017	UJ	0.003
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.002	0.002	UJ	0.003
	PCB-093/098/102		0.002	0.002	UJ	0.003
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.507	0.0019		0.003
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0018	0.0018	UJ	0.003
	PCB-091/121		0.0958	0.0022		0.003
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.224	0.002		0.003
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.224	0.002	UJ	0.003
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0025	0.0025	UJ	0.003
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0024	0.0024	UJ	0.003
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.44	0.002		0.003
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0016	0.0016	UJ	0.003
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.189	0.0021		0.003
	PCB-112/119		0.0019	0.0019	UJ	0.003
	PCB-083/109		0.0012	0.0012	UJ	0.003
	PCB-086/117		0.0031	0.0031	U	0.003
	PCB-097/116		0.148	0.0019		0.003
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0019	0.0019	UJ	0.003
	PCB-087/115		0.196	0.002		0.003
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0926	0.0019	UJ	0.003
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.0926	0.0019		0.003
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0017	0.0017	UJ	0.003
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.685	0.0018		0.003
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.0842	0.0028		0.003
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0275	0.0011		0.003
	PCB-107/108		0.0338	0.001		0.003
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0013	0.0013	UJ	0.003
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.001	0.001	UJ	0.003
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.395	0.0014		0.003
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0015	0.0015	UJ	0.003

DATA REPORT

Client: City of Spokane
Client ID: G.F. Olga Jar #2
Field ID: #16-18397
PRL ID: PR164207D

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/14/2017
HRMS File: DF02121726

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0009	0.0009	UJ	0.003
	PCB-105/127		0.23	0.0011		0.003
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.001	0.001	UJ	0.003
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.0008	0.0008	UJ	0.003
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0014	0.0014	UJ	0.003
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0013	0.0013	UJ	0.003
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.0015	0.0015	UJ	0.003
	PCB-136/148		0.122	0.0014		0.003
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0017	0.0017	UJ	0.003
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.223	0.002		0.003
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.124	0.0022		0.003
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.04	0.0023	NJ	0.003
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0193	0.0017	NJ	0.003
	PCB-139/149		0.889	0.0022		0.003
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0018	0.0018	UJ	0.003
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.001	0.001	UJ	0.003
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.0704	0.0014		0.003
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0012	0.0012	UJ	0.003
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0013	0.0013	UJ	0.003
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0011	0.0011	UJ	0.003
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.001	0.001	UJ	0.003
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.105	0.0009		0.003
	PCB-132/161		0.372	0.0011		0.003
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	0.957	0.0011		0.003
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0007	0.0007	UJ	0.003
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.198	0.001		0.003
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0489	0.0011		0.003
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0545	0.0011		0.003
	PCB-163/164		0.294	0.0008		0.003
	PCB-138/160		0.792	0.0011		0.003
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.0805	0.0006		0.003
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.049	0.001	NJ	0.003
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0007	0.0007	UJ	0.003
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.136	0.0008	UJ	0.003
	PCB-128/162		0.0007	0.0007		0.003
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0337	0.0007		0.003
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.0792	0.0007		0.003
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0184	0.0007		0.003
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0012	0.0012	UJ	0.003
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0008	0.0008	UJ	0.003
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0007	0.0007	UJ	0.003
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.0921	0.0006		0.003
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0247	0.0006		0.003
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0007	0.0007	UJ	0.003
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0366	0.0009		0.003
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0008	0.0008	UJ	0.003
	PCB-182/187		0.235	0.0008		0.003
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.109	0.0008		0.003
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0268	0.0009		0.003
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.183	0.0008		0.003
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0008	0.0008	UJ	0.003
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.0933	0.0008		0.003

DATA REPORT

Client: City of Spokane
 Client ID: G.F. Olga Jar #2
 Field ID: #16-18397
 PRL ID: PR164207D

Contact: Jeff Donovan
 Date Extracted: 12/28/2016
 Date Analysed: 2/14/2017
 HRMS File: DF02121726

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.037	0.0008		0.003
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0008	0.0008	UJ	0.003
2,2',3,3',4,5,5',6-HpCB	PCB-172	52663-74-8	0.0236	0.0008		0.003
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0006	0.0006	UJ	0.003
2,2',3,4,4',5,5',6-HpCB	PCB-180	35065-29-3	0.314	0.0007		0.003
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0007	0.0007	UJ	0.003
2,3,3',4,4',5',6-HpCB	PCB-191	74472-50-7	0.0006	0.0006	UJ	0.003
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.137	0.0008		0.003
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0312	0.0006		0.003
2,3,3',4,4',5,5',6-HpCB	PCB-189	39635-31-9	0.0096	0.0005		0.003
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0007	0.0007		0.003
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0006	0.0006		0.003
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0006	0.0006	UJ	0.003
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0006	0.0006	UJ	0.003
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0171	0.0005		0.003
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0009	0.0009	UJ	0.003
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.139	0.0009		0.003
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.079	0.001		0.003
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.0501	0.0009		0.003
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0435	0.0008		0.003
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.131	0.0009		0.003
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0006	0.0006	UJ	0.003
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0295	0.002		0.003
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.002	0.002	UJ	0.003
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.0026	0.0026		0.003
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0282	0.0013		0.003

Homologs	# of Congeners			
Monochlorobiphenyls	3	0.0019	0.0001	J
Dichlorobiphenyls	12	0.112	0.0002	
Trichlorobiphenyls	24	0.652	0.0001	
Tetrachlorobiphenyls	42	2.43	0.0003	
Pentachlorobiphenyls	46	3.35	0.0005	
Hexachlorobiphenyls	42	4.6	0.0006	
Heptachlorobiphenyls	24	1.35	0.0005	
Octachlorobiphenyls	12	0.509	0.0005	
Nonachlorobiphenyls	3	0.119	0.002	
Decachlorobiphenyl	1	0.0282	0.0013	
Total PCB		13.2	0.0001	

DATA REPORT

Client: City of Spokane
Client ID: G.F. Olga Jar #2
Field ID: #16-18397
PRL ID: PR164207D

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/14/2017
HRMS File: DF02121726

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	68	5	145
¹³ C ₁₂ -4-MoCB	3L	73	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	71	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	70	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	72	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	101	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	93	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	91	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	93	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	79	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	123	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	112	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	108	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	107	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	85	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	67	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	65	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	56	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HxCB	157L	56	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	39	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	96	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	106	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	64	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	90	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	106	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	94	10	145
¹³ C ₁₂ -DeCB	209L	88	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	121	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	134	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	78	10	145

DATA REPORT

Client: City of Spokane
Client ID: P. Ost. Colum. Jar #2
Field ID: #16-18398
PRL ID: PR164208

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/14/2017
HRMS File: DF02121727

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0024	0.0001	J	0.0035
3-MoCB	PCB-002	2051-61-8	0.0016	0.0001	J	0.0035
4-MoCB	PCB-003	2051-62-9	0.0038	0.0001		0.0035
2,6-DiCB	PCB-010	33146-45-1	0.0001	0.0001	UJ	0.0035
2,2'-DiCB	PCB-004	13029-08-8	0.0033	0.0002	J	0.0035
2,5-DiCB	PCB-009	34883-39-1	0.001	0.0002	J	0.0035
2,4-DiCB	PCB-007	33284-50-3	0.0032	0.0002	J	0.0035
2,3'-DiCB	PCB-006	25569-80-6	0.0037	0.0002		0.0035
2,3/2,4'-DiCB	PCB-005/008		0.0225	0.0002		0.0035
3,5-DiCB	PCB-014	34883-41-5	0.0002	0.0002	UJ	0.0035
3,3'-DiCB	PCB-011	2050-67-1	0.145	0.0002		0.0035
3,4/3,4'-DiCB	PCB-012/013		0.0002	0.0002	UJ	0.0035
4,4'-DiCB	PCB-015	2050-68-2	0.0439	0.0002		0.0035
2,2',6-TrCB	PCB-019	38444-73-4	0.0027	0.0002	J	0.0035
2,4,6-TrCB	PCB-030	35693-92-6	0.0002	0.0002	UJ	0.0035
2,2',5-TrCB	PCB-018	37680-65-2	0.0392	0.0003		0.0035
2,2',4-TrCB	PCB-017	37680-66-3	0.0238	0.0003		0.0035
2,3,6-TrCB	PCB-024	55702-45-9	0.0023	0.0002	J	0.0035
2,3',6-TrCB	PCB-027	38444-76-7	0.0058	0.0002		0.0035
2,4',6-TrCB	PCB-032	38444-77-8	0.0223	0.0002		0.0035
2,2',3-TrCB	PCB-016	38444-78-9	0.0647	0.0005		0.0035
2,3,5-TrCB	PCB-023	55720-44-0	0.0001	0.0001	UJ	0.0035
2,3',5'-TrCB	PCB-034	37680-68-5	0.0001	0.0001	UJ	0.0035
2,4,5-TrCB	PCB-029	15862-07-4	0.0001	0.0001	UJ	0.0035
2,3',5-TrCB	PCB-026	38444-81-4	0.0233	0.0001		0.0035
2,3',4-TrCB	PCB-025	55712-37-3	0.0139	0.0001		0.0035
2,4',5-TrCB	PCB-031	16606-02-3	0.143	0.0001		0.0035
2,4,4'-TrCB	PCB-028	7012-37-5	0.262	0.0001		0.0035
2,3,4-TrCB	PCB-021	55702-46-0	0.0001	0.0001	UJ	0.0035
	PCB-020/033		0.0552	0.0001		0.0035
2,3,4'-TrCB	PCB-022	38444-85-8	0.0819	0.0001		0.0035
3,3',5-TrCB	PCB-036	38444-87-0	0.0067	0.0001		0.0035
3,4',5-TrCB	PCB-039	38444-88-1	0.0001	0.0001	UJ	0.0035
3,4,5-TrCB	PCB-038	53555-66-1	0.0001	0.0001	UJ	0.0035
3,3',4-TrCB	PCB-035	37680-69-6	0.0058	0.0001		0.0035
3,4,4'-TrCB	PCB-037	38444-90-5	0.146	0.0002		0.0035
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0002	0.0002	UJ	0.0035
2,2',4,6'-TeCB	PCB-050	62796-65-0	0.0005	0.0005	UJ	0.0035
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0448	0.0005		0.0035
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0129	0.0005		0.0035
2,2',3,6'-TeCB	PCB-045	70362-45-7	0.0403	0.0005		0.0035
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0189	0.0006		0.0035
	PCB-052/069		0.331	0.0004		0.0035
2,3',5',6'-TeCB	PCB-073	74338-23-1	0.0006	0.0006	UJ	0.0035
	PCB-043/049		0.265	0.0006		0.0035
	PCB-065/075		0.0004	0.0004	UJ	0.0035
	PCB-047/048		0.114	0.0004		0.0035
2,3,4,6'-TeCB	PCB-062	54230-22-7	0.0006	0.0006	UJ	0.0035
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.258	0.0006		0.0035
2,3,3',6'-TeCB	PCB-059	74472-33-6	0.039	0.0005		0.0035
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.103	0.0006		0.0035
	PCB-064/072		0.228	0.0004		0.0035

DATA REPORT

Client: City of Spokane
Client ID: P. Ost. Colum. Jar #2
Field ID: #16-18398
PRL ID: PR164208

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/14/2017
HRMS File: DF02121727

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.069	0.0004		0.0035
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0515	0.001		0.0035
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0005	0.0005	UJ	0.0035
	PCB-040/057		0.0678	0.0008		0.0035
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0083	0.0004		0.0035
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0259	0.0005		0.0035
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0259	0.0005		0.0035
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0005	0.0005	UJ	0.0035
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.227	0.0006		0.0035
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.425	0.0005		0.0035
	PCB-055/080		0.0006	0.0006	UJ	0.0035
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.353	0.0005		0.0035
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0005	0.0005	UJ	0.0035
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.0868	0.0005		0.0035
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.178	0.0006		0.0035
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0005	0.0005	UJ	0.0035
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0006	0.0006	UJ	0.0035
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.001	0.001	UJ	0.0035
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0549	0.001		0.0035
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0005	0.0005	UJ	0.0035
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.001	0.001	UJ	0.0035
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0014	0.0014	UJ	0.0035
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0016	0.0016	UJ	0.0035
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0018	0.0018	UJ	0.0035
	PCB-093/098/102		0.0018	0.0018	UJ	0.0035
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.509	0.0018		0.0035
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0016	0.0016	UJ	0.0035
	PCB-091/121		0.0964	0.002		0.0035
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.22	0.0019		0.0035
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.22	0.0019	UJ	0.0035
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0023	0.0023	UJ	0.0035
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0021	0.0021	UJ	0.0035
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.501	0.0018		0.0035
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0014	0.0014	UJ	0.0035
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.213	0.0019		0.0035
	PCB-112/119		0.0018	0.0018	UJ	0.0035
	PCB-083/109		0.0011	0.0011	UJ	0.0035
	PCB-086/117		0.0028	0.0028	UJ	0.0035
	PCB-097/116		0.173	0.0017		0.0035
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0017	0.0017	UJ	0.0035
	PCB-087/115		0.241	0.0018		0.0035
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.105	0.0017	UJ	0.0035
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.105	0.0017		0.0035
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0015	0.0015	UJ	0.0035
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.733	0.0016		0.0035
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.0867	0.0025		0.0035
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0408	0.001		0.0035
	PCB-107/108		0.0351	0.0009		0.0035
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0012	0.0012	UJ	0.0035
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0009	0.0009	UJ	0.0035
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.478	0.0012		0.0035
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0227	0.0013		0.0035

DATA REPORT

Client: City of Spokane
Client ID: P. Ost. Colum. Jar #2
Field ID: #16-18398
PRL ID: PR164208

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/14/2017
HRMS File: DF02121727

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0008	0.0008	UJ	0.0035
	PCB-105/127		0.269	0.001		0.0035
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0079	0.0009		0.0035
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.0008	0.0008	UJ	0.0035
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0013	0.0013	UJ	0.0035
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0012	0.0012	UJ	0.0035
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.0014	0.0014	UJ	0.0035
	PCB-136/148		0.139	0.0013		0.0035
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0083	0.0016		0.0035
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.254	0.0019		0.0035
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.146	0.0021		0.0035
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.0733	0.0022		0.0035
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0016	0.0016	UJ	0.0035
	PCB-139/149		1.06	0.0021		0.0035
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0017	0.0017	UJ	0.0035
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.001	0.001	UJ	0.0035
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.0752	0.0013		0.0035
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0011	0.0011	UJ	0.0035
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0012	0.0012	UJ	0.0035
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.001	0.001	UJ	0.0035
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.001	0.001	UJ	0.0035
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.131	0.0008		0.0035
	PCB-132/161		0.44	0.001		0.0035
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	1.23	0.0011		0.0035
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0007	0.0007	UJ	0.0035
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.246	0.001		0.0035
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0537	0.001		0.0035
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0655	0.001		0.0035
	PCB-163/164		0.357	0.0007		0.0035
	PCB-138/160		1.01	0.001		0.0035
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.103	0.0006		0.0035
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.001	0.001	UJ	0.0035
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0007	0.0007	UJ	0.0035
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.149	0.0008	UJ	0.0035
	PCB-128/162		0.0008	0.0006	NJ	0.0035
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0415	0.0006		0.0035
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.0777	0.0006		0.0035
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0149	0.0006		0.0035
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0012	0.0012	UJ	0.0035
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0008	0.0008	UJ	0.0035
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0007	0.0007	UJ	0.0035
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.116	0.0006		0.0035
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0359	0.0006		0.0035
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0007	0.0007	UJ	0.0035
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0554	0.0009		0.0035
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0008	0.0008	UJ	0.0035
	PCB-182/187		0.329	0.0008		0.0035
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.13	0.0008		0.0035
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0294	0.0009		0.0035
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.235	0.0008		0.0035
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0008	0.0008	UJ	0.0035
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.131	0.0008		0.0035

DATA REPORT

Client: City of Spokane
Client ID: P. Ost. Colum. Jar #2
Field ID: #16-18398
PRL ID: PR164208

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/14/2017
HRMS File: DF02121727

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0576	0.0008		0.0035
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0008	0.0008	UJ	0.0035
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0329	0.0008		0.0035
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0006	0.0006	UJ	0.0035
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.391	0.0007		0.0035
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0007	0.0007	UJ	0.0035
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.0091	0.0006		0.0035
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.167	0.0008		0.0035
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0341	0.0006		0.0035
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.0139	0.0005		0.0035
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0007	0.0007		0.0035
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0007	0.0007		0.0035
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0006	0.0006	UJ	0.0035
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0006	0.0006	UJ	0.0035
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0207	0.0006		0.0035
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.001	0.001	UJ	0.0035
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.162	0.001		0.0035
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.0772	0.0011		0.0035
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.0852	0.0009		0.0035
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0505	0.0008		0.0035
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.133	0.001		0.0035
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0007	0.0007	UJ	0.0035
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.037	0.0019		0.0035
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.002	0.002	UJ	0.0035
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.0026	0.0026		0.0035
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0283	0.0018		0.0035

Homologs	# of Congeners		
Monochlorobiphenyls	3	0.0078	0.0001
Dichlorobiphenyls	12	0.223	0.0001
Trichlorobiphenyls	24	0.899	0.0001
Tetrachlorobiphenyls	42	3.03	0.0002
Pentachlorobiphenyls	46	3.73	0.0005
Hexachlorobiphenyls	42	5.68	0.0006
Heptachlorobiphenyls	24	1.77	0.0005
Octachlorobiphenyls	12	0.586	0.0006
Nonachlorobiphenyls	3	0.123	0.0019
Decachlorobiphenyl	1	0.0283	0.0018
Total PCB		16.1	0.0001

DATA REPORT

Client: City of Spokane
Client ID: P. Ost. Colum. Jar #2
Field ID: #16-18398
PRL ID: PR164208

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/14/2017
HRMS File: DF02121727

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	67	5	145
¹³ C ₁₂ -4-MoCB	3L	71	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	69	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	73	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	70	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	109	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	88	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	89	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	91	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	83	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	121	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	117	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	110	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	109	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	87	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	71	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	63	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	57	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HxCB	157L	57	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	37	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	86	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	106	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	62	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	88	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	108	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	96	10	145
¹³ C ₁₂ -DeCB	209L	87	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	119	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	138	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	79	10	145

DATA REPORT

Client: City of Spokane
Client ID: P. Ost. Brat Jar #2
Field ID: #16-18399
PRL ID: PR164209

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/14/2017
HRMS File: DF02121728

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0023	0.0001	J	0.0031
3-MoCB	PCB-002	2051-61-8	0.0018	0.0001	J	0.0031
4-MoCB	PCB-003	2051-62-9	0.004	0.0001		0.0031
2,6-DiCB	PCB-010	33146-45-1	0.0001	0.0001	UJ	0.0031
2,2'-DiCB	PCB-004	13029-08-8	0.0049	0.0002		0.0031
2,5-DiCB	PCB-009	34883-39-1	0.0016	0.0002	J	0.0031
2,4-DiCB	PCB-007	33284-50-3	0.0031	0.0002		0.0031
2,3'-DiCB	PCB-006	25569-80-6	0.005	0.0001		0.0031
2,3/2,4'-DiCB	PCB-005/008		0.0284	0.0001		0.0031
3,5-DiCB	PCB-014	34883-41-5	0.0001	0.0001	UJ	0.0031
3,3'-DiCB	PCB-011	2050-67-1	0.151	0.0001		0.0031
3,4/3,4'-DiCB	PCB-012/013		0.0002	0.0002	UJ	0.0031
4,4'-DiCB	PCB-015	2050-68-2	0.0474	0.0001		0.0031
2,2',6-TrCB	PCB-019	38444-73-4	0.0029	0.0002	J	0.0031
2,4,6-TrCB	PCB-030	35693-92-6	0.0002	0.0002	UJ	0.0031
2,2',5-TrCB	PCB-018	37680-65-2	0.0452	0.0002		0.0031
2,2',4-TrCB	PCB-017	37680-66-3	0.0267	0.0003		0.0031
2,3,6-TrCB	PCB-024	55702-45-9	0.0019	0.0002	J	0.0031
2,3',6-TrCB	PCB-027	38444-76-7	0.0041	0.0002		0.0031
2,4',6-TrCB	PCB-032	38444-77-8	0.0201	0.0002		0.0031
2,2',3-TrCB	PCB-016	38444-78-9	0.0652	0.0005		0.0031
2,3,5-TrCB	PCB-023	55720-44-0	0.0001	0.0001	UJ	0.0031
2,3',5'-TrCB	PCB-034	37680-68-5	0.0001	0.0001	UJ	0.0031
2,4,5-TrCB	PCB-029	15862-07-4	0.0001	0.0001	UJ	0.0031
2,3',5-TrCB	PCB-026	38444-81-4	0.0216	0.0001		0.0031
2,3',4-TrCB	PCB-025	55712-37-3	0.0141	0.0001		0.0031
2,4',5-TrCB	PCB-031	16606-02-3	0.149	0.0001		0.0031
2,4,4'-TrCB	PCB-028	7012-37-5	0.246	0.0001		0.0031
2,3,4-TrCB	PCB-021	55702-46-0	0.0001	0.0001	UJ	0.0031
	PCB-020/033		0.0557	0.0001		0.0031
2,3,4'-TrCB	PCB-022	38444-85-8	0.0857	0.0001		0.0031
3,3',5-TrCB	PCB-036	38444-87-0	0.008	0.0001		0.0031
3,4',5-TrCB	PCB-039	38444-88-1	0.0001	0.0001	UJ	0.0031
3,4,5-TrCB	PCB-038	53555-66-1	0.0001	0.0001	UJ	0.0031
3,3',4-TrCB	PCB-035	37680-69-6	0.0001	0.0001	UJ	0.0031
3,4,4'-TrCB	PCB-037	38444-90-5	0.132	0.0002		0.0031
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0002	0.0002	UJ	0.0031
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0004	0.0004	UJ	0.0031
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0331	0.0005		0.0031
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0111	0.0004		0.0031
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0228	0.0005		0.0031
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0157	0.0005		0.0031
	PCB-052/069		0.336	0.0003		0.0031
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0006	0.0006	UJ	0.0031
	PCB-043/049		0.268	0.0005		0.0031
	PCB-065/075		0.0004	0.0004	UJ	0.0031
	PCB-047/048		0.115	0.0004		0.0031
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0005	0.0005	UJ	0.0031
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.241	0.0005		0.0031
2,3,3',6-TeCB	PCB-059	74472-33-6	0.027	0.0004		0.0031
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.103	0.0006		0.0031
	PCB-064/072		0.198	0.0004		0.0031

DATA REPORT

Client: City of Spokane
Client ID: P. Ost. Brat Jar #2
Field ID: #16-18399
PRL ID: PR164209

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/14/2017
HRMS File: DF02121728

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.0601	0.0003		0.0031
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.055	0.0009		0.0031
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0004	0.0004	UJ	0.0031
	PCB-040/057		0.0616	0.0007		0.0031
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0095	0.0004		0.0031
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.028	0.0004		0.0031
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.028	0.0004		0.0031
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0005	0.0005	UJ	0.0031
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.231	0.0006		0.0031
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.453	0.0005		0.0031
	PCB-055/080		0.0005	0.0005	UJ	0.0031
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.328	0.0004		0.0031
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0005	0.0005	UJ	0.0031
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.0991	0.0005		0.0031
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.174	0.0005		0.0031
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0005	0.0005	UJ	0.0031
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0005	0.0005	UJ	0.0031
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0008	0.0008	UJ	0.0031
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0503	0.0008		0.0031
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0005	0.0005	UJ	0.0031
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0009	0.0009	UJ	0.0031
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0012	0.0012	UJ	0.0031
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0014	0.0014	UJ	0.0031
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0016	0.0016	UJ	0.0031
	PCB-093/098/102		0.0016	0.0016	UJ	0.0031
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.524	0.0015		0.0031
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0014	0.0014	UJ	0.0031
	PCB-091/121		0.102	0.0017		0.0031
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.25	0.0016		0.0031
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.25	0.0016	UJ	0.0031
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.002	0.002	UJ	0.0031
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0019	0.0019	UJ	0.0031
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.614	0.0016		0.0031
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0012	0.0012	UJ	0.0031
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.258	0.0016		0.0031
	PCB-112/119		0.0015	0.0015	UJ	0.0031
	PCB-083/109		0.001	0.001		0.0031
	PCB-086/117		0.0025	0.0025	UJ	0.0031
	PCB-097/116		0.191	0.0015		0.0031
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0015	0.0015	UJ	0.0031
	PCB-087/115		0.28	0.0015		0.0031
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.111	0.0015	UJ	0.0031
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.111	0.0015		0.0031
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0013	0.0013	UJ	0.0031
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.779	0.0014		0.0031
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.0849	0.0022		0.0031
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0398	0.0008		0.0031
	PCB-107/108		0.0353	0.0008		0.0031
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.001	0.001	UJ	0.0031
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0008	0.0008	UJ	0.0031
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.547	0.0011		0.0031
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0236	0.0011		0.0031

DATA REPORT

Client: City of Spokane
Client ID: P. Ost. Brat Jar #2
Field ID: #16-18399
PRL ID: PR164209

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/14/2017
HRMS File: DF02121728

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0073	0.0007		0.0031
	PCB-105/127		0.289	0.0009		0.0031
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0069	0.0007		0.0031
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.0007	0.0007	UJ	0.0031
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0011	0.0011	UJ	0.0031
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.001	0.001	UJ	0.0031
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.0012	0.0012	UJ	0.0031
	PCB-136/148		0.131	0.0011		0.0031
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0013	0.0013	UJ	0.0031
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.242	0.0016		0.0031
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.136	0.0017		0.0031
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.089	0.0018		0.0031
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0013	0.0013	UJ	0.0031
	PCB-139/149		0.985	0.0017		0.0031
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0014	0.0014	UJ	0.0031
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0008	0.0008	UJ	0.0031
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.0648	0.001		0.0031
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0009	0.0009	UJ	0.0031
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0173	0.001		0.0031
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0008	0.0008	UJ	0.0031
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0008	0.0008	UJ	0.0031
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.116	0.0007		0.0031
	PCB-132/161		0.405	0.0008		0.0031
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	1.14	0.0009		0.0031
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0005	0.0005	UJ	0.0031
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.232	0.0008		0.0031
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0556	0.0008		0.0031
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0645	0.0008		0.0031
	PCB-163/164		0.294	0.0006		0.0031
	PCB-138/160		0.9	0.0008		0.0031
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.0962	0.0005		0.0031
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.0521	0.0008		0.0031
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0006	0.0006	UJ	0.0031
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.149	0.0006	UJ	0.0031
	PCB-128/162		0.0005	0.0005		0.0031
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0324	0.0005		0.0031
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.0885	0.0005		0.0031
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0206	0.0005		0.0031
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0009	0.0009	UJ	0.0031
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0007	0.0007	UJ	0.0031
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0006	0.0006	UJ	0.0031
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.0991	0.0005		0.0031
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0283	0.0006		0.0031
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0006	0.0006	UJ	0.0031
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.045	0.0007		0.0031
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0007	0.0007	UJ	0.0031
	PCB-182/187		0.271	0.0007		0.0031
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.112	0.0006		0.0031
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0258	0.0007	NJ	0.0031
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.197	0.0007		0.0031
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0007	0.0007	UJ	0.0031
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.104	0.0007		0.0031

DATA REPORT

Client: City of Spokane
 Client ID: P. Ost. Brat Jar #2
 Field ID: #16-18399
 PRL ID: PR164209

Contact: Jeff Donovan
 Date Extracted: 12/28/2016
 Date Analysed: 2/14/2017
 HRMS File: DF02121728

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0464	0.0007		0.0031
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0029	0.0007	NJ	0.0031
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0281	0.0007		0.0031
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0005	0.0005	UJ	0.0031
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.347	0.0006		0.0031
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0006	0.0006	UJ	0.0031
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.0067	0.0005		0.0031
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.158	0.0007		0.0031
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.032	0.0005		0.0031
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.0111	0.0004		0.0031
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0006	0.0006		0.0031
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0005	0.0005		0.0031
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0005	0.0005	UJ	0.0031
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0058	0.0005	NJ	0.0031
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0155	0.0005		0.0031
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0008	0.0008	UJ	0.0031
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.136	0.0008		0.0031
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.0634	0.0008		0.0031
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.0529	0.0007		0.0031
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.044	0.0006		0.0031
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.111	0.0008		0.0031
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0005	0.0005	UJ	0.0031
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0243	0.0014		0.0031
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0015	0.0015		0.0031
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.0022	0.0022		0.0031
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0308	0.0016		0.0031

Homologs	# of Congeners		
Monochlorobiphenyls	3	0.0081	0.0001
Dichlorobiphenyls	12	0.241	0.0001
Trichlorobiphenyls	24	0.878	0.0001
Tetrachlorobiphenyls	42	2.95	0.0002
Pentachlorobiphenyls	46	4.18	0.0005
Hexachlorobiphenyls	42	5.31	0.0005
Heptachlorobiphenyls	24	1.49	0.0004
Octachlorobiphenyls	12	0.471	0.0005
Nonachlorobiphenyls	3	0.113	0.0014
Decachlorobiphenyl	1	0.0308	0.0016
Total PCB		15.7	0.0001

DATA REPORT

Client: City of Spokane
Client ID: P. Ost. Brat Jar #2
Field ID: #16-18399
PRL ID: PR164209

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/14/2017
HRMS File: DF02121728

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	61	5	145
¹³ C ₁₂ -4-MoCB	3L	67	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	66	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	69	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	67	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	108	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	82	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	101	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	95	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	78	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	121	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	111	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	116	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	109	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	89	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	68	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	70	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	58	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HxCB	157L	56	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	44	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	89	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	106	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	65	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	91	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	113	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	94	10	145
¹³ C ₁₂ -DeCB	209L	92	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	121	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	137	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	82	10	145

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste Control
Field ID: #16-18400
PRL ID: PR164210

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/17/2017
HRMS File: DF02151715

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.002	0.0001		0.0019
3-MoCB	PCB-002	2051-61-8	0.001	0.0001	J	0.0019
4-MoCB	PCB-003	2051-62-9	0.0035	0.0001		0.0019
2,6-DiCB	PCB-010	33146-45-1	0.0001	0.0001	UJ	0.0019
2,2'-DiCB	PCB-004	13029-08-8	0.005	0.0002		0.0019
2,5-DiCB	PCB-009	34883-39-1	0.0001	0.0001	UJ	0.0019
2,4-DiCB	PCB-007	33284-50-3	0.0038	0.0001		0.0019
2,3'-DiCB	PCB-006	25569-80-6	0.0043	0.0001		0.0019
2,3/2,4'-DiCB	PCB-005/008		0.0192	0.0001		0.0019
3,5-DiCB	PCB-014	34883-41-5	0.0001	0.0001	UJ	0.0019
3,3'-DiCB	PCB-011	2050-67-1	0.0497	0.0001		0.0019
3,4/3,4'-DiCB	PCB-012/013		0.004	0.0001		0.0019
4,4'-DiCB	PCB-015	2050-68-2	0.0367	0.0001		0.0019
2,2',6-TrCB	PCB-019	38444-73-4	0.0115	0.0002		0.0019
2,4,6-TrCB	PCB-030	35693-92-6	0.0001	0.0001	UJ	0.0019
2,2',5-TrCB	PCB-018	37680-65-2	0.0248	0.0002		0.0019
2,2',4-TrCB	PCB-017	37680-66-3	0.0099	0.0002		0.0019
2,3,6-TrCB	PCB-024	55702-45-9	0.0011	0.0002	J	0.0019
2,3',6-TrCB	PCB-027	38444-76-7	0.0041	0.0001		0.0019
2,4',6-TrCB	PCB-032	38444-77-8	0.0126	0.0001		0.0019
2,2',3-TrCB	PCB-016	38444-78-9	0.0248	0.0002		0.0019
2,3,5-TrCB	PCB-023	55720-44-0	0.0001	0.0001	UJ	0.0019
2,3',5'-TrCB	PCB-034	37680-68-5	0.0001	0.0001	UJ	0.0019
2,4,5-TrCB	PCB-029	15862-07-4	0.0001	0.0001	UJ	0.0019
2,3',5-TrCB	PCB-026	38444-81-4	0.01	0.0001		0.0019
2,3',4-TrCB	PCB-025	55712-37-3	0.0076	0.0001		0.0019
2,4',5-TrCB	PCB-031	16606-02-3	0.0572	0.0001		0.0019
2,4,4'-TrCB	PCB-028	7012-37-5	0.0886	0.0001		0.0019
2,3,4-TrCB	PCB-021	55702-46-0	0.0001	0.0001	UJ	0.0019
	PCB-020/033		0.0292	0.0001		0.0019
2,3,4'-TrCB	PCB-022	38444-85-8	0.0304	0.0001		0.0019
3,3',5-TrCB	PCB-036	38444-87-0	0.0039	0.0001		0.0019
3,4',5-TrCB	PCB-039	38444-88-1	0.0001	0.0001	UJ	0.0019
3,4,5-TrCB	PCB-038	53555-66-1	0.0001	0.0001	UJ	0.0019
3,3',4-TrCB	PCB-035	37680-69-6	0.0001	0.0001	UJ	0.0019
3,4,4'-TrCB	PCB-037	38444-90-5	0.0638	0.0002		0.0019
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0009	0.0002	J	0.0019
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0003	0.0003	UJ	0.0019
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0859	0.0004		0.0019
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0312	0.0004		0.0019
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0824	0.0004		0.0019
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0511	0.0005		0.0019
	PCB-052/069		0.377	0.0004		0.0019
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0004	0.0004	UJ	0.0019
	PCB-043/049		0.129	0.0005		0.0019
	PCB-065/075		0.0004	0.0004	UJ	0.0019
	PCB-047/048		0.0497	0.0004		0.0019
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0004	0.0004	UJ	0.0019
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.226	0.0005		0.0019
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0424	0.0004		0.0019
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.0575	0.0005		0.0019
	PCB-064/072		0.244	0.0004		0.0019

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste Control
Field ID: #16-18400
PRL ID: PR164210

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/17/2017
HRMS File: DF02151715

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.0672	0.0004		0.0019
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0006	0.0006	UJ	0.0019
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0004	0.0004	UJ	0.0019
	PCB-040/057		0.0388	0.0007		0.0019
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0005	0.0005	UJ	0.0019
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0277	0.0005		0.0019
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0277	0.0005		0.0019
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0006	0.0006	UJ	0.0019
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.0916	0.0005		0.0019
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.262	0.0005		0.0019
	PCB-055/080		0.0005	0.0005	UJ	0.0019
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.144	0.0005		0.0019
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0162	0.0005		0.0019
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.0582	0.0005		0.0019
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.0979	0.0006		0.0019
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0005	0.0005	UJ	0.0019
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0006	0.0006	UJ	0.0019
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0009	0.0009	UJ	0.0019
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0363	0.0009		0.0019
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0005	0.0005	UJ	0.0019
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0009	0.0009		0.0019
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0044	0.0014	UJ	0.0019
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0017	0.0017	UJ	0.0019
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0018	0.0018	UJ	0.0019
	PCB-093/098/102		0.0019	0.0019	U	0.0019
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	1.1	0.0017		0.0019
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0021	0.0021	U	0.0019
	PCB-091/121		0.17	0.0017		0.0019
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.52	0.0019		0.0019
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.52	0.0019	U	0.0019
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.002	0.002	U	0.0019
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.002	0.002	U	0.0019
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.595	0.0017		0.0019
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0014	0.0014	UJ	0.0019
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.198	0.0017		0.0019
	PCB-112/119		0.0016	0.0016	UJ	0.0019
	PCB-083/109		0.0011	0.0011		0.0019
	PCB-086/117		0.0026	0.0026	U	0.0019
	PCB-097/116		0.265	0.002		0.0019
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0014	0.0014	UJ	0.0019
	PCB-087/115		0.276	0.0017		0.0019
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0906	0.0016	UJ	0.0019
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.0906	0.0016		0.0019
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0014	0.0014	UJ	0.0019
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	1.28	0.0016		0.0019
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.102	0.0021		0.0019
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0264	0.0006		0.0019
	PCB-107/108		0.0357	0.0008		0.0019
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.001	0.001	UJ	0.0019
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0008	0.0008	UJ	0.0019
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.409	0.0011		0.0019
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.024	0.0012		0.0019

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste Control
Field ID: #16-18400
PRL ID: PR164210

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/17/2017
HRMS File: DF02151715

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0007	0.0007	UJ	0.0019
	PCB-105/127		0.241	0.0009		0.0019
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0085	0.0007		0.0019
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.0009	0.0009	UJ	0.0019
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.001	0.001	UJ	0.0019
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0009	0.0009	UJ	0.0019
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.001	0.001	UJ	0.0019
	PCB-136/148		0.176	0.0009		0.0019
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0011	0.0011	UJ	0.0019
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.274	0.0013		0.0019
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.158	0.0014		0.0019
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.0833	0.0013		0.0019
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0011	0.0011	UJ	0.0019
	PCB-139/149		1.37	0.0017		0.0019
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0006	0.0006	UJ	0.0019
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0006	0.0006	UJ	0.0019
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.0918	0.0008		0.0019
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0007	0.0007	UJ	0.0019
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0199	0.0007		0.0019
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0006	0.0006	UJ	0.0019
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0006	0.0006	UJ	0.0019
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.145	0.0005		0.0019
	PCB-132/161		0.44	0.0005		0.0019
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	1.09	0.0007		0.0019
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0004	0.0004	UJ	0.0019
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.241	0.0006		0.0019
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0666	0.0007		0.0019
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0791	0.0007		0.0019
	PCB-163/164		0.419	0.0005		0.0019
	PCB-138/160		1.09	0.0007		0.0019
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.13	0.0004		0.0019
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.0635	0.0006		0.0019
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0005	0.0005	UJ	0.0019
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.208	0.0005	UJ	0.0019
	PCB-128/162		0.0005	0.0005		0.0019
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0485	0.0006		0.0019
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.105	0.0006		0.0019
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0314	0.0005		0.0019
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0006	0.0006	UJ	0.0019
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0009	0.0009	UJ	0.0019
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0005	0.0005	UJ	0.0019
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.125	0.0005		0.0019
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0376	0.0005		0.0019
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0005	0.0005	UJ	0.0019
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0691	0.0007		0.0019
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0171	0.0007		0.0019
	PCB-182/187		0.373	0.0007		0.0019
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.166	0.0007		0.0019
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.042	0.0008		0.0019
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.297	0.0007		0.0019
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0008	0.0008	UJ	0.0019
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.166	0.0008		0.0019

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste Control
Field ID: #16-18400
PRL ID: PR164210

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/17/2017
HRMS File: DF02151715

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0753	0.0008		0.0019
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0053	0.0008		0.0019
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0538	0.0009		0.0019
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0007	0.0007	UJ	0.0019
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.671	0.0008		0.0019
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0008	0.0008	UJ	0.0019
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.014	0.0007		0.0019
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.296	0.001		0.0019
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0716	0.0007		0.0019
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.0182	0.0005		0.0019
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0004	0.0004		0.0019
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0003	0.0003		0.0019
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0003	0.0003	UJ	0.0019
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0058	0.0003		0.0019
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0232	0.0003		0.0019
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0005	0.0005	UJ	0.0019
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.255	0.0005		0.0019
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.0928	0.0005		0.0019
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.139	0.0004		0.0019
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0901	0.0004		0.0019
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.291	0.0006		0.0019
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0121	0.0003		0.0019
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0478	0.0014		0.0019
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0012	0.0012		0.0019
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.0018	0.0018		0.0019
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0323	0.0003		0.0019

Homologs	# of Congeners		
Monochlorobiphenyls	3	0.0065	0.0001
Dichlorobiphenyls	12	0.123	0.0001
Trichlorobiphenyls	24	0.38	0.0001
Tetrachlorobiphenyls	42	2.24	0.0002
Pentachlorobiphenyls	46	5.42	0.0005
Hexachlorobiphenyls	42	6.33	0.0004
Heptachlorobiphenyls	24	2.5	0.0005
Octachlorobiphenyls	12	0.99	0.0003
Nonachlorobiphenyls	3	0.2	0.0012
Decachlorobiphenyl	1	0.0323	0.0003
Total PCB		18.2	0.0001

DATA REPORT

Client: City of Spokane
Client ID: Vactor Waste Control
Field ID: #16-18400
PRL ID: PR164210

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/17/2017
HRMS File: DF02151715

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	73	5	145
¹³ C ₁₂ -4-MoCB	3L	73	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	68	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	68	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	61	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	102	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	95	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	85	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	82	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	84	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	125	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	123	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	117	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	109	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	101	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	69	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	68	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	62	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	157L	61	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	48	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	77	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	114	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	48	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	88	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	91	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	82	10	145
¹³ C ₁₂ -DeCB	209L	71	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	125	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	142	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	68	10	145

DATA REPORT

Client: City of Spokane
Client ID: G.F. Olga Jar #1
Field ID: #16-18401
PRL ID: PR164211

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/16/2017
HRMS File: DF02151715

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0023	0.0001	J	0.0032
3-MoCB	PCB-002	2051-61-8	0.002	0.0001	J	0.0032
4-MoCB	PCB-003	2051-62-9	0.0031	0.0001	J	0.0032
2,6-DiCB	PCB-010	33146-45-1	0.0001	0.0001	UJ	0.0032
2,2'-DiCB	PCB-004	13029-08-8	0.0033	0.0002		0.0032
2,5-DiCB	PCB-009	34883-39-1	0.0001	0.0001	UJ	0.0032
2,4-DiCB	PCB-007	33284-50-3	0.0057	0.0001		0.0032
2,3'-DiCB	PCB-006	25569-80-6	0.003	0.0001	J	0.0032
2,3/2,4'-DiCB	PCB-005/008		0.0156	0.0001		0.0032
3,5-DiCB	PCB-014	34883-41-5	0.0001	0.0001	UJ	0.0032
3,3'-DiCB	PCB-011	2050-67-1	0.0585	0.0001		0.0032
3,4/3,4'-DiCB	PCB-012/013		0.0001	0.0001	UJ	0.0032
4,4'-DiCB	PCB-015	2050-68-2	0.045	0.0001		0.0032
2,2',6-TrCB	PCB-019	38444-73-4	0.0082	0.0002		0.0032
2,4,6-TrCB	PCB-030	35693-92-6	0.0002	0.0002	UJ	0.0032
2,2',5-TrCB	PCB-018	37680-65-2	0.0417	0.0003		0.0032
2,2',4-TrCB	PCB-017	37680-66-3	0.0188	0.0003		0.0032
2,3,6-TrCB	PCB-024	55702-45-9	0.0002	0.0002	UJ	0.0032
2,3',6-TrCB	PCB-027	38444-76-7	0.007	0.0002		0.0032
2,4',6-TrCB	PCB-032	38444-77-8	0.116	0.0003		0.0032
2,2',3-TrCB	PCB-016	38444-78-9	0.0119	0.0002		0.0032
2,3,5-TrCB	PCB-023	55720-44-0	0.0001	0.0001	NJ	0.0032
2,3',5'-TrCB	PCB-034	37680-68-5	0.0001	0.0001	UJ	0.0032
2,4,5-TrCB	PCB-029	15862-07-4	0.0002	0.0001	NJ	0.0032
2,3',5-TrCB	PCB-026	38444-81-4	0.0208	0.0001		0.0032
2,3',4-TrCB	PCB-025	55712-37-3	0.0001	0.0001	UJ	0.0032
2,4',5-TrCB	PCB-031	16606-02-3	0.109	0.0001		0.0032
2,4,4'-TrCB	PCB-028	7012-37-5	0.193	0.0001		0.0032
2,3,4-TrCB	PCB-021	55702-46-0	0.0001	0.0001	UJ	0.0032
	PCB-020/033		0.0413	0.0001		0.0032
2,3,4'-TrCB	PCB-022	38444-85-8	0.0617	0.0001		0.0032
3,3',5-TrCB	PCB-036	38444-87-0	0.0061	0.0001		0.0032
3,4',5-TrCB	PCB-039	38444-88-1	0.0001	0.0001	UJ	0.0032
3,4,5-TrCB	PCB-038	53555-66-1	0.0001	0.0001	UJ	0.0032
3,3',4-TrCB	PCB-035	37680-69-6	0.0059	0.0001		0.0032
3,4,4'-TrCB	PCB-037	38444-90-5	0.128	0.0002		0.0032
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0003	0.0003	UJ	0.0032
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0005	0.0005	UJ	0.0032
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0633	0.0005		0.0032
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.019	0.0005		0.0032
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0553	0.0006		0.0032
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0319	0.0006		0.0032
	PCB-052/069		0.366	0.0005		0.0032
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0005	0.0005	UJ	0.0032
	PCB-043/049		0.208	0.0006		0.0032
	PCB-065/075		0.0005	0.0005	UJ	0.0032
	PCB-047/048		0.109	0.0005		0.0032
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0005	0.0005	UJ	0.0032
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.3	0.0007		0.0032
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0408	0.0005		0.0032
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.0865	0.0007		0.0032
	PCB-064/072		0.241	0.0005		0.0032

DATA REPORT

Client: City of Spokane
Client ID: G.F. Olga Jar #1
Field ID: #16-18401
PRL ID: PR164211

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/16/2017
HRMS File: DF02151715

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.106	0.0004		0.0032
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0009	0.0009	UJ	0.0032
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0005	0.0005	UJ	0.0032
	PCB-040/057		0.062	0.0009		0.0032
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0006	0.0006	UJ	0.0032
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0005	0.0005	UJ	0.0032
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0005	0.0005	UJ	0.0032
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0006	0.0006	UJ	0.0032
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.162	0.0006		0.0032
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.372	0.0006		0.0032
	PCB-055/080		0.0006	0.0006	UJ	0.0032
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.326	0.0006		0.0032
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0006	0.0006	UJ	0.0032
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.0951	0.0006		0.0032
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.169	0.0006		0.0032
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0006	0.0006	UJ	0.0032
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0007	0.0007	UJ	0.0032
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0012	0.0012	UJ	0.0032
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0652	0.0015		0.0032
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0007	0.0007	UJ	0.0032
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0011	0.0011		0.0032
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0016	0.0016	UJ	0.0032
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0018	0.0018	UJ	0.0032
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.002	0.002	UJ	0.0032
	PCB-093/098/102		0.002	0.002	UJ	0.0032
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.541	0.002		0.0032
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0019	0.0019	UJ	0.0032
	PCB-091/121		0.0964	0.002		0.0032
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.279	0.0021		0.0032
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.279	0.0021	UJ	0.0032
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0022	0.0022	UJ	0.0032
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0026	0.0026	UJ	0.0032
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.444	0.0018		0.0032
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0017	0.0017	UJ	0.0032
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.234	0.0021		0.0032
	PCB-112/119		0.002	0.002	UJ	0.0032
	PCB-083/109		0.0014	0.0014	UJ	0.0032
	PCB-086/117		0.0031	0.0031	UJ	0.0032
	PCB-097/116		0.206	0.0021		0.0032
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0017	0.0017	UJ	0.0032
	PCB-087/115		0.241	0.002		0.0032
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.125	0.0021	UJ	0.0032
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.125	0.0021		0.0032
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0018	0.0018	UJ	0.0032
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.919	0.002		0.0032
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.099	0.0028		0.0032
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0198	0.0006		0.0032
	PCB-107/108		0.0329	0.0012		0.0032
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0015	0.0015	UJ	0.0032
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0012	0.0012	UJ	0.0032
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.477	0.0015		0.0032
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0192	0.0015		0.0032

DATA REPORT

Client: City of Spokane
Client ID: G.F. Olga Jar #1
Field ID: #16-18401
PRL ID: PR164211

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/16/2017
HRMS File: DF02151715

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0012	0.0012	UJ	0.0032
	PCB-105/127		0.254	0.0012		0.0032
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0011	0.0011	UJ	0.0032
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.001	0.001	UJ	0.0032
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0007	0.0007	UJ	0.0032
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0006	0.0006	UJ	0.0032
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.0008	0.0008	UJ	0.0032
	PCB-136/148		0.0844	0.0007		0.0032
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0009	0.0009	UJ	0.0032
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.154	0.001		0.0032
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.0836	0.0011		0.0032
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.0498	0.0012		0.0032
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0008	0.0008	UJ	0.0032
	PCB-139/149		0.609	0.0011		0.0032
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0004	0.0004	UJ	0.0032
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0004	0.0004	UJ	0.0032
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.0341	0.0006		0.0032
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0006	0.0006	UJ	0.0032
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0005	0.0005	UJ	0.0032
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0005	0.0005	UJ	0.0032
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0005	0.0005	UJ	0.0032
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.062	0.0005		0.0032
	PCB-132/161		0.216	0.0005		0.0032
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	0.684	0.0006		0.0032
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0004	0.0004	UJ	0.0032
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.137	0.0005		0.0032
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0308	0.0006		0.0032
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0339	0.0006		0.0032
	PCB-163/164		0.254	0.0004		0.0032
	PCB-138/160		0.636	0.0007		0.0032
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.071	0.0004		0.0032
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.0006	0.0006	UJ	0.0032
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0005	0.0005	UJ	0.0032
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.13	0.0006	UJ	0.0032
	PCB-128/162		0.0006	0.0006		0.0032
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0349	0.0006		0.0032
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.073	0.0007		0.0032
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0097	0.0007	NJ	0.0032
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.001	0.001	UJ	0.0032
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.001	0.001	UJ	0.0032
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0005	0.0005	UJ	0.0032
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.0798	0.0004		0.0032
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0211	0.0005		0.0032
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0005	0.0005	UJ	0.0032
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0445	0.0008		0.0032
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0008	0.0008	UJ	0.0032
	PCB-182/187		0.281	0.0007		0.0032
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.119	0.0008		0.0032
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0327	0.0009		0.0032
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.229	0.0008		0.0032
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.001	0.001	UJ	0.0032
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.129	0.0009		0.0032

DATA REPORT

Client: City of Spokane
Client ID: G.F. Olga Jar #1
Field ID: #16-18401
PRL ID: PR164211

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/16/2017
HRMS File: DF02151715

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0599	0.0009		0.0032
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0011	0.0011	UJ	0.0032
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0499	0.0014		0.0032
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0012	0.0012	UJ	0.0032
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.645	0.0012		0.0032
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0012	0.0012	UJ	0.0032
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.001	0.001	UJ	0.0032
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.3	0.0017		0.0032
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0668	0.0013		0.0032
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.0162	0.0006		0.0032
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0004	0.0004		0.0032
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0002	0.0002		0.0032
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0002	0.0002	UJ	0.0032
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0002	0.0002	UJ	0.0032
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0172	0.0002		0.0032
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0005	0.0005	UJ	0.0032
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.204	0.0005		0.0032
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.0943	0.0006		0.0032
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.112	0.0005		0.0032
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0785	0.0005		0.0032
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.276	0.0008		0.0032
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0109	0.0003		0.0032
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0337	0.0017		0.0032
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0014	0.0014	UJ	0.0032
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.0033	0.0033		0.0032
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0296	0.0002		0.0032

Homologs	# of Congeners		
Monochlorobiphenyls	3	0.0074	0.0001
Dichlorobiphenyls	12	0.131	0.0001
Trichlorobiphenyls	24	0.769	0.0001
Tetrachlorobiphenyls	42	2.88	0.0003
Pentachlorobiphenyls	46	3.99	0.0006
Hexachlorobiphenyls	42	3.38	0.0004
Heptachlorobiphenyls	24	2.07	0.0004
Octachlorobiphenyls	12	0.853	0.0002
Nonachlorobiphenyls	3	0.18	0.0014
Decachlorobiphenyl	1	0.0296	0.0002
Total PCB		14.3	0.0001

DATA REPORT

Client: City of Spokane
Client ID: G.F. Olga Jar #1
Field ID: #16-18401
PRL ID: PR164211

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/16/2017
HRMS File: DF02151715

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	60	5	145
¹³ C ₁₂ -4-MoCB	3L	61	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	73	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	83	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	86	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	91	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	81	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	92	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	88	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	87	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	93	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	88	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	89	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	88	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	106	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	88	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	111	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	109	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	157L	108	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	141	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	90	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	68	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	101	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	94	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	51	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	101	10	145
¹³ C ₁₂ -DeCB	209L	144	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	98	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	137	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	89	10	145

DATA REPORT

Client: City of Spokane
Client ID: SRA Jar #1
Field ID: #16-18402
PRL ID: PR164212

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/18/2017
HRMS File: DF02171707

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0023	0.0001	J	0.0026
3-MoCB	PCB-002	2051-61-8	0.0017	0.0001	J	0.0026
4-MoCB	PCB-003	2051-62-9	0.003	0.0001		0.0026
2,6-DiCB	PCB-010	33146-45-1	0.0001	0.0001	UJ	0.0026
2,2'-DiCB	PCB-004	13029-08-8	0.0051	0.0002		0.0026
2,5-DiCB	PCB-009	34883-39-1	0.0001	0.0001	UJ	0.0026
2,4-DiCB	PCB-007	33284-50-3	0.0032	0.0001		0.0026
2,3'-DiCB	PCB-006	25569-80-6	0.0043	0.0001		0.0026
2,3/2,4'-DiCB	PCB-005/008		0.0165	0.0001		0.0026
3,5-DiCB	PCB-014	34883-41-5	0.0001	0.0001	UJ	0.0026
3,3'-DiCB	PCB-011	2050-67-1	0.0487	0.0001		0.0026
3,4/3,4'-DiCB	PCB-012/013		0.0001	0.0001	UJ	0.0026
4,4'-DiCB	PCB-015	2050-68-2	0.0425	0.0001		0.0026
2,2',6-TrCB	PCB-019	38444-73-4	0.0082	0.0002		0.0026
2,4,6-TrCB	PCB-030	35693-92-6	0.0002	0.0002	UJ	0.0026
2,2',5-TrCB	PCB-018	37680-65-2	0.0291	0.0002		0.0026
2,2',4-TrCB	PCB-017	37680-66-3	0.0129	0.0003		0.0026
2,3,6-TrCB	PCB-024	55702-45-9	0.0005	0.0002	NJ	0.0026
2,3',6-TrCB	PCB-027	38444-76-7	0.0056	0.0002		0.0026
2,4',6-TrCB	PCB-032	38444-77-8	0.0498	0.0002		0.0026
2,2',3-TrCB	PCB-016	38444-78-9	0.0132	0.0001		0.0026
2,3,5-TrCB	PCB-023	55720-44-0	0.0001	0.0001	UJ	0.0026
2,3',5'-TrCB	PCB-034	37680-68-5	0.0002	0.0001	NJ	0.0026
2,4,5-TrCB	PCB-029	15862-07-4	0.0001	0.0001	UJ	0.0026
2,3',5-TrCB	PCB-026	38444-81-4	0.0141	0.0001		0.0026
2,3',4-TrCB	PCB-025	55712-37-3	0.0084	0.0001		0.0026
2,4',5-TrCB	PCB-031	16606-02-3	0.0695	0.0001		0.0026
2,4,4'-TrCB	PCB-028	7012-37-5	0.134	0.0001		0.0026
2,3,4-TrCB	PCB-021	55702-46-0	0.0001	0.0001	UJ	0.0026
	PCB-020/033		0.0295	0.0001		0.0026
2,3,4'-TrCB	PCB-022	38444-85-8	0.0342	0.0001	NJ	0.0026
3,3',5-TrCB	PCB-036	38444-87-0	0.0049	0.0001		0.0026
3,4',5-TrCB	PCB-039	38444-88-1	0.0001	0.0001	UJ	0.0026
3,4,5-TrCB	PCB-038	53555-66-1	0.0004	0.0001	NJ	0.0026
3,3',4-TrCB	PCB-035	37680-69-6	0.0029	0.0001	NJ	0.0026
3,4,4'-TrCB	PCB-037	38444-90-5	0.0985	0.0002		0.0026
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0004	0.0003	NJ	0.0026
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0005	0.0005	UJ	0.0026
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0539	0.0005		0.0026
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0158	0.0005		0.0026
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0458	0.0005		0.0026
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0283	0.0006		0.0026
	PCB-052/069		0.271	0.0005		0.0026
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0005	0.0005	UJ	0.0026
	PCB-043/049		0.0006	0.0006	UJ	0.0026
	PCB-065/075		0.075	0.0005		0.0026
	PCB-047/048		0.0713	0.0005		0.0026
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0005	0.0005	UJ	0.0026
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.19	0.0007		0.0026
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0234	0.0004		0.0026
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.0674	0.0007		0.0026
	PCB-064/072		0.168	0.0005		0.0026

DATA REPORT

Client: City of Spokane
Client ID: SRA Jar #1
Field ID: #16-18402
PRL ID: PR164212

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/18/2017
HRMS File: DF02171707

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.0719	0.0004		0.0026
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0008	0.0008	UJ	0.0026
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0009	0.0005	NJ	0.0026
	PCB-040/057		0.0391	0.0008		0.0026
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.002	0.0005	NJ	0.0026
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0223	0.0005	NJ	0.0026
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0223	0.0005	NJ	0.0026
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0006	0.0006	UJ	0.0026
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.112	0.0005		0.0026
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.261	0.0006		0.0026
	PCB-055/080		0.0005	0.0005	UJ	0.0026
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.226	0.0005		0.0026
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0095	0.0006		0.0026
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.0006	0.0006	UJ	0.0026
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.174	0.0006		0.0026
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0006	0.0006	UJ	0.0026
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0007	0.0007	UJ	0.0026
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0011	0.0011	UJ	0.0026
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0584	0.0013		0.0026
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0007	0.0007	UJ	0.0026
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0009	0.0009	UJ	0.0026
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0021	0.0013	UJ	0.0026
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0015	0.0015	UJ	0.0026
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0016	0.0016	UJ	0.0026
	PCB-093/098/102		0.525	0.0016		0.0026
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.519	0.0016		0.0026
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0015	0.0015	UJ	0.0026
	PCB-091/121		0.0894	0.0016		0.0026
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.256	0.0017		0.0026
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.256	0.0017	UJ	0.0026
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0099	0.0018	NJ	0.0026
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0021	0.0021	UJ	0.0026
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.414	0.0014		0.0026
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0028	0.0013	NJ	0.0026
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.201	0.0017		0.0026
	PCB-112/119		0.0079	0.0016	NJ	0.0026
	PCB-083/109		0.0077	0.0011	UJ	0.0026
	PCB-086/117		0.0025	0.0025	UJ	0.0026
	PCB-097/116		0.178	0.0017		0.0026
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0014	0.0014	UJ	0.0026
	PCB-087/115		0.218	0.0016		0.0026
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0969	0.0017	UJ	0.0026
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.0969	0.0017		0.0026
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0014	0.0014	UJ	0.0026
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.915	0.0016		0.0026
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.0924	0.0023		0.0026
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0176	0.0005		0.0026
	PCB-107/108		0.0337	0.0009		0.0026
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0012	0.0012	UJ	0.0026
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0009	0.0009	UJ	0.0026
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.452	0.0012		0.0026
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0162	0.0011		0.0026

DATA REPORT

Client: City of Spokane
Client ID: SRA Jar #1
Field ID: #16-18402
PRL ID: PR164212

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/18/2017
HRMS File: DF02171707

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0618	0.001		0.0026
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0011	0.0011	UJ	0.0026
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0582	0.0014		0.0026
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0012	0.0012	UJ	0.0026
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.667	0.0012		0.0026
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0012	0.0012	UJ	0.0026
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.0131	0.0011		0.0026
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.348	0.0017		0.0026
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0715	0.0013		0.0026
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.0128	0.0007		0.0026
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0008	0.0008		0.0026
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0004	0.0004		0.0026
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0005	0.0005	UJ	0.0026
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0006	0.0006	UJ	0.0026
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0189	0.0005		0.0026
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0012	0.0012	UJ	0.0026
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.22	0.0012		0.0026
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.103	0.0013		0.0026
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.113	0.0012		0.0026
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.08	0.0011		0.0026
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.274	0.0017		0.0026
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0006	0.0006	UJ	0.0026
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0309	0.0018		0.0026
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0015	0.0015	UJ	0.0026
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.0032	0.0032		0.0026
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0385	0.0013		0.0026

Homologs	# of Congeners		
Monochlorobiphenyls	3	0.007	0.0001
Dichlorobiphenyls	12	0.12	0.0001
Trichlorobiphenyls	24	0.478	0.0001
Tetrachlorobiphenyls	42	1.96	0.0003
Pentachlorobiphenyls	46	4.26	0.0005
Hexachlorobiphenyls	42	3.6	0.0003
Heptachlorobiphenyls	24	2.18	0.0004
Octachlorobiphenyls	12	0.868	0.0004
Nonachlorobiphenyls	3	0.146	0.0015
Decachlorobiphenyl	1	0.0385	0.0013
Total PCB		13.7	0.0001

DATA REPORT

Client: City of Spokane
Client ID: SRA Jar #1
Field ID: #16-18402
PRL ID: PR164212

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/18/2017
HRMS File: DF02171707

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	67	5	145
¹³ C ₁₂ -4-MoCB	3L	69	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	78	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	82	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	88	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	96	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	88	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	104	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	101	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	84	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	94	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	94	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	95	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	95	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	103	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	90	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	108	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	117	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	157L	116	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	140	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	84	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	63	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	97	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	88	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	51	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	109	10	145
¹³ C ₁₂ -DeCB	209L	140	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	101	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	142	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	91	10	145

DATA REPORT

Client: City of Spokane
Client ID: P. Wild CA Creek Jar #1
Field ID: #16-18403
PRL ID: PR164213

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/18/2017
HRMS File: DF02171708

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0045	0.0002		0.0037
3-MoCB	PCB-002	2051-61-8	0.0023	0.0002	J	0.0037
4-MoCB	PCB-003	2051-62-9	0.0058	0.0002		0.0037
2,6-DiCB	PCB-010	33146-45-1	0.0003	0.0003	UJ	0.0037
2,2'-DiCB	PCB-004	13029-08-8	0.0055	0.0004		0.0037
2,5-DiCB	PCB-009	34883-39-1	0.0003	0.0003	UJ	0.0037
2,4-DiCB	PCB-007	33284-50-3	0.0046	0.0003		0.0037
2,3'-DiCB	PCB-006	25569-80-6	0.0071	0.0003		0.0037
2,3/2,4'-DiCB	PCB-005/008		0.0401	0.0003		0.0037
3,5-DiCB	PCB-014	34883-41-5	0.0003	0.0003	UJ	0.0037
3,3'-DiCB	PCB-011	2050-67-1	0.206	0.0003		0.0037
3,4/3,4'-DiCB	PCB-012/013		0.0003	0.0003	UJ	0.0037
4,4'-DiCB	PCB-015	2050-68-2	0.0958	0.0003		0.0037
2,2',6-TrCB	PCB-019	38444-73-4	0.0066	0.0004		0.0037
2,4,6-TrCB	PCB-030	35693-92-6	0.0004	0.0004	UJ	0.0037
2,2',5-TrCB	PCB-018	37680-65-2	0.0499	0.0005		0.0037
2,2',4-TrCB	PCB-017	37680-66-3	0.0466	0.0005		0.0037
2,3,6-TrCB	PCB-024	55702-45-9	0.0027	0.0004	J	0.0037
2,3',6-TrCB	PCB-027	38444-76-7	0.01	0.0003		0.0037
2,4',6-TrCB	PCB-032	38444-77-8	0.182	0.0005		0.0037
2,2',3-TrCB	PCB-016	38444-78-9	0.0352	0.0003		0.0037
2,3,5-TrCB	PCB-023	55720-44-0	0.0002	0.0002	UJ	0.0037
2,3',5'-TrCB	PCB-034	37680-68-5	0.0002	0.0002	UJ	0.0037
2,4,5-TrCB	PCB-029	15862-07-4	0.0002	0.0002	UJ	0.0037
2,3',5-TrCB	PCB-026	38444-81-4	0.0441	0.0002		0.0037
2,3',4-TrCB	PCB-025	55712-37-3	0.0294	0.0002		0.0037
2,4',5-TrCB	PCB-031	16606-02-3	0.281	0.0002		0.0037
2,4,4'-TrCB	PCB-028	7012-37-5	0.488	0.0002		0.0037
2,3,4-TrCB	PCB-021	55702-46-0	0.0002	0.0002	UJ	0.0037
	PCB-020/033		0.114	0.0002		0.0037
2,3,4'-TrCB	PCB-022	38444-85-8	0.18	0.0002		0.0037
3,3',5-TrCB	PCB-036	38444-87-0	0.011	0.0002		0.0037
3,4',5-TrCB	PCB-039	38444-88-1	0.0002	0.0002	UJ	0.0037
3,4,5-TrCB	PCB-038	53555-66-1	0.0003	0.0003	UJ	0.0037
3,3',4-TrCB	PCB-035	37680-69-6	0.0138	0.0003		0.0037
3,4,4'-TrCB	PCB-037	38444-90-5	0.251	0.0004		0.0037
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0005	0.0005	UJ	0.0037
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0009	0.0009	UJ	0.0037
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0784	0.001		0.0037
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0236	0.001		0.0037
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0793	0.0011		0.0037
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0389	0.0013		0.0037
	PCB-052/069		0.685	0.001		0.0037
2,3',5',6-TeCB	PCB-073	74338-23-1	0.001	0.001	UJ	0.0037
	PCB-043/049		0.428	0.0012		0.0037
	PCB-065/075		0.001	0.001	UJ	0.0037
	PCB-047/048		0.224	0.0009		0.0037
2,3,4,6-TeCB	PCB-062	54230-22-7	0.001	0.001	UJ	0.0037
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.414	0.0014		0.0037
2,3,3',6-TeCB	PCB-059	74472-33-6	0.066	0.0009		0.0037
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.199	0.0014		0.0037
	PCB-064/072		0.376	0.001		0.0037

DATA REPORT

Client: City of Spokane
Client ID: P. Wild CA Creek Jar #1
Field ID: #16-18403
PRL ID: PR164213

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/18/2017
HRMS File: DF02171708

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.102	0.0018		0.0037
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0021	0.0021	UJ	0.0037
2,2',3,3',4,5,5',6-HpCB	PCB-172	52663-74-8	0.102	0.0027		0.0037
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0035	0.0023	UJ	0.0037
2,2',3,4,4',5,5',6-HpCB	PCB-180	35065-29-3	1.07	0.0023		0.0037
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0023	0.0023	UJ	0.0037
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.002	0.002	UJ	0.0037
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.532	0.0033		0.0037
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.122	0.0026		0.0037
2,3,3',4,4',5,5',6-HpCB	PCB-189	39635-31-9	0.0355	0.0013		0.0037
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0018	0.0018		0.0037
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.001	0.001		0.0037
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0012	0.0012	UJ	0.0037
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0013	0.0013	UJ	0.0037
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0294	0.0012		0.0037
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0027	0.0027	UJ	0.0037
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.385	0.0027		0.0037
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.189	0.0029		0.0037
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.199	0.0027		0.0037
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.128	0.0025		0.0037
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.484	0.004		0.0037
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0015	0.0015	UJ	0.0037
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0613	0.0054		0.0037
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0048	0.0048	U	0.0037
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.0118	0.0118		0.0037
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0059	0.0059	U	0.0037

Homologs	# of Congeners		
Monochlorobiphenyls	3	0.0126	0.0002
Dichlorobiphenyls	12	0.359	0.0003
Trichlorobiphenyls	24	1.75	0.0002
Tetrachlorobiphenyls	42	5.17	0.0005
Pentachlorobiphenyls	46	5.81	0.001
Hexachlorobiphenyls	42	5.03	0.0006
Heptachlorobiphenyls	24	3.4	0.0008
Octachlorobiphenyls	12	1.53	0.001
Nonachlorobiphenyls	3	0.329	0.0048
Decachlorobiphenyl	1	0.0059	0.0059 U
Total PCB		23.4	0.0002

DATA REPORT

Client: City of Spokane
Client ID: P. Wild CA Creek Jar #1
Field ID: #16-18403
PRL ID: PR164213

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/18/2017
HRMS File: DF02171708

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	63	5	145
¹³ C ₁₂ -4-MoCB	3L	65	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	75	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	79	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	89	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	86	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	80	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	79	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	78	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	93	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	95	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	90	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	94	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	91	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	107	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	93	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	112	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	120	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	157L	124	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	117	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	91	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	62	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	103	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	90	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	46	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	90	10	145
¹³ C ₁₂ -DeCB	209L	135	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	93	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	143	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	92	10	145

DATA REPORT

Client: City of Spokane
Client ID: L.E. Bell Jar #3
Field ID: #16-18404
PRL ID: PR164214

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/18/2017
HRMS File: DF02171709

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0135	0.001		0.0052
3-MoCB	PCB-002	2051-61-8	0.0109	0.001		0.0052
4-MoCB	PCB-003	2051-62-9	0.0154	0.001		0.0052
2,6-DiCB	PCB-010	33146-45-1	0.0012	0.0012	UJ	0.0052
2,2'-DiCB	PCB-004	13029-08-8	0.0254	0.0019		0.0052
2,5-DiCB	PCB-009	34883-39-1	0.0011	0.0011	UJ	0.0052
2,4-DiCB	PCB-007	33284-50-3	0.0087	0.0011		0.0052
2,3'-DiCB	PCB-006	25569-80-6	0.015	0.0012		0.0052
2,3/2,4'-DiCB	PCB-005/008		0.0805	0.0012		0.0052
3,5-DiCB	PCB-014	34883-41-5	0.0012	0.0012	UJ	0.0052
3,3'-DiCB	PCB-011	2050-67-1	0.408	0.0011		0.0052
3,4/3,4'-DiCB	PCB-012/013		0.0012	0.0012	UJ	0.0052
4,4'-DiCB	PCB-015	2050-68-2	0.201	0.0012		0.0052
2,2',6-TrCB	PCB-019	38444-73-4	0.0302	0.0015		0.0052
2,4,6-TrCB	PCB-030	35693-92-6	0.0012	0.0012	UJ	0.0052
2,2',5-TrCB	PCB-018	37680-65-2	0.186	0.0016		0.0052
2,2',4-TrCB	PCB-017	37680-66-3	0.0904	0.0017		0.0052
2,3,6-TrCB	PCB-024	55702-45-9	0.0014	0.0014	UJ	0.0052
2,3',6-TrCB	PCB-027	38444-76-7	0.0225	0.0011		0.0052
2,4',6-TrCB	PCB-032	38444-77-8	0.165	0.0016		0.0052
2,2',3-TrCB	PCB-016	38444-78-9	0.102	0.001		0.0052
2,3,5-TrCB	PCB-023	55720-44-0	0.0006	0.0006	UJ	0.0052
2,3',5'-TrCB	PCB-034	37680-68-5	0.0008	0.0008	UJ	0.0052
2,4,5-TrCB	PCB-029	15862-07-4	0.0006	0.0006	UJ	0.0052
2,3',5-TrCB	PCB-026	38444-81-4	0.117	0.0006		0.0052
2,3',4-TrCB	PCB-025	55712-37-3	0.0726	0.0007		0.0052
2,4',5-TrCB	PCB-031	16606-02-3	0.731	0.0006		0.0052
2,4,4'-TrCB	PCB-028	7012-37-5	1.15	0.0007		0.0052
2,3,4-TrCB	PCB-021	55702-46-0	0.0009	0.0009	UJ	0.0052
	PCB-020/033		0.214	0.0007		0.0052
2,3,4'-TrCB	PCB-022	38444-85-8	0.383	0.0008		0.0052
3,3',5-TrCB	PCB-036	38444-87-0	0.0008	0.0008	UJ	0.0052
3,4',5-TrCB	PCB-039	38444-88-1	0.0008	0.0008	UJ	0.0052
3,4,5-TrCB	PCB-038	53555-66-1	0.0009	0.0009	UJ	0.0052
3,3',4-TrCB	PCB-035	37680-69-6	0.0305	0.0009		0.0052
3,4,4'-TrCB	PCB-037	38444-90-5	0.569	0.0013		0.0052
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0017	0.0017	UJ	0.0052
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0029	0.0029	UJ	0.0052
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.136	0.0031		0.0052
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0393	0.0031		0.0052
2,2',3,6-TeCB	PCB-045	70362-45-7	0.145	0.0033		0.0052
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0936	0.0038		0.0052
	PCB-052/069		1.32	0.003		0.0052
2,3',5',6-TeCB	PCB-073	74338-23-1	0.003	0.003	UJ	0.0052
	PCB-043/049		0.949	0.0037		0.0052
	PCB-065/075		0.003	0.003	UJ	0.0052
	PCB-047/048		0.446	0.0029		0.0052
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0031	0.0031	UJ	0.0052
2,2',3,5'-TeCB	PCB-044	41464-39-5	1.07	0.0043		0.0052
2,3,3',6-TeCB	PCB-059	74472-33-6	0.14	0.0028		0.0052
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.384	0.0042		0.0052
	PCB-064/072		0.75	0.003		0.0052

DATA REPORT

Client: City of Spokane
Client ID: L.E. Bell Jar #3
Field ID: #16-18404
PRL ID: PR164214

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/18/2017
HRMS File: DF02171709

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.371	0.0026		0.0052
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0052	0.0052	U	0.0052
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.003	0.003	UJ	0.0052
	PCB-040/057		0.21	0.0051		0.0052
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.039	0.0033		0.0052
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.103	0.0032		0.0052
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.103	0.0032		0.0052
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0036	0.0036	UJ	0.0052
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.824	0.0033		0.0052
2,3',4',5'-TeCB	PCB-070	32598-11-1	1.72	0.0035		0.0052
	PCB-055/080		0.0035	0.0035	UJ	0.0052
2,3',4,4'-TeCB	PCB-066	32598-10-0	1.68	0.0034		0.0052
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0489	0.0035		0.0052
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.378	0.0038		0.0052
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.917	0.0036		0.0052
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0038	0.0038	UJ	0.0052
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0042	0.0042	UJ	0.0052
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0064	0.0064	U	0.0052
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.281	0.0074		0.0052
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0038	0.0038	UJ	0.0052
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0053	0.0053		0.0052
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0073	0.0073	U	0.0052
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0086	0.0086	U	0.0052
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0095	0.0095	U	0.0052
	PCB-093/098/102		0.0093	0.0093	U	0.0052
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	1.45	0.0092		0.0052
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0089	0.0089	U	0.0052
	PCB-091/121		0.292	0.0095		0.0052
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.714	0.0101		0.0052
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.714	0.0101	U	0.0052
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0105	0.0105	U	0.0052
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0123	0.0123	U	0.0052
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	1.2	0.0083		0.0052
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0078	0.0078	U	0.0052
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.745	0.0101		0.0052
	PCB-112/119		0.0093	0.0093	U	0.0052
	PCB-083/109		0.0065	0.0065	U	0.0052
	PCB-086/117		0.0146	0.0146	U	0.0052
	PCB-097/116		0.562	0.0098		0.0052
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0081	0.0081	U	0.0052
	PCB-087/115		0.763	0.0097		0.0052
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.388	0.0098	U	0.0052
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.388	0.0098		0.0052
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0084	0.0084	U	0.0052
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	2.17	0.0096		0.0052
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.272	0.0133		0.0052
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0455	0.0024		0.0052
	PCB-107/108		0.129	0.0055		0.0052
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0071	0.0071	U	0.0052
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0055	0.0055	U	0.0052
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	1.8	0.007		0.0052
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.042	0.0067	NJ	0.0052

DATA REPORT

Client: City of Spokane
 Client ID: L.E. Bell Jar #3
 Field ID: #16-18404
 PRL ID: PR164214

Contact: Jeff Donovan
 Date Extracted: 12/28/2016
 Date Analysed: 2/18/2017
 HRMS File: DF02171709

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.177	0.0043		0.0052
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0048	0.0048	UJ	0.0052
2,2',3,3',4,5,5',6-HpCB	PCB-172	52663-74-8	0.154	0.0062	NJ	0.0052
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0054	0.0054	U	0.0052
2,2',3,4,4',5,5',6-HpCB	PCB-180	35065-29-3	1.97	0.0054		0.0052
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0054	0.0054	UJ	0.0052
2,3,3',4,4',5,5',6-HpCB	PCB-191	74472-50-7	0.0048	0.0048	UJ	0.0052
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	1.01	0.0077		0.0052
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.228	0.006		0.0052
2,3,3',4,4',5,5',6-HpCB	PCB-189	39635-31-9	0.0509	0.0029		0.0052
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0048	0.0048		0.0052
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0027	0.0027		0.0052
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0031	0.0031	UJ	0.0052
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0034	0.0034	UJ	0.0052
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0409	0.0031		0.0052
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0073	0.0073	U	0.0052
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.583	0.0073		0.0052
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.172	0.0077	NJ	0.0052
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.404	0.0072		0.0052
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.193	0.0067		0.0052
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.974	0.0107		0.0052
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0041	0.0041	UJ	0.0052
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0144	0.0144	U	0.0052
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.012	0.012	U	0.0052
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.027	0.027		0.0052
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0184	0.0184	U	0.0052

Homologs	# of Congeners		
Monochlorobiphenyls	3	0.0398	0.001
Dichlorobiphenyls	12	0.739	0.0011
Trichlorobiphenyls	24	3.86	0.0006
Tetrachlorobiphenyls	42	12.1	0.0017
Pentachlorobiphenyls	46	11.5	0.0024
Hexachlorobiphenyls	42	8.98	0.0014
Heptachlorobiphenyls	24	6	0.0019
Octachlorobiphenyls	12	2.35	0.0027
Nonachlorobiphenyls	3	0.452	0.012
Decachlorobiphenyl	1	0.0184	0.0184 U
Total PCB		46.1	0.0006

DATA REPORT

Client: City of Spokane
 Client ID: L.E. Bell Jar #3
 Field ID: #16-18404
 PRL ID: PR164214

Contact: Jeff Donovan
 Date Extracted: 12/28/2016
 Date Analysed: 2/18/2017
 HRMS File: DF02171709

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	47	5	145
¹³ C ₁₂ -4-MoCB	3L	46	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	67	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	84	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	80	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	88	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	73	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	91	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	89	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	84	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	89	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	88	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	90	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	92	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	111	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	91	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	118	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	121	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	157L	123	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	144	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	85	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	70	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	100	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	95	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	56	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	111	10	145
¹³ C ₁₂ -DeCB	209L	135	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	91	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	143	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	90	10	145

DATA REPORT

Client: City of Spokane
Client ID: VW+Sawdust Control
Field ID: #16-18404
PRL ID: PR164215

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/17/2017
HRMS File: DF02151720

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0022	0.0001		0.0019
3-MoCB	PCB-002	2051-61-8	0.001	0.0001	J	0.0019
4-MoCB	PCB-003	2051-62-9	0.0029	0.0001		0.0019
2,6-DiCB	PCB-010	33146-45-1	0.0001	0.0001	UJ	0.0019
2,2'-DiCB	PCB-004	13029-08-8	0.0045	0.0001		0.0019
2,5-DiCB	PCB-009	34883-39-1	0.0014	0.0001	J	0.0019
2,4-DiCB	PCB-007	33284-50-3	0.0035	0.0001		0.0019
2,3'-DiCB	PCB-006	25569-80-6	0.0039	0.0001		0.0019
2,3/2,4'-DiCB	PCB-005/008		0.0178	0.0001		0.0019
3,5-DiCB	PCB-014	34883-41-5	0.0001	0.0001	UJ	0.0019
3,3'-DiCB	PCB-011	2050-67-1	0.0446	0.0001		0.0019
3,4/3,4'-DiCB	PCB-012/013		0.0001	0.0001	UJ	0.0019
4,4'-DiCB	PCB-015	2050-68-2	0.0397	0.0002		0.0019
2,2',6-TrCB	PCB-019	38444-73-4	0.0093	0.0001		0.0019
2,4,6-TrCB	PCB-030	35693-92-6	0.0001	0.0001	UJ	0.0019
2,2',5-TrCB	PCB-018	37680-65-2	0.0273	0.0002		0.0019
2,2',4-TrCB	PCB-017	37680-66-3	0.0118	0.0002		0.0019
2,3,6-TrCB	PCB-024	55702-45-9	0.0012	0.0002	J	0.0019
2,3',6-TrCB	PCB-027	38444-76-7	0.0043	0.0001		0.0019
2,4',6-TrCB	PCB-032	38444-77-8	0.034	0.0001		0.0019
2,2',3-TrCB	PCB-016	38444-78-9	0.033	0.0002		0.0019
2,3,5-TrCB	PCB-023	55720-44-0	0.0001	0.0001	UJ	0.0019
2,3',5'-TrCB	PCB-034	37680-68-5	0.0001	0.0001	UJ	0.0019
2,4,5-TrCB	PCB-029	15862-07-4	0.0001	0.0001	UJ	0.0019
2,3',5-TrCB	PCB-026	38444-81-4	0.0094	0.0001		0.0019
2,3',4-TrCB	PCB-025	55712-37-3	0.0065	0.0001		0.0019
2,4',5-TrCB	PCB-031	16606-02-3	0.0602	0.0001		0.0019
2,4,4'-TrCB	PCB-028	7012-37-5	0.0952	0.0001		0.0019
2,3,4-TrCB	PCB-021	55702-46-0	0.0001	0.0001	UJ	0.0019
	PCB-020/033		0.0326	0.0001		0.0019
2,3,4'-TrCB	PCB-022	38444-85-8	0.0323	0.0001		0.0019
3,3',5-TrCB	PCB-036	38444-87-0	0.0038	0.0001		0.0019
3,4',5-TrCB	PCB-039	38444-88-1	0.0001	0.0001	UJ	0.0019
3,4,5-TrCB	PCB-038	53555-66-1	0.0001	0.0001	UJ	0.0019
3,3',4-TrCB	PCB-035	37680-69-6	0.0001	0.0001	UJ	0.0019
3,4,4'-TrCB	PCB-037	38444-90-5	0.0697	0.0002		0.0019
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0001	0.0001	UJ	0.0019
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0003	0.0003	UJ	0.0019
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.093	0.0003		0.0019
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0271	0.0004		0.0019
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0799	0.0004		0.0019
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0489	0.0004		0.0019
	PCB-052/069		0.22	0.0003		0.0019
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0004	0.0004	UJ	0.0019
	PCB-043/049		0.114	0.0004		0.0019
	PCB-065/075		0.0004	0.0004	UJ	0.0019
	PCB-047/048		0.0521	0.0003		0.0019
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0004	0.0004	UJ	0.0019
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.14	0.0005		0.0019
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0431	0.0004		0.0019
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.0444	0.0005		0.0019
	PCB-064/072		0.15	0.0004		0.0019

DATA REPORT

Client: City of Spokane
Client ID: VW+Sawdust Control
Field ID: #16-18404
PRL ID: PR164215

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/17/2017
HRMS File: DF02151720

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.063	0.0014		0.0019
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0057	0.0015		0.0019
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0486	0.0016		0.0019
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0013	0.0013	UJ	0.0019
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.699	0.0014		0.0019
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0014	0.0014	UJ	0.0019
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.0012	0.0012	UJ	0.0019
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.332	0.0018		0.0019
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0825	0.0013		0.0019
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.0264	0.0008		0.0019
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.002	0.002		0.0019
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0009	0.0009		0.0019
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0009	0.0009	UJ	0.0019
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.001	0.001	UJ	0.0019
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0177	0.0009		0.0019
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0017	0.0017	UJ	0.0019
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.246	0.0017		0.0019
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.0686	0.0016		0.0019
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.157	0.0015		0.0019
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0961	0.0014		0.0019
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.332	0.0019		0.0019
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0008	0.0008	UJ	0.0019
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0434	0.0028	NJ	0.0019
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0021	0.0021	U	0.0019
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.003	0.003		0.0019
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0356	0.0032		0.0019

Homologs	# of Congeners		
Monochlorobiphenyls	3	0.0061	0.0001
Dichlorobiphenyls	12	0.115	0.0001
Trichlorobiphenyls	24	0.431	0.0001
Tetrachlorobiphenyls	42	1.76	0.0001
Pentachlorobiphenyls	46	4.63	0.0006
Hexachlorobiphenyls	42	5.51	0.0009
Heptachlorobiphenyls	24	2.29	0.0008
Octachlorobiphenyls	12	1	0.0008
Nonachlorobiphenyls	3	0.125	0.0021
Decachlorobiphenyl	1	0.0356	0.0032
Total PCB		15.9	0.0001

DATA REPORT

Client: City of Spokane
Client ID: VW+Sawdust Control
Field ID: #16-18404
PRL ID: PR164215

Contact: Jeff Donovan
Date Extracted: 12/28/2016
Date Analysed: 2/17/2017
HRMS File: DF02151720

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	118	5	145
¹³ C ₁₂ -4-MoCB	3L	107	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	81	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	50	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	57	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	80	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	129	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	44	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	43	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	121	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	126	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	121	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	116	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	110	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	101	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	67	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	82	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	70	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HxCB	157L	71	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	73	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	74	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	102	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	46	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	88	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	76	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	95	10	145
¹³ C ₁₂ -DeCB	209L	100	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	122	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	129	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	68	10	145

QC REPORT - BLANK

Client: City of Spokane
 Client ID: BLANK
 Field ID:
 PRL ID: PC161623B

Contact: Jeff Donovan
 Date Extracted: 12/28/2016
 Date Analysed: 2/14/2017
 HRMS File: DF02121722

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5,5',6-HpCB	PCB-172	52663-74-8	0.0001	0.0001	UJ	0.002
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0001	0.0001	UJ	0.002
2,2',3,4,4',5,5',6-HpCB	PCB-180	35065-29-3	0.0001	0.0001	UJ	0.002
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0001	0.0001	UJ	0.002
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.0001	0.0001	UJ	0.002
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.0001	0.0001	UJ	0.002
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0001	0.0001	UJ	0.002
2,3,3',4,4',5,5',6-HpCB	PCB-189	39635-31-9	0.0001	0.0001	UJ	0.002
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0002	0.0002	UJ	0.002
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0001	0.0001	UJ	0.002
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0001	0.0001	UJ	0.002
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0002	0.0002	UJ	0.002
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.0002	0.0002	UJ	0.002
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.0002	0.0002	UJ	0.002
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.0002	0.0002	UJ	0.002
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0002	0.0002	UJ	0.002
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.0002	0.0002	UJ	0.002
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0001	0.0001	UJ	0.002
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0008	0.0008	UJ	0.002
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0008	0.0008	UJ	0.002
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.0011	0.0011	UJ	0.002
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.001	0.001	UJ	0.002

Homologs	# of Congeners			
Monochlorobiphenyls	3	0.0001	0.0001	UJ
Dichlorobiphenyls	12	0.007	0.0001	
Trichlorobiphenyls	24	0.0035	0.0001	
Tetrachlorobiphenyls	42	0.0014	0.0001	J
Pentachlorobiphenyls	46	0.0002	0.0002	UJ
Hexachlorobiphenyls	42	0.0015	0.0001	J
Heptachlorobiphenyls	24	0.0001	0.0001	UJ
Octachlorobiphenyls	12	0.0001	0.0001	UJ
Nonachlorobiphenyls	3	0.0008	0.0008	UJ
Decachlorobiphenyl	1	0.001	0.001	UJ
Total PCB		0.0134	0.0001	

QC REPORT - BLANK

Client: City of Spokane
 Client ID: BLANK
 Field ID:
 PRL ID: PC161623B

Contact: Jeff Donovan
 Date Extracted: 12/28/2016
 Date Analysed: 2/14/2017
 HRMS File: DF02121722

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	23	5	145
¹³ C ₁₂ -4-MoCB	3L	24	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	25	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	23	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	26	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	39	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	26	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	42	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	41	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	21	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	37	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	36	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	36	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	32	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	30	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	25	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	25	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	22	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HxCB	157L	22	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	20	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	29	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	38	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	24	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	33	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	38	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	33	10	145
¹³ C ₁₂ -DeCB	209L	29	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	35	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	58	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	30	10	145

QC REPORT - SPIKE

Client: City of Spokane
 Client ID: SPIKE (LCS)
 Field ID:
 PRL ID: PC161624S

Contact: Jeff Donovan
 Date Extracted: 12/28/2016
 Date Analysed: 2/13/2017
 HRMS File: DF02121720

Polychlorinated Biphenyls			Accept. Recovery		Pass/Fail		Surrogate Recoveries
Chemical Name	IUPAC #	CAS No.	LOF ug/Kg	Recovery %	Min %	Max %	%
2-MoCB	PCB-001	2051-60-7	0.1	116.3	60	135	38
4-MoCB	PCB-003	2051-62-9	0.1	122.3	60	135	42
2,6-DiCB	PCB-010	33146-45-1	0.1	72.4			-
2,2'-DiCB	PCB-004	13029-08-8	0.1	81.2	60	135	41
	PCB-005/008		0.1	97.4			-
4,4'-DiCB	PCB-015	2050-68-2	0.1	97.2	60	135	54
2,2',6-TrCB	PCB-019	38444-73-4	0.1	97.5	60	135	49
2,2',5-TrCB	PCB-018	37680-65-2	0.1	73.3			-
2,4,4'-TrCB	PCB-028	7012-37-5	0.1	78.9			-
	PCB-020/033		0.1	76.3			-
2,3,4'-TrCB	PCB-022	38444-85-8	0.1	99.3			-
3,4,4'-TrCB	PCB-037	38444-90-5	0.1	113.3	60	135	95
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.1	101.2	60	135	46
	PCB-052/069		0.1	60.9			-
	PCB-043/049		0.1	94.3			-
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.1	88.8			-
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.1	125.4			-
2,2',3,3'-TeCB	PCB-040	38444-93-8	0.1	88.9			-
2,4,4',5-TeCB	PCB-074	32690-93-0	0.1	128.5			-
2,3',4',5-TeCB	PCB-070	32598-11-1	0.1	122.5			-
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.1	112.1			-
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.1	119.1			-
3,4,4',5-TeCB	PCB-081	70362-50-4	0.1	93.2	60	135	128
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.1	88.4	60	135	130
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.1	84.4	60	135	47
2,2',3,5',6-PeCB	PCB-095	38379-99-6	0.1	88.0			-
2,2',3,4',5-PeCB	PCB-090	68194-07-0	0.1	106.8			-
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.1	106.4			-
2,2',4,4',5-PeCB	PCB-099	38380-01-7	0.1	116.2			-
2,3',4,4',6-PeCB	PCB-119	56558-17-9	0.1	127.1			-
	PCB-087/115		0.1	88.6			-
2,3,3',4',6-PeCB	PCB-110	38380-03-9	0.1	132.0			-
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.1	121.5	60	135	96
2,3',4,4',5-PeCB	PCB-118	31508-00-6	0.1	118.1	60	135	94
2,3,4,4',5-PeCB	PCB-114	74472-37-0	0.1	122.3	60	135	93
2,3,3',4,4'-PeCB	PCB-105	32598-14-4	0.1	112.1	60	135	92
3,3',4,4',5-PeCB	PCB-126	57465-28-8	0.1	109.7	60	135	91
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.1	94.4	60	135	65
2,2',3,5,5',6-HxCB	PCB-151	52663-63-5	0.1	109.6			-
	PCB-139/149		0.1	125.0			-
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	0.1	90.0			-
2,3',4,4',5',6-HxCB	PCB-168	59291-65-5	0.1	107.0			-
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.1	130.7			-
2,2',3,4,4',5-HxCB	PCB-137	35694-06-5	0.1	132.7			-
2,2',3,4,4',5'-HxCB	PCB-138	35065-28-2	0.1	135.4			-
2,3,3',4,4',6-HxCB	PCB-158	74472-42-7	0.1	100.3			-
2,2',3,3',4,5-HxCB	PCB-129	55215-18-4	0.1	104.5			-
2,2',3,3',4,4'-HxCB	PCB-128	38380-07-3	0.1	85.3			-
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.1	93.2	60	135	67
2,3,3',4,4',5-HxCB	PCB-156	38380-08-4	0.1	98.7	60	135	63
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.1	98.9	60	135	63
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.1	92.0	60	135	55

QC REPORT - SPIKE

Client: City of Spokane
 Client ID: SPIKE (LCS)
 Field ID:
 PRL ID: PC161624S

Contact: Jeff Donovan
 Date Extracted: 12/28/2016
 Date Analysed: 2/13/2017
 HRMS File: DF02121720

Polychlorinated Biphenyls			Accept. Recovery		Pass/Fail		Surrogate Recoveries
Chemical Name	IUPAC #	CAS No.	LOF ug/Kg	Recovery %	Min %	Max %	%
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.1	92.0	60	135	82
2,2',3,3',5,5',6-HpCB	PCB-178	52663-67-9	0.1	84.9			-
	PCB-182/187		0.1	90.9			-
2,2',3,4,4',5',6-HpCB	PCB-183	52663-69-1	0.1	92.4			-
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.1	89.9			-
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.1	73.1			-
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.1	154.0			-
2,3,3',4',5,5',6-HpCB	PCB-193	69782-91-8	0.1	154.0			-
2,3,3',4,4',5',6-HpCB	PCB-191	74472-50-7	0.1	73.1			-
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.1	74.6			-
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.1	89.0	60	135	103
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.1	97.0	60	135	72
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.1	81.1			-
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.1	85.8			-
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.1	87.0			-
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.1	97.8			-
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.1	87.3	60	135	88
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.1	93.1	60	135	120
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.1	89.9	60	135	92
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.1	91.4	60	135	81

LOF - level of fortification

DATA REPORT

Client: City of Spokane
Client ID: P. Wild CA Jar #2
Field ID: #16-17817
PRL ID: PR164216

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101719

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0045	0.0002	B	0.0037
3-MoCB	PCB-002	2051-61-8	0.0057	0.0002		0.0037
4-MoCB	PCB-003	2051-62-9	0.0064	0.0002		0.0037
2,6-DiCB	PCB-010	33146-45-1	0.0009	0.0005	J	0.0037
2,2'-DiCB	PCB-004	13029-08-8	0.0066	0.0007		0.0037
2,5-DiCB	PCB-009	34883-39-1	0.0016	0.0005	NJ	0.0037
2,4-DiCB	PCB-007	33284-50-3	0.0031	0.0006	J	0.0037
2,3'-DiCB	PCB-006	25569-80-6	0.0082	0.0005		0.0037
2,3/2,4'-DiCB	PCB-005/008		0.0399	0.0005		0.0037
3,5-DiCB	PCB-014	34883-41-5	0.0005	0.0005	UJ	0.0037
3,3'-DiCB	PCB-011	2050-67-1	0.224	0.0006		0.0037
3,4/3,4'-DiCB	PCB-012/013		0.009	0.0007		0.0037
4,4'-DiCB	PCB-015	2050-68-2	0.0659	0.0006		0.0037
2,2',6-TrCB	PCB-019	38444-73-4	0.0016	0.0016	UJ	0.0037
2,4,6-TrCB	PCB-030	35693-92-6	0.0012	0.0012	UJ	0.0037
2,2',5-TrCB	PCB-018	37680-65-2	0.0352	0.0015		0.0037
2,2',4-TrCB	PCB-017	37680-66-3	0.0381	0.0019		0.0037
2,3,6-TrCB	PCB-024	55702-45-9	0.0023	0.0015	NJ	0.0037
2,3',6-TrCB	PCB-027	38444-76-7	0.0049	0.0009		0.0037
2,4',6-TrCB	PCB-032	38444-77-8	0.112	0.0009		0.0037
2,2',3-TrCB	PCB-016	38444-78-9	0.0312	0.0004		0.0037
2,3,5-TrCB	PCB-023	55720-44-0	0.0002	0.0002	UJ	0.0037
2,3',5'-TrCB	PCB-034	37680-68-5	0.0007	0.0003	NJ	0.0037
2,4,5-TrCB	PCB-029	15862-07-4	0.0019	0.0002	J	0.0037
2,3',5-TrCB	PCB-026	38444-81-4	0.0331	0.0002		0.0037
2,3',4-TrCB	PCB-025	55712-37-3	0.0156	0.0002		0.0037
2,4',5-TrCB	PCB-031	16606-02-3	0.17	0.0002		0.0037
2,4,4'-TrCB	PCB-028	7012-37-5	0.29	0.0003		0.0037
2,3,4-TrCB	PCB-021	55702-46-0	0.0003	0.0003	UJ	0.0037
	PCB-020/033		0.086	0.0003		0.0037
2,3,4'-TrCB	PCB-022	38444-85-8	0.111	0.0003		0.0037
3,3',5-TrCB	PCB-036	38444-87-0	0.0075	0.0003		0.0037
3,4',5-TrCB	PCB-039	38444-88-1	0.0019	0.0003	J	0.0037
3,4,5-TrCB	PCB-038	53555-66-1	0.0008	0.0003	UJ	0.0037
3,3',4-TrCB	PCB-035	37680-69-6	0.0113	0.0004		0.0037
3,4,4'-TrCB	PCB-037	38444-90-5	0.0978	0.0004		0.0037
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.001	0.0006	NJ	0.0037
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0011	0.0011	UJ	0.0037
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0651	0.0012		0.0037
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0183	0.0012		0.0037
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0624	0.0013		0.0037
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0249	0.0014		0.0037
	PCB-052/069		0.675	0.0011		0.0037
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0011	0.0011	UJ	0.0037
	PCB-043/049		0.343	0.0013		0.0037
	PCB-065/075		0.0008	0.0008	UJ	0.0037
	PCB-047/048		0.204	0.0012		0.0037
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0011	0.0011	UJ	0.0037
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.378	0.0015		0.0037
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0424	0.001		0.0037
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.162	0.0015		0.0037
	PCB-064/072		0.304	0.001		0.0037

DATA REPORT

Client: City of Spokane
Client ID: P. Wild CA Jar #2
Field ID: #16-17817
PRL ID: PR164216

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101719

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.0894	0.0009		0.0037
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0306	0.0017		0.0037
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.001	0.001	UJ	0.0037
	PCB-040/057		0.0869	0.0018		0.0037
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0132	0.0011		0.0037
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0426	0.001		0.0037
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.001	0.001	UJ	0.0037
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0012	0.0012	UJ	0.0037
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.227	0.0011		0.0037
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.507	0.0012		0.0037
	PCB-055/080		0.0011	0.0011	UJ	0.0037
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.374	0.0011		0.0037
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0206	0.0012		0.0037
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.109	0.0012		0.0037
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.178	0.0013		0.0037
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0014	0.0014	UJ	0.0037
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0016	0.0016	UJ	0.0037
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0029	0.0029	UJ	0.0037
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0425	0.003		0.0037
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0008	0.0008	UJ	0.0037
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0028	0.0028	UJ	0.0037
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0036	0.0036	UJ	0.0037
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0037	0.0037	U	0.0037
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0044	0.0044	U	0.0037
	PCB-093/098/102		0.0045	0.0045	U	0.0037
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.691	0.0037		0.0037
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0042	0.0042	U	0.0037
	PCB-091/121		0.115	0.004		0.0037
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.327	0.0043		0.0037
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.0043	0.0043	U	0.0037
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.006	0.0042	NJ	0.0037
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.004	0.004	U	0.0037
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.565	0.0035		0.0037
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0032	0.0032	UJ	0.0037
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.232	0.0037		0.0037
	PCB-112/119		0.0043	0.0029	NJ	0.0037
	PCB-083/109		0.003	0.003	UJ	0.0037
	PCB-086/117		0.0046	0.0046	U	0.0037
	PCB-097/116		0.169	0.0038		0.0037
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0032	0.0032	UJ	0.0037
	PCB-087/115		0.18	0.0039		0.0037
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0036	0.0036		0.0037
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.0817	0.0036		0.0037
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0032	0.0032	UJ	0.0037
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.641	0.0034		0.0037
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.0741	0.0054		0.0037
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0304	0.0012		0.0037
	PCB-107/108		0.0368	0.001		0.0037
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0093	0.001		0.0037
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0011	0.0011	UJ	0.0037
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.339	0.0011		0.0037
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0164	0.0014		0.0037

DATA REPORT

Client: City of Spokane
Client ID: P. Wild CA Jar #2
Field ID: #16-17817
PRL ID: PR164216

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101719

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0075	0.0011	NJ	0.0037
	PCB-105/127		0.168	0.0011		0.0037
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.019	0.0023		0.0037
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.0014	0.0014	UJ	0.0037
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0034	0.0034	UJ	0.0037
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0031	0.0031	UJ	0.0037
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.0035	0.0035	UJ	0.0037
	PCB-136/148		0.145	0.0032		0.0037
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0036	0.0036	UJ	0.0037
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.156	0.0041		0.0037
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.148	0.0051		0.0037
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.0212	0.0041	NJ	0.0037
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0054	0.0054	U	0.0037
	PCB-139/149		0.674	0.0041		0.0037
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0009	0.0009	UJ	0.0037
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0012	0.001	NJ	0.0037
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.0577	0.0013		0.0037
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0012	0.0012	UJ	0.0037
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0152	0.0013		0.0037
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0046	0.0011	NJ	0.0037
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0009	0.0009	UJ	0.0037
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.102	0.001		0.0037
	PCB-132/161		0.338	0.0012		0.0037
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	0.497	0.0008		0.0037
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0009	0.0009	UJ	0.0037
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.142	0.0011		0.0037
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0322	0.0012		0.0037
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0392	0.0013		0.0037
	PCB-163/164		0.202	0.0009		0.0037
	PCB-138/160		0.493	0.0011		0.0037
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.0635	0.0008		0.0037
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.0331	0.0013		0.0037
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0019	0.001	NJ	0.0037
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.0019	0.0013	UJ	0.0037
	PCB-128/162		0.098	0.0012	NJ	0.0037
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0276	0.0015		0.0037
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.0535	0.0017		0.0037
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.019	0.0016		0.0037
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0143	0.0025	NJ	0.0037
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0021	0.0021	UJ	0.0037
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0021	0.0021	UJ	0.0037
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.103	0.0019		0.0037
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0307	0.0021		0.0037
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0023	0.0023	UJ	0.0037
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0398	0.0029		0.0037
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0072	0.0028		0.0037
	PCB-182/187		0.23	0.0027		0.0037
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.114	0.0027		0.0037
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0179	0.0032		0.0037
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.163	0.0028		0.0037
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0035	0.0035	UJ	0.0037
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.0753	0.0031		0.0037

DATA REPORT

Client: City of Spokane
 Client ID: P. Wild CA Jar #2
 Field ID: #16-17817
 PRL ID: PR164216

Contact: Jeff Donovan
 Date Extracted: 12/29/2016
 Date Analysed: 1/11/2017
 HRMS File: DF01101719

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0431	0.0033		0.0037
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0037	0.0037	U	0.0037
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0286	0.0042		0.0037
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0035	0.0035	UJ	0.0037
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.281	0.0035		0.0037
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0035	0.0035	UJ	0.0037
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.0036	0.0036	UJ	0.0037
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.122	0.0058		0.0037
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0264	0.0047		0.0037
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.0302	0.0037		0.0037
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0402	0.0037	NJ	0.0037
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0034	0.0034	UJ	0.0037
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0036	0.0036	UJ	0.0037
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0115	0.0038	NJ	0.0037
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0103	0.0037	NJ	0.0037
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0073	0.0073	U	0.0037
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.217	0.0073		0.0037
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.0913	0.0075		0.0037
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.0886	0.0089		0.0037
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0665	0.0062		0.0037
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.178	0.01		0.0037
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0068	0.0068	U	0.0037
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0341	0.0341	U	0.0037
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0352	0.0352	U	0.0037
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.109	0.061	NJ	0.0037
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0469	0.0469	U	0.0037

Homologs	# of Congeners		
Monochlorobiphenyls	3	0.0166	0.0002
Dichlorobiphenyls	12	0.358	0.0005
Trichlorobiphenyls	24	1.05	0.0002
Tetrachlorobiphenyls	42	4	0.0006
Pentachlorobiphenyls	46	3.78	0.0008
Hexachlorobiphenyls	42	3.34	0.0008
Heptachlorobiphenyls	24	1.31	0.0019
Octachlorobiphenyls	12	0.641	0.0034
Nonachlorobiphenyls	3	0.0341	0.0341 U
Decachlorobiphenyl	1	0.0469	0.0469 U
Total PCB		14.5	0.0002

DATA REPORT

Client: City of Spokane
 Client ID: P. Wild CA Jar #2
 Field ID: #16-17817
 PRL ID: PR164216

Contact: Jeff Donovan
 Date Extracted: 12/29/2016
 Date Analysed: 1/11/2017
 HRMS File: DF01101719

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	76	5	145
¹³ C ₁₂ -4-MoCB	3L	88	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	69	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	74	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	67	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	97	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	82	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	47	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	49	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	101	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	145	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	144	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	143	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	128	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	98	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	84	10	145
¹³ C ₁₂ -2,3',4,4',5'-HxCB	167L	49	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	43	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	157L	42	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	48	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	112	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	92	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	51	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	75	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	64	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	92	10	145
¹³ C ₁₂ -DeCB	209L	81	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	111	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	104	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	71	10	145

DATA REPORT

Client: City of Spokane
Client ID: P. Wild CA Jar #2
Field ID: #16-17817
PRL ID: PR164216D

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101720

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0033	0.0002	BJ	0.0039
3-MoCB	PCB-002	2051-61-8	0.004	0.0003		0.0039
4-MoCB	PCB-003	2051-62-9	0.0052	0.0002		0.0039
2,6-DiCB	PCB-010	33146-45-1	0.0009	0.0005	J	0.0039
2,2'-DiCB	PCB-004	13029-08-8	0.0059	0.0008		0.0039
2,5-DiCB	PCB-009	34883-39-1	0.0005	0.0005	UJ	0.0039
2,4-DiCB	PCB-007	33284-50-3	0.0028	0.0006	J	0.0039
2,3'-DiCB	PCB-006	25569-80-6	0.008	0.0006		0.0039
2,3/2,4'-DiCB	PCB-005/008		0.0425	0.0006		0.0039
3,5-DiCB	PCB-014	34883-41-5	0.0006	0.0006	UJ	0.0039
3,3'-DiCB	PCB-011	2050-67-1	0.185	0.0007		0.0039
3,4/3,4'-DiCB	PCB-012/013		0.008	0.0007		0.0039
4,4'-DiCB	PCB-015	2050-68-2	0.053	0.0006		0.0039
2,2',6-TrCB	PCB-019	38444-73-4	0.0018	0.0018	UJ	0.0039
2,4,6-TrCB	PCB-030	35693-92-6	0.0013	0.0013	UJ	0.0039
2,2',5-TrCB	PCB-018	37680-65-2	0.0241	0.0015		0.0039
2,2',4-TrCB	PCB-017	37680-66-3	0.0289	0.002		0.0039
2,3,6-TrCB	PCB-024	55702-45-9	0.0015	0.0015	UJ	0.0039
2,3',6-TrCB	PCB-027	38444-76-7	0.0045	0.0009		0.0039
2,4',6-TrCB	PCB-032	38444-77-8	0.0871	0.0009		0.0039
2,2',3-TrCB	PCB-016	38444-78-9	0.0219	0.0004		0.0039
2,3,5-TrCB	PCB-023	55720-44-0	0.0004	0.0002	NJ	0.0039
2,3',5'-TrCB	PCB-034	37680-68-5	0.0007	0.0003	NJ	0.0039
2,4,5-TrCB	PCB-029	15862-07-4	0.0017	0.0002	J	0.0039
2,3',5-TrCB	PCB-026	38444-81-4	0.031	0.0002		0.0039
2,3',4-TrCB	PCB-025	55712-37-3	0.0166	0.0002		0.0039
2,4',5-TrCB	PCB-031	16606-02-3	0.194	0.0002		0.0039
2,4,4'-TrCB	PCB-028	7012-37-5	0.285	0.0003		0.0039
2,3,4-TrCB	PCB-021	55702-46-0	0.0011	0.0003	NJ	0.0039
	PCB-020/033		0.0741	0.0003		0.0039
2,3,4'-TrCB	PCB-022	38444-85-8	0.103	0.0003		0.0039
3,3',5-TrCB	PCB-036	38444-87-0	0.0076	0.0003		0.0039
3,4',5-TrCB	PCB-039	38444-88-1	0.0012	0.0003	J	0.0039
3,4,5-TrCB	PCB-038	53555-66-1	0.0005	0.0004	NJ	0.0039
3,3',4-TrCB	PCB-035	37680-69-6	0.0099	0.0004		0.0039
3,4,4'-TrCB	PCB-037	38444-90-5	0.0899	0.0004		0.0039
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0006	0.0006	UJ	0.0039
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0012	0.0012	UJ	0.0039
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0398	0.0013		0.0039
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0154	0.0013		0.0039
2,2',3,6-TeCB	PCB-045	70362-45-7	0.047	0.0014		0.0039
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0173	0.0015		0.0039
	PCB-052/069		0.439	0.0011		0.0039
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0012	0.0012	UJ	0.0039
	PCB-043/049		0.235	0.0014		0.0039
	PCB-065/075		0.0009	0.0009	UJ	0.0039
	PCB-047/048		0.165	0.0013		0.0039
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0012	0.0012	UJ	0.0039
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.217	0.0016		0.0039
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0352	0.0011		0.0039
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.125	0.0017		0.0039
	PCB-064/072		0.233	0.0011		0.0039

DATA REPORT

Client: City of Spokane
Client ID: P. Wild CA Jar #2
Field ID: #16-17817
PRL ID: PR164216D

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101720

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.064	0.001		0.0039
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0285	0.0018		0.0039
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0011	0.0011	UJ	0.0039
	PCB-040/057		0.0586	0.0019		0.0039
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0128	0.0011		0.0039
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0138	0.0011		0.0039
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0011	0.0011	UJ	0.0039
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0013	0.0013	UJ	0.0039
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.171	0.0012		0.0039
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.358	0.0012		0.0039
	PCB-055/080		0.0012	0.0012	UJ	0.0039
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.314	0.0012		0.0039
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0143	0.0013		0.0039
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.0932	0.0013		0.0039
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.15	0.0014		0.0039
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0015	0.0015	UJ	0.0039
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0017	0.0017	UJ	0.0039
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0024	0.0024	UJ	0.0039
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0359	0.0026		0.0039
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0014	0.0014	UJ	0.0039
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0055	0.0038	NJ	0.0039
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0048	0.0048	U	0.0039
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.005	0.005	U	0.0039
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.006	0.006	U	0.0039
	PCB-093/098/102		0.0061	0.0061	U	0.0039
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.531	0.0051		0.0039
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0057	0.0057	U	0.0039
	PCB-091/121		0.103	0.0054		0.0039
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.267	0.0059		0.0039
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.0059	0.0059	U	0.0039
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0057	0.0057	U	0.0039
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0054	0.0054	U	0.0039
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.452	0.0048		0.0039
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0043	0.0043	U	0.0039
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.181	0.0051		0.0039
	PCB-112/119		0.0039	0.0039	U	0.0039
	PCB-083/109		0.0041	0.0041	U	0.0039
	PCB-086/117		0.0062	0.0062	U	0.0039
	PCB-097/116		0.159	0.0051		0.0039
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0044	0.0044	U	0.0039
	PCB-087/115		0.121	0.0053		0.0039
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0049	0.0049		0.0039
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.0705	0.0049		0.0039
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0044	0.0044	U	0.0039
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.563	0.0046		0.0039
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.0587	0.0073		0.0039
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0304	0.0014		0.0039
	PCB-107/108		0.0308	0.0014		0.0039
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0084	0.0014	NJ	0.0039
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0015	0.0015	UJ	0.0039
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.298	0.0014		0.0039
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0192	0.0017		0.0039

DATA REPORT

Client: City of Spokane
Client ID: P. Wild CA Jar #2
Field ID: #16-17817
PRL ID: PR164216D

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101720

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.006	0.0015	NJ	0.0039
	PCB-105/127		0.156	0.0013		0.0039
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0136	0.0013		0.0039
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.0028	0.0028	UJ	0.0039
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0046	0.0046	U	0.0039
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0041	0.0041	U	0.0039
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.0047	0.0047	U	0.0039
	PCB-136/148		0.112	0.0043		0.0039
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0049	0.0049	U	0.0039
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.155	0.0056		0.0039
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.119	0.0069		0.0039
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.0156	0.0055	NJ	0.0039
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0126	0.0072	NJ	0.0039
	PCB-139/149		0.587	0.0055		0.0039
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0025	0.0012	NJ	0.0039
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0018	0.0013	NJ	0.0039
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.066	0.0018		0.0039
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0016	0.0016	UJ	0.0039
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0064	0.0018	NJ	0.0039
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0075	0.0015	NJ	0.0039
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0012	0.0012	UJ	0.0039
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.111	0.0013		0.0039
	PCB-132/161		0.333	0.0016		0.0039
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	0.513	0.0011		0.0039
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0012	0.0012	UJ	0.0039
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.151	0.0015		0.0039
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0381	0.0016		0.0039
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0522	0.0017		0.0039
	PCB-163/164		0.225	0.0011		0.0039
	PCB-138/160		0.526	0.0015		0.0039
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.077	0.0011		0.0039
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.0372	0.0017		0.0039
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0013	0.0013	UJ	0.0039
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.0017	0.0017	UJ	0.0039
	PCB-128/162		0.119	0.0016		0.0039
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0272	0.0018		0.0039
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.0698	0.002		0.0039
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0064	0.002	NJ	0.0039
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0024	0.0024	UJ	0.0039
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0022	0.0022	UJ	0.0039
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0018	0.0018	UJ	0.0039
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.0821	0.0016		0.0039
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.023	0.0018		0.0039
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.002	0.002	UJ	0.0039
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0249	0.0024		0.0039
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0058	0.0024		0.0039
	PCB-182/187		0.195	0.0023		0.0039
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.0745	0.0023		0.0039
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0232	0.0027		0.0039
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.128	0.0024		0.0039
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.003	0.003	UJ	0.0039
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.0718	0.0027		0.0039

DATA REPORT

Client: City of Spokane
Client ID: P. Wild CA Jar #2
Field ID: #16-17817
PRL ID: PR164216D

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101720

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0333	0.0028		0.0039
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0032	0.0032	UJ	0.0039
2,2',3,3',4,5,5',6-HpCB	PCB-172	52663-74-8	0.0217	0.0036		0.0039
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.003	0.003	UJ	0.0039
2,2',3,4,4',5,5',6-HpCB	PCB-180	35065-29-3	0.266	0.003		0.0039
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.003	0.003	UJ	0.0039
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.0031	0.0031	UJ	0.0039
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.134	0.005		0.0039
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0288	0.004		0.0039
2,3,3',4,4',5,5',6-HpCB	PCB-189	39635-31-9	0.0224	0.0021		0.0039
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0367	0.0032		0.0039
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0077	0.0025	NJ	0.0039
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0027	0.0027	UJ	0.0039
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0027	0.0027	UJ	0.0039
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0103	0.0027	NJ	0.0039
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0053	0.0053	U	0.0039
2,2',3,3',4,5,5',6-OxCB	PCB-199	52663-75-9	0.131	0.0053		0.0039
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.067	0.0055		0.0039
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.0747	0.0065		0.0039
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0677	0.0045		0.0039
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.245	0.0073		0.0039
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0174	0.0039	NJ	0.0039
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0358	0.0185	NJ	0.0039
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0397	0.0188	NJ	0.0039
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.132	0.0315	NJ	0.0039
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0863	0.0332	NJ	0.0039

Homologs	# of Congeners			
Monochlorobiphenyls	3	0.0125	0.0002	
Dichlorobiphenyls	12	0.306	0.0005	
Trichlorobiphenyls	24	0.981	0.0002	
Tetrachlorobiphenyls	42	2.88	0.0006	
Pentachlorobiphenyls	46	3.12	0.0013	
Hexachlorobiphenyls	42	3.32	0.0011	
Heptachlorobiphenyls	24	1.13	0.0016	
Octachlorobiphenyls	12	0.622	0.0025	
Nonachlorobiphenyls	3	0.0185	0.0185	U
Decachlorobiphenyl	1	0.0332	0.0332	U
Total PCB		12.4	0.0002	

DATA REPORT

Client: City of Spokane
Client ID: P. Wild CA Jar #2
Field ID: #16-17817
PRL ID: PR164216D

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101720

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	89	5	145
¹³ C ₁₂ -4-MoCB	3L	101	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	71	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	83	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	73	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	111	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	81	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	60	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	64	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	102	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	136	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	131	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	126	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	118	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	110	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	82	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	54	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	48	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HxCB	157L	47	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	64	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	88	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	123	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	46	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	94	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	72	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	114	10	145
¹³ C ₁₂ -DeCB	209L	75	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	125	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	117	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	63	10	145

DATA REPORT

Client: City of Spokane
Client ID: P. Wild CA Jar #2 Dup
Field ID: #16-17818
PRL ID: PR164217

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/21/2017 1/25/2017
HRMS File: DF01201716 FS01251708

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0024	0.0003	BJ	0.0037
3-MoCB	PCB-002	2051-61-8	0.0024	0.0003	J	0.0037
4-MoCB	PCB-003	2051-62-9	0.0039	0.0002		0.0037
2,6-DiCB	PCB-010	33146-45-1	0.0023	0.0006	NJ	0.0037
2,2'-DiCB	PCB-004	13029-08-8	0.0025	0.0008	J	0.0037
2,5-DiCB	PCB-009	34883-39-1	0.0007	0.0007	UJ	0.0037
2,4-DiCB	PCB-007	33284-50-3	0.0003	0.0003	UJ	0.0037
2,3'-DiCB	PCB-006	25569-80-6	0.0026	0.0004	J	0.0037
2,3/2,4'-DiCB	PCB-005/008		0.0202	0.0005		0.0037
3,5-DiCB	PCB-014	34883-41-5	0.0004	0.0004	UJ	0.0037
3,3'-DiCB	PCB-011	2050-67-1	0.128	0.0004		0.0037
3,4/3,4'-DiCB	PCB-012/013		0.0004	0.0004	UJ	0.0037
4,4'-DiCB	PCB-015	2050-68-2	0.0538	0.0007		0.0037
2,2',6-TrCB	PCB-019	38444-73-4	0.0014	0.0014	UJ	0.0037
2,4,6-TrCB	PCB-030	35693-92-6	0.0031	0.0031	UJ	0.0037
2,2',5-TrCB	PCB-018	37680-65-2	0.0326	0.004		0.0037
2,2',4-TrCB	PCB-017	37680-66-3	0.065	0.0055		0.0037
2,3,6-TrCB	PCB-024	55702-45-9	0.0065	0.0065	U	0.0037
2,3',6-TrCB	PCB-027	38444-76-7	0.0077	0.0032		0.0037
2,4',6-TrCB	PCB-032	38444-77-8	0.592	0.0058		0.0037
2,2',3-TrCB	PCB-016	38444-78-9	0.0417	0.0012		0.0037
2,3,5-TrCB	PCB-023	55720-44-0	0.0007	0.0007	UJ	0.0037
2,3',5'-TrCB	PCB-034	37680-68-5	0.0004	0.0004	UJ	0.0037
2,4,5-TrCB	PCB-029	15862-07-4	0.0009	0.0004	NJ	0.0037
2,3',5-TrCB	PCB-026	38444-81-4	0.0077	0.0005	NJ	0.0037
2,3',4-TrCB	PCB-025	55712-37-3	0.0125	0.0005		0.0037
2,4',5-TrCB	PCB-031	16606-02-3	0.178	0.0004		0.0037
2,4,4'-TrCB	PCB-028	7012-37-5	0.294	0.0005		0.0037
2,3,4-TrCB	PCB-021	55702-46-0	0.0009	0.0009	UJ	0.0037
	PCB-020/033		0.0826	0.0006		0.0037
2,3,4'-TrCB	PCB-022	38444-85-8	0.124	0.0006		0.0037
3,3',5-TrCB	PCB-036	38444-87-0	0.0006	0.0006	UJ	0.0037
3,4',5-TrCB	PCB-039	38444-88-1	0.0005	0.0005	UJ	0.0037
3,4,5-TrCB	PCB-038	53555-66-1	0.0007	0.0007	UJ	0.0037
3,3',4-TrCB	PCB-035	37680-69-6	0.0009	0.0009	UJ	0.0037
3,4,4'-TrCB	PCB-037	38444-90-5	0.181	0.001		0.0037
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0014	0.0014	UJ	0.0037
2,2',4,6-TeCB	PCB-050	62796-65-0	0.003	0.003	UJ	0.0037
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0414	0.0034		0.0037
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0141	0.0029		0.0037
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0033	0.0033	UJ	0.0037
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0043	0.0043	U	0.0037
	PCB-052/069		0.461	0.0029		0.0037
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0028	0.0028	UJ	0.0037
	PCB-043/049		0.194	0.0032		0.0037
	PCB-065/075		0.0028	0.0028	UJ	0.0037
	PCB-047/048		0.128	0.0026		0.0037
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0021	0.0021	UJ	0.0037
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.216	0.0043		0.0037
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0429	0.002		0.0037
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.1	0.0027		0.0037
	PCB-064/072		0.143	0.002		0.0037

DATA REPORT

Client: City of Spokane
Client ID: P. Wild CA Jar #2 Dup
Field ID: #16-17818
PRL ID: PR164217

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/21/2017 1/25/2017
HRMS File: DF01201716 FS01251708

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.115	0.002		0.0037
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0389	0.0025		0.0037
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0017	0.0017	UJ	0.0037
	PCB-040/057		0.0743	0.005		0.0037
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0027	0.0027	UJ	0.0037
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0023	0.0023	UJ	0.0037
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0023	0.0023	UJ	0.0037
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0022	0.0022	UJ	0.0037
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.159	0.0019		0.0037
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.405	0.0024		0.0037
	PCB-055/080		0.0018	0.0018	UJ	0.0037
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.269	0.0017		0.0037
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0023	0.0023	UJ	0.0037
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.23	0.0024		0.0037
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.063	0.0018		0.0037
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0023	0.0023	UJ	0.0037
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.002	0.002	UJ	0.0037
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0042	0.0042	U	0.0037
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0599	0.005		0.0037
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.002	0.002	UJ	0.0037
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0055	0.0055	U	0.0037
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0069	0.0069	U	0.0037
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0087	0.0087	U	0.0037
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0111	0.0111	U	0.0037
	PCB-093/098/102		0.0074	0.0074	U	0.0037
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.617	0.0081		0.0037
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0102	0.0102	U	0.0037
	PCB-091/121		0.0958	0.0068		0.0037
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.238	0.0082		0.0037
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.0776	0.0079		0.0037
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.01	0.01	U	0.0037
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0089	0.0089	U	0.0037
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.493	0.0058		0.0037
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0072	0.0072	U	0.0037
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.313	0.011		0.0037
	PCB-112/119		0.0059	0.0059	U	0.0037
	PCB-083/109		0.011	0.011	U	0.0037
	PCB-086/117		0.0069	0.0069	U	0.0037
	PCB-097/116		0.306	0.0124		0.0037
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.01	0.01	U	0.0037
	PCB-087/115		0.15	0.0071		0.0037
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0051	0.0051	U	0.0037
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.0954	0.0074		0.0037
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0041	0.0041	U	0.0037
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.388	0.0038		0.0037
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.012	0.012	U	0.0037
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0095	0.0095	U	0.0037
	PCB-107/108		0.0023	0.0023	UJ	0.0037
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0025	0.0025	UJ	0.0037
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0033	0.0033	UJ	0.0037
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.427	0.0026		0.0037
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0029	0.0029	UJ	0.0037

DATA REPORT

Client: City of Spokane
Client ID: P. Wild CA Jar #2 Dup
Field ID: #16-17818
PRL ID: PR164217

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/21/2017 1/25/2017
HRMS File: DF01201716 FS01251708

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0026	0.0026	UJ	0.0037
	PCB-105/127		0.265	0.0031		0.0037
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0035	0.0035	UJ	0.0037
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.0021	0.0021	UJ	0.0037
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0255	0.0255	U	0.0037
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0245	0.0245	U	0.0037
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.0376	0.0376	U	0.0037
	PCB-136/148		0.875	0.039		0.0037
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0267	0.0267	U	0.0037
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.9	0.0351		0.0037
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.88	0.0445		0.0037
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.0385	0.0385	U	0.0037
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0403	0.0403	U	0.0037
	PCB-139/149		3.57	0.039		0.0037
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0454	0.0454	U	0.0037
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0037	0.0037	U	0.0037
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.0044	0.0044	U	0.0037
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.005	0.005	U	0.0037
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0052	0.0052	U	0.0037
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0028	0.0028	UJ	0.0037
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0035	0.0035	UJ	0.0037
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.13	0.003		0.0037
	PCB-132/161		0.348	0.0034		0.0037
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	0.77	0.0031		0.0037
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0025	0.0025	UJ	0.0037
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.233	0.0038	U	0.0037
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0039	0.0039	U	0.0037
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0039	0.0039	U	0.0037
	PCB-163/164		0.251	0.003		0.0037
	PCB-138/160		0.581	0.0025		0.0037
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.0705	0.0019		0.0037
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.0034	0.0034	UJ	0.0037
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0024	0.0024	UJ	0.0037
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.0024	0.0024	UJ	0.0037
	PCB-128/162		0.108	0.0033		0.0037
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0324	0.0032		0.0037
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.0606	0.0034		0.0037
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0148	0.003		0.0037
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.004	0.004	U	0.0037
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0005	0.0005	UJ	0.0037
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0004	0.0004	UJ	0.0037
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.0744	0.0004		0.0037
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0238	0.0004		0.0037
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0004	0.0004	UJ	0.0037
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0377	0.0007		0.0037
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0007	0.0007	UJ	0.0037
	PCB-182/187		0.253	0.0007		0.0037
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.115	0.0007		0.0037
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0248	0.0008		0.0037
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.191	0.0007		0.0037
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0008	0.0008	UJ	0.0037
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.104	0.0007		0.0037

DATA REPORT

Client: City of Spokane
 Client ID: P. Wild CA Jar #2 Dup
 Field ID: #16-17818
 PRL ID: PR164217

Contact: Jeff Donovan
 Date Extracted: 12/29/2016
 Date Analysed: 1/21/2017 1/25/2017
 HRMS File: DF01201716 FS01251708

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0497	0.0008		0.0037
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0048	0.0009		0.0037
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0331	0.0009		0.0037
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0009	0.0009	UJ	0.0037
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.464	0.0009		0.0037
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0009	0.0009	UJ	0.0037
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.0076	0.0008		0.0037
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.212	0.0012		0.0037
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0481	0.001		0.0037
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.0081	0.0004		0.0037
2,2',3,3',5,5',6,6'-OoCB	PCB-202	2136-99-4	0.0234	0.0004		0.0037
2,2',3,3',4,5',6,6'-OoCB	PCB-201	40186-71-8	0.0139	0.0003		0.0037
2,2',3,4,4',5,6,6'-OoCB	PCB-204	74472-52-9	0.0004	0.0004	UJ	0.0037
2,2',3,3',4,4',6,6'-OoCB	PCB-197	33091-17-7	0.0021	0.0004	NJ	0.0037
2,2',3,3',4,5,6,6'-OoCB	PCB-200	52663-73-7	0.0105	0.0003		0.0037
2,2',3,3',4,5,5',6-OoCB	PCB-198	68194-17-2	0.0007	0.0007	UJ	0.0037
2,2',3,3',4,5,5',6'-OoCB	PCB-199	52663-75-9	0.112	0.0007		0.0037
2,2',3,3',4,4',5,6'-OoCB	PCB-196	42740-50-1	0.0451	0.0007		0.0037
2,2',3,4,4',5,5',6-OoCB	PCB-203	52663-76-0	0.0921	0.0008		0.0037
2,2',3,3',4,4',5,6-OoCB	PCB-195	52663-78-2	0.0393	0.0006		0.0037
2,2',3,3',4,4',5,5'-OoCB	PCB-194	35694-08-7	0.119	0.0008		0.0037
2,3,3',4,4',5,5',6-OoCB	PCB-205	74472-53-0	0.0092	0.0005		0.0037
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0235	0.0033		0.0037
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0035	0.0035	UJ	0.0037
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.0687	0.0054		0.0037
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0277	0.0014		0.0037

Homologs	# of Congeners		
Monochlorobiphenyls	3	0.0087	0.0002
Dichlorobiphenyls	12	0.207	0.0003
Trichlorobiphenyls	24	1.61	0.0004
Tetrachlorobiphenyls	42	2.75	0.0014
Pentachlorobiphenyls	46	3.47	0.002
Hexachlorobiphenyls	42	8.59	0.0019
Heptachlorobiphenyls	24	1.65	0.0004
Octachlorobiphenyls	12	0.465	0.0003
Nonachlorobiphenyls	3	0.0922	0.0033
Decachlorobiphenyl	1	0.0277	0.0014
Total PCB		18.9	0.0002

DATA REPORT

Client: City of Spokane
Client ID: P. Wild CA Jar #2 Dup
Field ID: #16-17818
PRL ID: PR164217

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/21/2017 1/25/2017
HRMS File: DF01201716 FS01251708

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	53	5	145
¹³ C ₁₂ -4-MoCB	3L	66	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	63	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	59	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	129	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	114	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	85	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	47	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	49	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	104	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	144	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	133	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	135	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	140	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	89	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	137	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	55	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	44	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HxCB	157L	47	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	41	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	82	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	67	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	105	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	83	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	63	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	101	10	145
¹³ C ₁₂ -DeCB	209L	122	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	135	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	67	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	83	10	145

DATA REPORT

Client: City of Spokane
Client ID: P. Wild CA Jar #2 Trip
Field ID: #16-17819
PRL ID: PR164218

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101718

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0042	0.0003	BJ	0.0052
3-MoCB	PCB-002	2051-61-8	0.0028	0.0003	J	0.0052
4-MoCB	PCB-003	2051-62-9	0.0034	0.0003	J	0.0052
2,6-DiCB	PCB-010	33146-45-1	0.0024	0.0007	NJ	0.0052
2,2'-DiCB	PCB-004	13029-08-8	0.0079	0.0011		0.0052
2,5-DiCB	PCB-009	34883-39-1	0.0029	0.0007	NJ	0.0052
2,4-DiCB	PCB-007	33284-50-3	0.0043	0.0008	NJ	0.0052
2,3'-DiCB	PCB-006	25569-80-6	0.0085	0.0007		0.0052
2,3/2,4'-DiCB	PCB-005/008		0.0461	0.0007		0.0052
3,5-DiCB	PCB-014	34883-41-5	0.0008	0.0008	UJ	0.0052
3,3'-DiCB	PCB-011	2050-67-1	0.223	0.0009		0.0052
3,4/3,4'-DiCB	PCB-012/013		0.009	0.0009		0.0052
4,4'-DiCB	PCB-015	2050-68-2	0.0731	0.0008		0.0052
2,2',6-TrCB	PCB-019	38444-73-4	0.0055	0.0024	NJ	0.0052
2,4,6-TrCB	PCB-030	35693-92-6	0.0016	0.0016	UJ	0.0052
2,2',5-TrCB	PCB-018	37680-65-2	0.0428	0.0019		0.0052
2,2',4-TrCB	PCB-017	37680-66-3	0.0416	0.0024		0.0052
2,3,6-TrCB	PCB-024	55702-45-9	0.0025	0.0019	J	0.0052
2,3',6-TrCB	PCB-027	38444-76-7	0.0054	0.0011		0.0052
2,4',6-TrCB	PCB-032	38444-77-8	0.147	0.0012		0.0052
2,2',3-TrCB	PCB-016	38444-78-9	0.0235	0.0005		0.0052
2,3,5-TrCB	PCB-023	55720-44-0	0.0003	0.0002	NJ	0.0052
2,3',5'-TrCB	PCB-034	37680-68-5	0.0003	0.0003	UJ	0.0052
2,4,5-TrCB	PCB-029	15862-07-4	0.0016	0.0002	NJ	0.0052
2,3',5-TrCB	PCB-026	38444-81-4	0.0298	0.0002		0.0052
2,3',4-TrCB	PCB-025	55712-37-3	0.0135	0.0003		0.0052
2,4',5-TrCB	PCB-031	16606-02-3	0.175	0.0002		0.0052
2,4,4'-TrCB	PCB-028	7012-37-5	0.268	0.0003		0.0052
2,3,4-TrCB	PCB-021	55702-46-0	0.0008	0.0004	NJ	0.0052
	PCB-020/033		0.0815	0.0004		0.0052
2,3,4'-TrCB	PCB-022	38444-85-8	0.102	0.0004		0.0052
3,3',5-TrCB	PCB-036	38444-87-0	0.0032	0.0004	NJ	0.0052
3,4',5-TrCB	PCB-039	38444-88-1	0.0004	0.0004	UJ	0.0052
3,4,5-TrCB	PCB-038	53555-66-1	0.0012	0.0004	NJ	0.0052
3,3',4-TrCB	PCB-035	37680-69-6	0.0089	0.0005		0.0052
3,4,4'-TrCB	PCB-037	38444-90-5	0.0942	0.0004		0.0052
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0009	0.0009	UJ	0.0052
2,2',4,6'-TeCB	PCB-050	62796-65-0	0.0016	0.0016	UJ	0.0052
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0733	0.0017		0.0052
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0344	0.0017		0.0052
2,2',3,6'-TeCB	PCB-045	70362-45-7	0.085	0.0018		0.0052
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0272	0.002	NJ	0.0052
	PCB-052/069		0.615	0.0015		0.0052
2,3',5',6'-TeCB	PCB-073	74338-23-1	0.0015	0.0015	UJ	0.0052
	PCB-043/049		0.385	0.0019		0.0052
	PCB-065/075		0.0012	0.0012	UJ	0.0052
	PCB-047/048		0.271	0.0017		0.0052
2,3,4,6'-TeCB	PCB-062	54230-22-7	0.0015	0.0015	UJ	0.0052
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.383	0.0021		0.0052
2,3,3',6'-TeCB	PCB-059	74472-33-6	0.055	0.0015		0.0052
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.192	0.0022		0.0052
	PCB-064/072		0.355	0.0015		0.0052

DATA REPORT

Client: City of Spokane
Client ID: P. Wild CA Jar #2 Trip
Field ID: #16-17819
PRL ID: PR164218

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101718

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.141	0.0013		0.0052
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0408	0.0024		0.0052
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0022	0.0015	NJ	0.0052
	PCB-040/057		0.0969	0.0025		0.0052
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0155	0.0015		0.0052
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0257	0.0015	NJ	0.0052
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0015	0.0015	NJ	0.0052
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0017	0.0017	UJ	0.0052
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.28	0.0016		0.0052
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.531	0.0016		0.0052
	PCB-055/080		0.0045	0.0016	NJ	0.0052
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.492	0.0016		0.0052
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0129	0.0017	NJ	0.0052
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.16	0.0017		0.0052
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.268	0.0018		0.0052
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.002	0.002	UJ	0.0052
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0023	0.0023	UJ	0.0052
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0028	0.0028	UJ	0.0052
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0531	0.003		0.0052
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0021	0.0021	UJ	0.0052
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0088	0.0045	NJ	0.0052
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0058	0.0058	U	0.0052
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.006	0.006	U	0.0052
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0072	0.0072	U	0.0052
	PCB-093/098/102		0.0073	0.0073	U	0.0052
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.696	0.0061		0.0052
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0068	0.0068	U	0.0052
	PCB-091/121		0.148	0.0065		0.0052
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.345	0.007		0.0052
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.007	0.007	U	0.0052
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0068	0.0068	U	0.0052
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0064	0.0064	U	0.0052
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.553	0.0057		0.0052
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0052	0.0052	U	0.0052
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.276	0.0061		0.0052
	PCB-112/119		0.0062	0.0046	NJ	0.0052
	PCB-083/109		0.005	0.005	UJ	0.0052
	PCB-086/117		0.0075	0.0075	U	0.0052
	PCB-097/116		0.226	0.0062		0.0052
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0053	0.0053	U	0.0052
	PCB-087/115		0.207	0.0063		0.0052
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0059	0.0059		0.0052
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.118	0.0059		0.0052
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0053	0.0053	U	0.0052
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.779	0.0055		0.0052
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.0924	0.0088		0.0052
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0349	0.0012		0.0052
	PCB-107/108		0.0478	0.0017		0.0052
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0149	0.0016	NJ	0.0052
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0018	0.0018	UJ	0.0052
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.432	0.0016		0.0052
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0273	0.002		0.0052

DATA REPORT

Client: City of Spokane
Client ID: P. Wild CA Jar #2 Trip
Field ID: #16-17819
PRL ID: PR164218

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101718

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0141	0.0018		0.0052
	PCB-105/127		0.26	0.0014		0.0052
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0097	0.0012		0.0052
2,2',4,4',6',6'-HxCB	PCB-155	33979-03-2	0.0036	0.0036	UJ	0.0052
2,2',3,4',6',6'-HxCB	PCB-150	68194-08-1	0.0039	0.0039	UJ	0.0052
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0035	0.0035	UJ	0.0052
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.004	0.004	UJ	0.0052
	PCB-136/148		0.103	0.0037		0.0052
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0042	0.0042	UJ	0.0052
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.111	0.0047	NJ	0.0052
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.119	0.0059		0.0052
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.015	0.0047	NJ	0.0052
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0142	0.0061	NJ	0.0052
	PCB-139/149		0.523	0.0047		0.0052
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.001	0.001	UJ	0.0052
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0011	0.0011	UJ	0.0052
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.0491	0.0015		0.0052
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0014	0.0014	UJ	0.0052
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.004	0.0015	NJ	0.0052
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0068	0.0013	NJ	0.0052
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.001	0.001	UJ	0.0052
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.093	0.0011		0.0052
	PCB-132/161		0.322	0.0014		0.0052
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	0.524	0.0009		0.0052
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0011	0.0011	UJ	0.0052
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.159	0.0012		0.0052
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0386	0.0014		0.0052
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0519	0.0015	NJ	0.0052
	PCB-163/164		0.251	0.001		0.0052
	PCB-138/160		0.617	0.0013		0.0052
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.0793	0.0009		0.0052
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.051	0.0014		0.0052
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0041	0.0011	NJ	0.0052
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.0015	0.0015	UJ	0.0052
	PCB-128/162		0.152	0.0014		0.0052
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0418	0.0016		0.0052
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.0861	0.0015		0.0052
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0215	0.0014		0.0052
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0025	0.0016	NJ	0.0052
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0023	0.0023	UJ	0.0052
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0015	0.0015	UJ	0.0052
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.0763	0.0013		0.0052
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0254	0.0014		0.0052
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0016	0.0016	UJ	0.0052
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.035	0.002		0.0052
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0053	0.0019	NJ	0.0052
	PCB-182/187		0.232	0.0018		0.0052
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.0947	0.0018		0.0052
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.024	0.0022		0.0052
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.175	0.0019		0.0052
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0024	0.0024	UJ	0.0052
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.113	0.0022		0.0052

DATA REPORT

Client: City of Spokane
Client ID: P. Wild CA Jar #2 Trip
Field ID: #16-17819
PRL ID: PR164218

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101718

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0402	0.0022		0.0052
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0048	0.0026	NJ	0.0052
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0287	0.0029	NJ	0.0052
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0024	0.0024	UJ	0.0052
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.394	0.0024		0.0052
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0024	0.0024	UJ	0.0052
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.0066	0.0025	NJ	0.0052
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.235	0.004		0.0052
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.021	0.0032	NJ	0.0052
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.0132	0.0013	NJ	0.0052
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0333	0.003		0.0052
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0163	0.0019		0.0052
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0021	0.0021	UJ	0.0052
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0022	0.0022	UJ	0.0052
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0061	0.0021	NJ	0.0052
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0042	0.0042	UJ	0.0052
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.19	0.0042		0.0052
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.0808	0.0043		0.0052
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.136	0.0051		0.0052
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0467	0.0035	NJ	0.0052
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.255	0.0057		0.0052
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0159	0.0025	NJ	0.0052
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0509	0.0143	NJ	0.0052
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0262	0.0132	NJ	0.0052
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.0946	0.0189	NJ	0.0052
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0092	0.0092	U	0.0052

Homologs	# of Congeners			
Monochlorobiphenyls	3	0.0104	0.0003	
Dichlorobiphenyls	12	0.368	0.0007	
Trichlorobiphenyls	24	1.04	0.0002	
Tetrachlorobiphenyls	42	4.53	0.0009	
Pentachlorobiphenyls	46	4.38	0.0012	
Hexachlorobiphenyls	42	3.23	0.0009	
Heptachlorobiphenyls	24	1.44	0.0013	
Octachlorobiphenyls	12	0.711	0.0019	
Nonachlorobiphenyls	3	0.0132	0.0132	U
Decachlorobiphenyl	1	0.0092	0.0092	U
Total PCB		15.7	0.0002	

DATA REPORT

Client: City of Spokane
Client ID: P. Wild CA Jar #2 Trip
Field ID: #16-17819
PRL ID: PR164218

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101718

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	70	5	145
¹³ C ₁₂ -4-MoCB	3L	84	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	67	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	80	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	68	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	111	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	79	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	72	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	77	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	91	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	143	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	136	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	131	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	131	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	142	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	76	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	73	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	75	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HxCB	157L	81	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	114	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	92	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	109	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	63	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	102	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	58	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	114	10	145
¹³ C ₁₂ -DeCB	209L	101	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	112	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	125	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	76	10	145

DATA REPORT

Client: City of Spokane
Client ID: P. Ost. Colum. Jar #1
Field ID: #16-17820
PRL ID: PR164219

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/21/2017 1/25/2017
HRMS File: DF01201715 FS01251707

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0032	0.0002	B	0.0028
3-MoCB	PCB-002	2051-61-8	0.0033	0.0003		0.0028
4-MoCB	PCB-003	2051-62-9	0.0057	0.0002		0.0028
2,6-DiCB	PCB-010	33146-45-1	0.0008	0.0008	UJ	0.0028
2,2'-DiCB	PCB-004	13029-08-8	0.001	0.001	UJ	0.0028
2,5-DiCB	PCB-009	34883-39-1	0.0023	0.0008	J	0.0028
2,4-DiCB	PCB-007	33284-50-3	0.0033	0.0004		0.0028
2,3'-DiCB	PCB-006	25569-80-6	0.004	0.0005		0.0028
2,3/2,4'-DiCB	PCB-005/008		0.0331	0.0005		0.0028
3,5-DiCB	PCB-014	34883-41-5	0.0005	0.0005	UJ	0.0028
3,3'-DiCB	PCB-011	2050-67-1	0.152	0.0005		0.0028
3,4/3,4'-DiCB	PCB-012/013		0.0005	0.0005	UJ	0.0028
4,4'-DiCB	PCB-015	2050-68-2	0.0868	0.0008		0.0028
2,2',6-TrCB	PCB-019	38444-73-4	0.0015	0.0015	UJ	0.0028
2,4,6-TrCB	PCB-030	35693-92-6	0.0038	0.0038	U	0.0028
2,2',5-TrCB	PCB-018	37680-65-2	0.129	0.0047		0.0028
2,2',4-TrCB	PCB-017	37680-66-3	0.107	0.0067		0.0028
2,3,6-TrCB	PCB-024	55702-45-9	0.008	0.008	U	0.0028
2,3',6-TrCB	PCB-027	38444-76-7	0.0236	0.0037		0.0028
2,4',6-TrCB	PCB-032	38444-77-8	0.28	0.0071		0.0028
2,2',3-TrCB	PCB-016	38444-78-9	0.0872	0.0015		0.0028
2,3,5-TrCB	PCB-023	55720-44-0	0.0008	0.0008	UJ	0.0028
2,3',5'-TrCB	PCB-034	37680-68-5	0.0006	0.0005	J	0.0028
2,4,5-TrCB	PCB-029	15862-07-4	0.0011	0.0005	NJ	0.0028
2,3',5-TrCB	PCB-026	38444-81-4	0.0507	0.0006		0.0028
2,3',4-TrCB	PCB-025	55712-37-3	0.0248	0.0006		0.0028
2,4',5-TrCB	PCB-031	16606-02-3	0.26	0.0005		0.0028
2,4,4'-TrCB	PCB-028	7012-37-5	0.457	0.0006		0.0028
2,3,4-TrCB	PCB-021	55702-46-0	0.0011	0.0011	UJ	0.0028
	PCB-020/033		0.125	0.0007		0.0028
2,3,4'-TrCB	PCB-022	38444-85-8	0.167	0.0008		0.0028
3,3',5-TrCB	PCB-036	38444-87-0	0.0007	0.0007	UJ	0.0028
3,4',5-TrCB	PCB-039	38444-88-1	0.0077	0.0006	UJ	0.0028
3,4,5-TrCB	PCB-038	53555-66-1	0.0008	0.0008	UJ	0.0028
3,3',4-TrCB	PCB-035	37680-69-6	0.0011	0.0011	UJ	0.0028
3,4,4'-TrCB	PCB-037	38444-90-5	0.306	0.0013		0.0028
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0014	0.0014	UJ	0.0028
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0033	0.0033	U	0.0028
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0824	0.0038		0.0028
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0174	0.0033		0.0028
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0737	0.0037		0.0028
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.021	0.0048		0.0028
	PCB-052/069		0.848	0.0032		0.0028
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0032	0.0032	U	0.0028
	PCB-043/049		0.495	0.0035		0.0028
	PCB-065/075		0.0031	0.0031	U	0.0028
	PCB-047/048		0.246	0.0029		0.0028
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0023	0.0023	UJ	0.0028
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.642	0.0048		0.0028
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0824	0.0023		0.0028
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.15	0.003		0.0028
	PCB-064/072		0.213	0.0023		0.0028

DATA REPORT

Client: City of Spokane
Client ID: P. Ost. Colum. Jar #1
Field ID: #16-17820
PRL ID: PR164219

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/21/2017 1/25/2017
HRMS File: DF01201715 FS01251707

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.204	0.0022		0.0028
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0978	0.0028		0.0028
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0019	0.0019	UJ	0.0028
	PCB-040/057		0.124	0.0055		0.0028
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0167	0.003		0.0028
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0166	0.0026		0.0028
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0166	0.0026		0.0028
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0024	0.0024	UJ	0.0028
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.222	0.0021		0.0028
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.657	0.0027		0.0028
	PCB-055/080		0.002	0.002	UJ	0.0028
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.395	0.0018		0.0028
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0025	0.0025	UJ	0.0028
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.409	0.0026		0.0028
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.002	0.002	UJ	0.0028
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0025	0.0025	UJ	0.0028
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0084	0.0022		0.0028
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0057	0.0057	U	0.0028
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.117	0.0069		0.0028
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0021	0.0021	UJ	0.0028
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0079	0.0079	U	0.0028
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.01	0.01	U	0.0028
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0126	0.0126	U	0.0028
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.016	0.016	U	0.0028
	PCB-093/098/102		0.0107	0.0107	U	0.0028
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	1.28	0.0116		0.0028
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0148	0.0148	U	0.0028
	PCB-091/121		0.0098	0.0098	U	0.0028
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.345	0.0118		0.0028
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.142	0.0113		0.0028
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0145	0.0145	U	0.0028
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0128	0.0128	U	0.0028
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.931	0.0084		0.0028
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0103	0.0103	U	0.0028
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.744	0.0159		0.0028
	PCB-112/119		0.0084	0.0084	U	0.0028
	PCB-083/109		0.0158	0.0158	U	0.0028
	PCB-086/117		0.01	0.01	U	0.0028
	PCB-097/116		0.618	0.0179		0.0028
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0145	0.0145	U	0.0028
	PCB-087/115		0.495	0.0102		0.0028
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0074	0.0074	U	0.0028
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.18	0.0107		0.0028
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0059	0.0059	U	0.0028
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.871	0.0055		0.0028
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.253	0.0173		0.0028
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0146	0.0146	U	0.0028
	PCB-107/108		0.0033	0.0033	U	0.0028
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0039	0.0039	U	0.0028
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0047	0.0047	U	0.0028
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.79	0.0039		0.0028
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0046	0.0046	U	0.0028

DATA REPORT

Client: City of Spokane
Client ID: P. Ost. Colum. Jar #1
Field ID: #16-17820
PRL ID: PR164219

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/21/2017 1/25/2017
HRMS File: DF01201715 FS01251707

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0038	0.0038	U	0.0028
	PCB-105/127		0.453	0.005		0.0028
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0054	0.0054	U	0.0028
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.0028	0.0028	U	0.0028
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0353	0.0353	U	0.0028
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0339	0.0339	U	0.0028
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.0521	0.0521	U	0.0028
	PCB-136/148		1.59	0.0541		0.0028
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0371	0.0371	U	0.0028
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	1.59	0.0486		0.0028
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	1.14	0.0617		0.0028
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.0534	0.0534	U	0.0028
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0558	0.0558	U	0.0028
	PCB-139/149		6.48	0.054		0.0028
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.063	0.063	U	0.0028
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0051	0.0051	U	0.0028
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.0061	0.0061	U	0.0028
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.007	0.007	U	0.0028
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0072	0.0072	U	0.0028
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0038	0.0038	U	0.0028
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0049	0.0049	U	0.0028
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.262	0.0042		0.0028
	PCB-132/161		0.773	0.0047		0.0028
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	1.49	0.0042		0.0028
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0034	0.0034	U	0.0028
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.393	0.0052		0.0028
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0685	0.0054		0.0028
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.114	0.0054		0.0028
	PCB-163/164		0.335	0.0042		0.0028
	PCB-138/160		1.15	0.0035		0.0028
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.122	0.0027		0.0028
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.0047	0.0047	U	0.0028
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0033	0.0033	U	0.0028
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.0033	0.0033	U	0.0028
	PCB-128/162		0.231	0.0045		0.0028
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0643	0.0044		0.0028
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.134	0.0045		0.0028
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0259	0.004		0.0028
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0064	0.0064	U	0.0028
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0006	0.0006	UJ	0.0028
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0004	0.0004	UJ	0.0028
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.116	0.0004		0.0028
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0348	0.0005		0.0028
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0005	0.0005	UJ	0.0028
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0595	0.0008		0.0028
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0122	0.0008		0.0028
	PCB-182/187		0.42	0.0008		0.0028
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.189	0.0008		0.0028
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0385	0.0009		0.0028
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.335	0.0008		0.0028
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.001	0.001	UJ	0.0028
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.171	0.0009		0.0028

DATA REPORT

Client: City of Spokane
Client ID: P. Ost. Colum. Jar #1
Field ID: #16-17820
PRL ID: PR164219

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/21/2017 1/25/2017
HRMS File: DF01201715 FS01251707

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0856	0.0009		0.0028
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0049	0.001	UJ	0.0028
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.046	0.0011		0.0028
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.001	0.001	UJ	0.0028
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.739	0.001		0.0028
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.001	0.001	UJ	0.0028
2,3,3',4,4',5,5',6-HpCB	PCB-191	74472-50-7	0.0119	0.0009		0.0028
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.336	0.0014		0.0028
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.076	0.0011		0.0028
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.015	0.0005		0.0028
2,2',3,3',5,5',6,6'-OoCB	PCB-202	2136-99-4	0.0514	0.0003		0.0028
2,2',3,3',4,5',6,6'-OoCB	PCB-201	40186-71-8	0.0251	0.0002		0.0028
2,2',3,4,4',5,6,6'-OoCB	PCB-204	74472-52-9	0.0003	0.0003	UJ	0.0028
2,2',3,3',4,4',6,6'-OoCB	PCB-197	33091-17-7	0.0044	0.0003		0.0028
2,2',3,3',4,5,6,6'-OoCB	PCB-200	52663-73-7	0.0183	0.0002		0.0028
2,2',3,3',4,5,5',6-OoCB	PCB-198	68194-17-2	0.0005	0.0005		0.0028
2,2',3,3',4,5,5',6'-OoCB	PCB-199	52663-75-9	0.197	0.0005		0.0028
2,2',3,3',4,4',5,6'-OoCB	PCB-196	42740-50-1	0.096	0.0005		0.0028
2,2',3,4,4',5,5',6-OoCB	PCB-203	52663-76-0	0.157	0.0006		0.0028
2,2',3,3',4,4',5,6-OoCB	PCB-195	52663-78-2	0.0534	0.0004		0.0028
2,2',3,3',4,4',5,5'-OoCB	PCB-194	35694-08-7	0.202	0.0006		0.0028
2,3,3',4,4',5,5',6-OoCB	PCB-205	74472-53-0	0.0003	0.0003	UJ	0.0028
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0334	0.0019		0.0028
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0233	0.002	UJ	0.0028
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.105	0.0032		0.0028
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0361	0.0006		0.0028

Homologs	# of Congeners		
Monochlorobiphenyls	3	0.0122	0.0002
Dichlorobiphenyls	12	0.282	0.0004
Trichlorobiphenyls	24	2.02	0.0005
Tetrachlorobiphenyls	42	5.16	0.0014
Pentachlorobiphenyls	46	7.1	0.0021
Hexachlorobiphenyls	42	16	0.0027
Heptachlorobiphenyls	24	2.69	0.0004
Octachlorobiphenyls	12	1	0.0002
Nonachlorobiphenyls	3	0.138	0.0019
Decachlorobiphenyl	1	0.0361	0.0006
Total PCB		34.4	0.0002

DATA REPORT

Client: City of Spokane
Client ID: P. Ost. Colum. Jar #1
Field ID: #16-17820
PRL ID: PR164219

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/21/2017 1/25/2017
HRMS File: DF01201715 FS01251707

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	62	5	145
¹³ C ₁₂ -4-MoCB	3L	66	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	65	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	66	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	138	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	89	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	85	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	38	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	40	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	131	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	142	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	142	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	137	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	128	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	88	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	136	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	55	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	45	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HxCB	157L	49	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	36	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	83	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	72	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	98	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	84	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	67	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	99	10	145
¹³ C ₁₂ -DeCB	209L	139	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	112	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	65	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	80	10	145

DATA REPORT

Client: City of Spokane
Client ID: T.V. Black Jar #2
Field ID: #16-17821
PRL ID: PR164220

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/14/2017
HRMS File: DF01141706

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.002	0.0002	BJ	0.0044
3-MoCB	PCB-002	2051-61-8	0.0023	0.0002	J	0.0044
4-MoCB	PCB-003	2051-62-9	0.004	0.0002	J	0.0044
2,6-DiCB	PCB-010	33146-45-1	0.0004	0.0004	UJ	0.0044
2,2'-DiCB	PCB-004	13029-08-8	0.0029	0.0007	J	0.0044
2,5-DiCB	PCB-009	34883-39-1	0.0005	0.0005	UJ	0.0044
2,4-DiCB	PCB-007	33284-50-3	0.0005	0.0005	UJ	0.0044
2,3'-DiCB	PCB-006	25569-80-6	0.0031	0.0005	J	0.0044
2,3/2,4'-DiCB	PCB-005/008		0.0131	0.0005		0.0044
3,5-DiCB	PCB-014	34883-41-5	0.0005	0.0005	UJ	0.0044
3,3'-DiCB	PCB-011	2050-67-1	0.0418	0.0006		0.0044
3,4/3,4'-DiCB	PCB-012/013		0.0006	0.0006	UJ	0.0044
4,4'-DiCB	PCB-015	2050-68-2	0.0383	0.0006		0.0044
2,2',6-TrCB	PCB-019	38444-73-4	0.0131	0.0008		0.0044
2,4,6-TrCB	PCB-030	35693-92-6	0.001	0.001	UJ	0.0044
2,2',5-TrCB	PCB-018	37680-65-2	0.081	0.0012		0.0044
2,2',4-TrCB	PCB-017	37680-66-3	0.0493	0.0014		0.0044
2,3,6-TrCB	PCB-024	55702-45-9	0.0012	0.0012	UJ	0.0044
2,3',6-TrCB	PCB-027	38444-76-7	0.0008	0.0008	UJ	0.0044
2,4',6-TrCB	PCB-032	38444-77-8	0.175	0.0006		0.0044
2,2',3-TrCB	PCB-016	38444-78-9	0.0143	0.0003		0.0044
2,3,5-TrCB	PCB-023	55720-44-0	0.0002	0.0002	UJ	0.0044
2,3',5'-TrCB	PCB-034	37680-68-5	0.0002	0.0002	UJ	0.0044
2,4,5-TrCB	PCB-029	15862-07-4	0.0002	0.0002	UJ	0.0044
2,3',5-TrCB	PCB-026	38444-81-4	0.017	0.0002		0.0044
2,3',4-TrCB	PCB-025	55712-37-3	0.0142	0.0002		0.0044
2,4',5-TrCB	PCB-031	16606-02-3	0.115	0.0002		0.0044
2,4,4'-TrCB	PCB-028	7012-37-5	0.198	0.0002		0.0044
2,3,4-TrCB	PCB-021	55702-46-0	0.0003	0.0003	UJ	0.0044
	PCB-020/033		0.0504	0.0002		0.0044
2,3,4'-TrCB	PCB-022	38444-85-8	0.0806	0.0003		0.0044
3,3',5-TrCB	PCB-036	38444-87-0	0.0137	0.0002		0.0044
3,4',5-TrCB	PCB-039	38444-88-1	0.0003	0.0003	UJ	0.0044
3,4,5-TrCB	PCB-038	53555-66-1	0.0003	0.0003	UJ	0.0044
3,3',4-TrCB	PCB-035	37680-69-6	0.006	0.0003		0.0044
3,4,4'-TrCB	PCB-037	38444-90-5	0.243	0.0009		0.0044
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0007	0.0007	UJ	0.0044
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0011	0.0011	UJ	0.0044
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0699	0.0011		0.0044
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0258	0.0012		0.0044
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0763	0.0012		0.0044
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0325	0.0014		0.0044
	PCB-052/069		0.514	0.0013		0.0044
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0011	0.0011	UJ	0.0044
	PCB-043/049		0.287	0.0015		0.0044
	PCB-065/075		0.0009	0.0009	UJ	0.0044
	PCB-047/048		0.162	0.0014		0.0044
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0012	0.0012	UJ	0.0044
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.374	0.0017		0.0044
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0437	0.0011		0.0044
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.124	0.0017		0.0044
	PCB-064/072		0.272	0.0012		0.0044

DATA REPORT

Client: City of Spokane
Client ID: T.V. Black Jar #2
Field ID: #16-17821
PRL ID: PR164220

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/14/2017
HRMS File: DF01141706

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.108	0.001		0.0044
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.051	0.0021		0.0044
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0013	0.0013	UJ	0.0044
	PCB-040/057		0.0698	0.002		0.0044
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0013	0.0013	UJ	0.0044
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0012	0.0012	UJ	0.0044
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0012	0.0012	UJ	0.0044
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0015	0.0015	UJ	0.0044
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.16	0.0013		0.0044
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.403	0.0014		0.0044
	PCB-055/080		0.0013	0.0013	UJ	0.0044
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.309	0.0014		0.0044
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0014	0.0014	UJ	0.0044
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.118	0.0016		0.0044
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.155	0.0015		0.0044
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0247	0.0018	NJ	0.0044
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0021	0.0021	UJ	0.0044
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0036	0.0036	UJ	0.0044
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.061	0.0039		0.0044
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0006	0.0006	UJ	0.0044
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0022	0.0022	UJ	0.0044
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.003	0.003	UJ	0.0044
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0035	0.0035	UJ	0.0044
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0038	0.0038	UJ	0.0044
	PCB-093/098/102		0.0042	0.0042	UJ	0.0044
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.622	0.0029		0.0044
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0037	0.0037	UJ	0.0044
	PCB-091/121		0.127	0.0036		0.0044
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.354	0.0037		0.0044
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.0037	0.0037	UJ	0.0044
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0037	0.0037	UJ	0.0044
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0041	0.0041	UJ	0.0044
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.641	0.0033		0.0044
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0028	0.0028	UJ	0.0044
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.259	0.0036		0.0044
	PCB-112/119		0.003	0.003	UJ	0.0044
	PCB-083/109		0.0027	0.0027		0.0044
	PCB-086/117		0.0048	0.0048	U	0.0044
	PCB-097/116		0.224	0.0037		0.0044
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0032	0.0032	UJ	0.0044
	PCB-087/115		0.294	0.0037		0.0044
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0036	0.0036		0.0044
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.133	0.0036		0.0044
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0034	0.0034	UJ	0.0044
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	1.07	0.0035		0.0044
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.124	0.0051		0.0044
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0267	0.0007		0.0044
	PCB-107/108		0.0488	0.0011		0.0044
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0018	0.0018	UJ	0.0044
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0011	0.0011	UJ	0.0044
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.647	0.0017		0.0044
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0447	0.002		0.0044

DATA REPORT

Client: City of Spokane
Client ID: T.V. Black Jar #2
Field ID: #16-17821
PRL ID: PR164220

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/14/2017
HRMS File: DF01141706

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0088	0.0012		0.0044
	PCB-105/127		0.364	0.0015		0.0044
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0198	0.0017		0.0044
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.001	0.001	UJ	0.0044
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0017	0.0017	UJ	0.0044
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0015	0.0015	UJ	0.0044
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.0018	0.0018	UJ	0.0044
	PCB-136/148		0.255	0.0016		0.0044
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0022	0.0022	UJ	0.0044
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.38	0.0024		0.0044
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.22	0.0026		0.0044
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.073	0.0028		0.0044
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0381	0.0023		0.0044
	PCB-139/149		1.4	0.0025		0.0044
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0004	0.0004	UJ	0.0044
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0004	0.0004	UJ	0.0044
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.0388	0.0006		0.0044
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0005	0.0005	UJ	0.0044
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0006	0.0006	UJ	0.0044
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0057	0.0006	NJ	0.0044
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0005	0.0005	UJ	0.0044
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.0981	0.0005		0.0044
	PCB-132/161		0.278	0.0006		0.0044
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	0.598	0.0005		0.0044
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0005	0.0005	UJ	0.0044
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.177	0.0006		0.0044
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0459	0.0007		0.0044
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0605	0.0007		0.0044
	PCB-163/164		0.287	0.0005		0.0044
	PCB-138/160		0.673	0.0007		0.0044
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.0904	0.0005		0.0044
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.0514	0.0007		0.0044
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0039	0.0006	NJ	0.0044
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.0008	0.0008	UJ	0.0044
	PCB-128/162		0.166	0.0007		0.0044
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0746	0.0011		0.0044
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.169	0.0011		0.0044
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0436	0.0011		0.0044
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0013	0.0013	UJ	0.0044
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0013	0.0013	UJ	0.0044
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0009	0.0009	UJ	0.0044
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.114	0.0008		0.0044
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0407	0.0009		0.0044
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.001	0.001	UJ	0.0044
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0586	0.0015		0.0044
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0123	0.0015		0.0044
	PCB-182/187		0.398	0.0015		0.0044
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.184	0.0015		0.0044
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0477	0.0017		0.0044
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.356	0.0016		0.0044
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0019	0.0019	UJ	0.0044
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.188	0.0016		0.0044

DATA REPORT

Client: City of Spokane
 Client ID: T.V. Black Jar #2
 Field ID: #16-17821
 PRL ID: PR164220

Contact: Jeff Donovan
 Date Extracted: 12/29/2016
 Date Analysed: 1/14/2017
 HRMS File: DF01141706

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.085	0.0017		0.0044
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0103	0.0019		0.0044
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0824	0.002		0.0044
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0019	0.0019	UJ	0.0044
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.873	0.0019		0.0044
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0019	0.0019	UJ	0.0044
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.0017	0.0017	UJ	0.0044
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.453	0.0027		0.0044
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.11	0.0021		0.0044
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.0281	0.0009		0.0044
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0625	0.0006		0.0044
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0355	0.0005		0.0044
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0005	0.0005	UJ	0.0044
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.009	0.0006		0.0044
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0265	0.0005		0.0044
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.001	0.001	UJ	0.0044
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.275	0.001		0.0044
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.15	0.001		0.0044
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.176	0.0012		0.0044
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0667	0.0008		0.0044
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.235	0.0012		0.0044
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0007	0.0007	UJ	0.0044
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0582	0.0058		0.0044
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0058	0.0058	U	0.0044
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.102	0.0082		0.0044
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.004	0.004	UJ	0.0044

Homologs	# of Congeners		
Monochlorobiphenyls	3	0.0083	0.0002
Dichlorobiphenyls	12	0.0992	0.0004
Trichlorobiphenyls	24	1.07	0.0002
Tetrachlorobiphenyls	42	3.42	0.0007
Pentachlorobiphenyls	46	5.19	0.0006
Hexachlorobiphenyls	42	5.22	0.0004
Heptachlorobiphenyls	24	3.04	0.0008
Octachlorobiphenyls	12	1.04	0.0005
Nonachlorobiphenyls	3	0.16	0.0058
Decachlorobiphenyl	1	0.004	0.004
Total PCB		19.2	0.0002

DATA REPORT

Client: City of Spokane
Client ID: T.V. Black Jar #2
Field ID: #16-17821
PRL ID: PR164220

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/14/2017
HRMS File: DF01141706

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	57	5	145
¹³ C ₁₂ -4-MoCB	3L	67	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	71	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	82	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	145	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	133	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	74	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	63	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	72	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	114	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	117	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	114	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	115	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	122	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	140	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	92	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	84	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	96	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HxCB	157L	95	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	127	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	106	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	55	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	144	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	81	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	72	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	134	10	145
¹³ C ₁₂ -DeCB	209L	137	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	144	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	139	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	110	10	145

DATA REPORT

Client: City of Spokane
Client ID: P. Djamor Jar #1
Field ID: #16-17822
PRL ID: PR164221

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101717

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0025	0.0002	BJ	0.0032
3-MoCB	PCB-002	2051-61-8	0.0032	0.0002		0.0032
4-MoCB	PCB-003	2051-62-9	0.004	0.0002		0.0032
2,6-DiCB	PCB-010	33146-45-1	0.0009	0.0004	J	0.0032
2,2'-DiCB	PCB-004	13029-08-8	0.0043	0.0007		0.0032
2,5-DiCB	PCB-009	34883-39-1	0.0004	0.0004	UJ	0.0032
2,4-DiCB	PCB-007	33284-50-3	0.0044	0.0005		0.0032
2,3'-DiCB	PCB-006	25569-80-6	0.0055	0.0005		0.0032
2,3/2,4'-DiCB	PCB-005/008		0.0325	0.0005		0.0032
3,5-DiCB	PCB-014	34883-41-5	0.0005	0.0005	UJ	0.0032
3,3'-DiCB	PCB-011	2050-67-1	0.231	0.0005		0.0032
3,4/3,4'-DiCB	PCB-012/013		0.0092	0.0006		0.0032
4,4'-DiCB	PCB-015	2050-68-2	0.0647	0.0005		0.0032
2,2',6-TrCB	PCB-019	38444-73-4	0.0086	0.0015	NJ	0.0032
2,4,6-TrCB	PCB-030	35693-92-6	0.0011	0.0011	UJ	0.0032
2,2',5-TrCB	PCB-018	37680-65-2	0.0404	0.0013		0.0032
2,2',4-TrCB	PCB-017	37680-66-3	0.0376	0.0017		0.0032
2,3,6-TrCB	PCB-024	55702-45-9	0.0021	0.0013	NJ	0.0032
2,3',6-TrCB	PCB-027	38444-76-7	0.0058	0.0008		0.0032
2,4',6-TrCB	PCB-032	38444-77-8	0.28	0.0008		0.0032
2,2',3-TrCB	PCB-016	38444-78-9	0.0408	0.0003		0.0032
2,3,5-TrCB	PCB-023	55720-44-0	0.0006	0.0002	NJ	0.0032
2,3',5'-TrCB	PCB-034	37680-68-5	0.0008	0.0002	NJ	0.0032
2,4,5-TrCB	PCB-029	15862-07-4	0.0008	0.0002	NJ	0.0032
2,3',5-TrCB	PCB-026	38444-81-4	0.0297	0.0002		0.0032
2,3',4-TrCB	PCB-025	55712-37-3	0.0208	0.0002		0.0032
2,4',5-TrCB	PCB-031	16606-02-3	0.205	0.0002		0.0032
2,4,4'-TrCB	PCB-028	7012-37-5	0.343	0.0002		0.0032
2,3,4-TrCB	PCB-021	55702-46-0	0.0003	0.0003	UJ	0.0032
	PCB-020/033		0.103	0.0002		0.0032
2,3,4'-TrCB	PCB-022	38444-85-8	0.147	0.0003		0.0032
3,3',5-TrCB	PCB-036	38444-87-0	0.005	0.0003	NJ	0.0032
3,4',5-TrCB	PCB-039	38444-88-1	0.0008	0.0003	J	0.0032
3,4,5-TrCB	PCB-038	53555-66-1	0.0005	0.0003	NJ	0.0032
3,3',4-TrCB	PCB-035	37680-69-6	0.0104	0.0004		0.0032
3,4,4'-TrCB	PCB-037	38444-90-5	0.118	0.0003		0.0032
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0006	0.0006	UJ	0.0032
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0011	0.0011	UJ	0.0032
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0355	0.0012		0.0032
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0278	0.0012		0.0032
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0654	0.0012		0.0032
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0298	0.0013		0.0032
	PCB-052/069		0.316	0.001		0.0032
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0011	0.0011	UJ	0.0032
	PCB-043/049		0.387	0.0013		0.0032
	PCB-065/075		0.0008	0.0008	UJ	0.0032
	PCB-047/048		0.212	0.0012		0.0032
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0011	0.0011	UJ	0.0032
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.398	0.0015		0.0032
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0383	0.001		0.0032
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.17	0.0015		0.0032
	PCB-064/072		0.328	0.001		0.0032

DATA REPORT

Client: City of Spokane
Client ID: P. Djamor Jar #1
Field ID: #16-17822
PRL ID: PR164221

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101717

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.151	0.0009		0.0032
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0394	0.0017		0.0032
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0037	0.001	NJ	0.0032
	PCB-040/057		0.0986	0.0017		0.0032
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0123	0.001	NJ	0.0032
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0186	0.001	NJ	0.0032
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.001	0.001	NJ	0.0032
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0012	0.0012	UJ	0.0032
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.241	0.0011		0.0032
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.523	0.0011		0.0032
	PCB-055/080		0.0011	0.0011	UJ	0.0032
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.451	0.0011		0.0032
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0167	0.0012	NJ	0.0032
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.137	0.0011		0.0032
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.266	0.0013		0.0032
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0014	0.0014	UJ	0.0032
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0016	0.0016	UJ	0.0032
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0045	0.002	NJ	0.0032
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0442	0.002		0.0032
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0013	0.0013	UJ	0.0032
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0063	0.003		0.0032
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0039	0.0039	U	0.0032
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.004	0.004	U	0.0032
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0048	0.0048	U	0.0032
	PCB-093/098/102		0.0048	0.0048	U	0.0032
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.472	0.004		0.0032
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0045	0.0045	U	0.0032
	PCB-091/121		0.1	0.0043		0.0032
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.279	0.0047		0.0032
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.0047	0.0047	U	0.0032
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0097	0.0045	NJ	0.0032
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0043	0.0043	U	0.0032
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.517	0.0038		0.0032
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0035	0.0035	U	0.0032
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.247	0.0041		0.0032
	PCB-112/119		0.0102	0.0031	NJ	0.0032
	PCB-083/109		0.0033	0.0033	U	0.0032
	PCB-086/117		0.005	0.005	U	0.0032
	PCB-097/116		0.195	0.0041		0.0032
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0035	0.0035	U	0.0032
	PCB-087/115		0.271	0.0042		0.0032
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0039	0.0039		0.0032
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.104	0.0039		0.0032
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0035	0.0035	U	0.0032
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.74	0.0037		0.0032
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.101	0.0059		0.0032
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0413	0.0009		0.0032
	PCB-107/108		0.0484	0.0011		0.0032
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0131	0.0011		0.0032
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0012	0.0012	UJ	0.0032
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.45	0.0011		0.0032
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0271	0.0013		0.0032

DATA REPORT

Client: City of Spokane
Client ID: P. Djamor Jar #1
Field ID: #16-17822
PRL ID: PR164221

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101717

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0097	0.0012		0.0032
	PCB-105/127		0.227	0.001		0.0032
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0064	0.0009		0.0032
2,2',4,4',6',6'-HxCB	PCB-155	33979-03-2	0.003	0.003	UJ	0.0032
2,2',3,4',6',6'-HxCB	PCB-150	68194-08-1	0.0034	0.0034	U	0.0032
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0031	0.0031	UJ	0.0032
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.0035	0.0035	U	0.0032
	PCB-136/148		0.113	0.0033		0.0032
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0037	0.0037	U	0.0032
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.181	0.0042		0.0032
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.096	0.0052		0.0032
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.0128	0.0041	NJ	0.0032
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.031	0.0054	NJ	0.0032
	PCB-139/149		0.561	0.0041		0.0032
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0009	0.0009	UJ	0.0032
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0018	0.001	NJ	0.0032
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.052	0.0013		0.0032
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0012	0.0012	UJ	0.0032
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0176	0.0013		0.0032
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0073	0.0011	NJ	0.0032
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0009	0.0009	UJ	0.0032
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.124	0.001		0.0032
	PCB-132/161		0.389	0.0012		0.0032
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	0.642	0.0008		0.0032
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0009	0.0009	UJ	0.0032
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.191	0.0011		0.0032
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0411	0.0012		0.0032
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0584	0.0013		0.0032
	PCB-163/164		0.287	0.0009		0.0032
	PCB-138/160		0.663	0.0011		0.0032
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.0876	0.0008		0.0032
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.0609	0.0013		0.0032
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0054	0.001	NJ	0.0032
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.0013	0.0013	UJ	0.0032
	PCB-128/162		0.165	0.0012		0.0032
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0543	0.0013		0.0032
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.0876	0.0013		0.0032
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0178	0.0013		0.0032
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0015	0.0015	UJ	0.0032
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0021	0.0021	UJ	0.0032
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0014	0.0014	UJ	0.0032
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.108	0.0012		0.0032
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0306	0.0013		0.0032
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0015	0.0015	UJ	0.0032
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0403	0.0018		0.0032
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0082	0.0017	NJ	0.0032
	PCB-182/187		0.28	0.0017		0.0032
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.128	0.0017		0.0032
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0307	0.002		0.0032
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.217	0.0018		0.0032
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0022	0.0022	UJ	0.0032
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.124	0.002		0.0032

DATA REPORT

Client: City of Spokane
Client ID: P. Djamor Jar #1
Field ID: #16-17822
PRL ID: PR164221

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101717

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.065	0.0021		0.0032
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0033	0.0024	NJ	0.0032
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0433	0.0027		0.0032
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0022	0.0022	UJ	0.0032
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.523	0.0022		0.0032
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0022	0.0022	UJ	0.0032
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.0098	0.0023	NJ	0.0032
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.267	0.0037		0.0032
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.056	0.0029		0.0032
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.0132	0.0012		0.0032
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0614	0.0022		0.0032
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0275	0.0014		0.0032
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0015	0.0015	UJ	0.0032
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.006	0.0016	NJ	0.0032
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0251	0.0015		0.0032
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0031	0.0031	UJ	0.0032
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.24	0.0031		0.0032
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.095	0.0031		0.0032
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.199	0.0037		0.0032
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0729	0.0026	NJ	0.0032
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.318	0.0042		0.0032
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0271	0.0018		0.0032
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0632	0.0099		0.0032
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.018	0.0096	NJ	0.0032
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.0756	0.015	NJ	0.0032
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0382	0.0074	NJ	0.0032

Homologs	# of Congeners		
Monochlorobiphenyls	3	0.0097	0.0002
Dichlorobiphenyls	12	0.353	0.0004
Trichlorobiphenyls	24	1.38	0.0002
Tetrachlorobiphenyls	42	3.96	0.0006
Pentachlorobiphenyls	46	3.96	0.0009
Hexachlorobiphenyls	42	3.89	0.0008
Heptachlorobiphenyls	24	1.93	0.0012
Octachlorobiphenyls	12	0.993	0.0014
Nonachlorobiphenyls	3	0.0632	0.0096
Decachlorobiphenyl	1	0.0074	0.0074
Total PCB		16.5	0.0002

DATA REPORT

Client: City of Spokane
Client ID: P. Djamor Jar #1
Field ID: #16-17822
PRL ID: PR164221

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101717

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	87	5	145
¹³ C ₁₂ -4-MoCB	3L	104	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	76	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	85	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	76	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	119	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	85	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	73	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	83	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	98	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	134	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	126	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	125	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	123	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	127	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	76	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	64	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	66	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HxCB	157L	65	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	86	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	77	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	103	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	51	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	91	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	56	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	94	10	145
¹³ C ₁₂ -DeCB	209L	77	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	129	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	130	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	67	10	145

DATA REPORT

Client: City of Spokane
Client ID: P. Ost. Brat Jar #1
Field ID: #16-17823
PRL ID: PR164222

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101716

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0024	0.0002	BJ	0.0025
3-MoCB	PCB-002	2051-61-8	0.002	0.0002	J	0.0025
4-MoCB	PCB-003	2051-62-9	0.0033	0.0002		0.0025
2,6-DiCB	PCB-010	33146-45-1	0.0005	0.0005	UJ	0.0025
2,2'-DiCB	PCB-004	13029-08-8	0.004	0.0007		0.0025
2,5-DiCB	PCB-009	34883-39-1	0.0005	0.0005	UJ	0.0025
2,4-DiCB	PCB-007	33284-50-3	0.0005	0.0005	UJ	0.0025
2,3'-DiCB	PCB-006	25569-80-6	0.004	0.0005		0.0025
2,3/2,4'-DiCB	PCB-005/008		0.0271	0.0005		0.0025
3,5-DiCB	PCB-014	34883-41-5	0.0005	0.0005	UJ	0.0025
3,3'-DiCB	PCB-011	2050-67-1	0.163	0.0006		0.0025
3,4/3,4'-DiCB	PCB-012/013		0.0006	0.0006	UJ	0.0025
4,4'-DiCB	PCB-015	2050-68-2	0.0582	0.0005		0.0025
2,2',6-TrCB	PCB-019	38444-73-4	0.0035	0.0015	NJ	0.0025
2,4,6-TrCB	PCB-030	35693-92-6	0.0009	0.0009	UJ	0.0025
2,2',5-TrCB	PCB-018	37680-65-2	0.0397	0.0011		0.0025
2,2',4-TrCB	PCB-017	37680-66-3	0.0259	0.0014		0.0025
2,3,6-TrCB	PCB-024	55702-45-9	0.0011	0.0011	UJ	0.0025
2,3',6-TrCB	PCB-027	38444-76-7	0.0031	0.0007	NJ	0.0025
2,4',6-TrCB	PCB-032	38444-77-8	0.133	0.0007		0.0025
2,2',3-TrCB	PCB-016	38444-78-9	0.0205	0.0003		0.0025
2,3,5-TrCB	PCB-023	55720-44-0	0.0001	0.0001	UJ	0.0025
2,3',5'-TrCB	PCB-034	37680-68-5	0.0004	0.0002	NJ	0.0025
2,4,5-TrCB	PCB-029	15862-07-4	0.0011	0.0001	J	0.0025
2,3',5-TrCB	PCB-026	38444-81-4	0.0244	0.0001		0.0025
2,3',4-TrCB	PCB-025	55712-37-3	0.0112	0.0002		0.0025
2,4',5-TrCB	PCB-031	16606-02-3	0.155	0.0001		0.0025
2,4,4'-TrCB	PCB-028	7012-37-5	0.226	0.0002		0.0025
2,3,4-TrCB	PCB-021	55702-46-0	0.0002	0.0002	UJ	0.0025
	PCB-020/033		0.0571	0.0002		0.0025
2,3,4'-TrCB	PCB-022	38444-85-8	0.106	0.0002		0.0025
3,3',5-TrCB	PCB-036	38444-87-0	0.0058	0.0002		0.0025
3,4',5-TrCB	PCB-039	38444-88-1	0.0013	0.0002	NJ	0.0025
3,4,5-TrCB	PCB-038	53555-66-1	0.0006	0.0003	NJ	0.0025
3,3',4-TrCB	PCB-035	37680-69-6	0.0097	0.0003		0.0025
3,4,4'-TrCB	PCB-037	38444-90-5	0.0898	0.0002		0.0025
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0006	0.0006	UJ	0.0025
2,2',4,6-TeCB	PCB-050	62796-65-0	0.001	0.001	UJ	0.0025
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0455	0.0011		0.0025
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0182	0.0011		0.0025
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0369	0.0011		0.0025
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0143	0.0012		0.0025
	PCB-052/069		0.442	0.0009		0.0025
2,3',5',6-TeCB	PCB-073	74338-23-1	0.001	0.001	UJ	0.0025
	PCB-043/049		0.337	0.0012		0.0025
	PCB-065/075		0.0007	0.0007	UJ	0.0025
	PCB-047/048		0.189	0.001		0.0025
2,3,4,6-TeCB	PCB-062	54230-22-7	0.001	0.001	UJ	0.0025
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.363	0.0013		0.0025
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0354	0.0009		0.0025
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.146	0.0014		0.0025
	PCB-064/072		0.277	0.0009		0.0025

DATA REPORT

Client: City of Spokane
Client ID: P. Ost. Brat Jar #1
Field ID: #16-17823
PRL ID: PR164222

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101716

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.107	0.0008		0.0025
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0398	0.0015		0.0025
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0025	0.0009	NJ	0.0025
	PCB-040/057		0.0736	0.0016		0.0025
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0119	0.0009		0.0025
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.016	0.0009	NJ	0.0025
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0009	0.0009	NJ	0.0025
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0011	0.0011	UJ	0.0025
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.212	0.001		0.0025
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.448	0.001		0.0025
	PCB-055/080		0.006	0.001	NJ	0.0025
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.403	0.001		0.0025
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0134	0.001	NJ	0.0025
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.117	0.001		0.0025
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.224	0.0011		0.0025
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0012	0.0012	UJ	0.0025
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0014	0.0014	UJ	0.0025
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0041	0.0017	UJ	0.0025
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0407	0.0016		0.0025
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0012	0.0012	UJ	0.0025
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0024	0.0024	UJ	0.0025
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0031	0.0031	U	0.0025
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0032	0.0032	U	0.0025
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0039	0.0039	U	0.0025
	PCB-093/098/102		0.0039	0.0039	U	0.0025
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.413	0.0032		0.0025
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0036	0.0036	U	0.0025
	PCB-091/121		0.0725	0.0035	NJ	0.0025
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.198	0.0038		0.0025
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.0038	0.0038	U	0.0025
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0036	0.0036	U	0.0025
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0149	0.0034	NJ	0.0025
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.39	0.0031		0.0025
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0028	0.0028	U	0.0025
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.177	0.0033		0.0025
	PCB-112/119		0.0025	0.0025	U	0.0025
	PCB-083/109		0.0027	0.0027		0.0025
	PCB-086/117		0.004	0.004	U	0.0025
	PCB-097/116		0.148	0.0033		0.0025
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0028	0.0028	U	0.0025
	PCB-087/115		0.197	0.0034		0.0025
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0032	0.0032		0.0025
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.0738	0.0032		0.0025
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0028	0.0028	U	0.0025
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.524	0.0029		0.0025
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.086	0.0047		0.0025
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0351	0.0008		0.0025
	PCB-107/108		0.0388	0.0009		0.0025
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0094	0.0008		0.0025
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.001	0.001	UJ	0.0025
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.334	0.0008		0.0025
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0215	0.001		0.0025

DATA REPORT

Client: City of Spokane
Client ID: P. Ost. Brat Jar #1
Field ID: #16-17823
PRL ID: PR164222

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101716

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0112	0.001		0.0025
	PCB-105/127		0.167	0.0008		0.0025
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0079	0.0007		0.0025
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.002	0.002	UJ	0.0025
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0026	0.0026	U	0.0025
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0023	0.0023	UJ	0.0025
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.0026	0.0026	U	0.0025
	PCB-136/148		0.0887	0.0024		0.0025
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0027	0.0027	U	0.0025
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.131	0.0031		0.0025
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.0723	0.0039		0.0025
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.0217	0.0031	NJ	0.0025
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0132	0.004	NJ	0.0025
	PCB-139/149		0.456	0.0031		0.0025
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0011	0.0007	NJ	0.0025
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0011	0.0007	NJ	0.0025
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.0399	0.001		0.0025
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0009	0.0009	UJ	0.0025
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0086	0.001	NJ	0.0025
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0064	0.0009	NJ	0.0025
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0007	0.0007	UJ	0.0025
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.0869	0.0007		0.0025
	PCB-132/161		0.273	0.0009		0.0025
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	0.438	0.0006		0.0025
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0007	0.0007	UJ	0.0025
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.132	0.0008		0.0025
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0329	0.0009		0.0025
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0397	0.001		0.0025
	PCB-163/164		0.197	0.0006		0.0025
	PCB-138/160		0.488	0.0008		0.0025
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.0639	0.0006		0.0025
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.036	0.001		0.0025
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0007	0.0007	UJ	0.0025
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.0037	0.001		0.0025
	PCB-128/162		0.11	0.0009		0.0025
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0303	0.0009		0.0025
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.0587	0.001		0.0025
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0189	0.001		0.0025
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0096	0.0013	NJ	0.0025
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0011	0.0011	UJ	0.0025
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0009	0.0009	UJ	0.0025
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.075	0.0008		0.0025
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0191	0.0009		0.0025
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.001	0.001	UJ	0.0025
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0316	0.0012		0.0025
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0039	0.0012	NJ	0.0025
	PCB-182/187		0.192	0.0011		0.0025
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.0767	0.0011		0.0025
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.023	0.0013		0.0025
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.134	0.0012		0.0025
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0015	0.0015	UJ	0.0025
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.0677	0.0013		0.0025

DATA REPORT

Client: City of Spokane
 Client ID: P. Ost. Brat Jar #1
 Field ID: #16-17823
 PRL ID: PR164222

Contact: Jeff Donovan
 Date Extracted: 12/29/2016
 Date Analysed: 1/11/2017
 HRMS File: DF01101716

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0389	0.0014		0.0025
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0016	0.0016	UJ	0.0025
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0254	0.0018	NJ	0.0025
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0015	0.0015	UJ	0.0025
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.298	0.0015		0.0025
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0015	0.0015	UJ	0.0025
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.0052	0.0015	NJ	0.0025
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.154	0.0025		0.0025
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0316	0.002	NJ	0.0025
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.015	0.0011		0.0025
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0283	0.0012	NJ	0.0025
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.017	0.0009	NJ	0.0025
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.001	0.001	UJ	0.0025
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0044	0.001		0.0025
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0155	0.001		0.0025
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0019	0.0019	UJ	0.0025
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.154	0.0019		0.0025
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.0613	0.002		0.0025
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.126	0.0023		0.0025
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0487	0.0016		0.0025
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.185	0.0026		0.0025
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.009	0.0013	NJ	0.0025
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.027	0.0086	NJ	0.0025
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0231	0.009	NJ	0.0025
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.0966	0.0159		0.0025
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.042	0.0069	NJ	0.0025

Homologs	# of Congeners		
Monochlorobiphenyls	3	0.0077	0.0002
Dichlorobiphenyls	12	0.256	0.0005
Trichlorobiphenyls	24	0.905	0.0001
Tetrachlorobiphenyls	42	3.58	0.0006
Pentachlorobiphenyls	46	2.93	0.0007
Hexachlorobiphenyls	42	2.8	0.0006
Heptachlorobiphenyls	24	1.13	0.0008
Octachlorobiphenyls	12	0.595	0.0009
Nonachlorobiphenyls	3	0.0966	0.0086
Decachlorobiphenyl	1	0.0069	0.0069
Total PCB		12.3	0.0001

DATA REPORT

Client: City of Spokane
Client ID: P. Ost. Brat Jar #1
Field ID: #16-17823
PRL ID: PR164222

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101716

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	79	5	145
¹³ C ₁₂ -4-MoCB	3L	96	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	73	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	85	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	73	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	115	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	75	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	75	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	83	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	87	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	145	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	135	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	135	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	127	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	131	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	80	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	65	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	60	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HxCB	157L	60	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	76	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	92	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	94	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	52	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	94	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	65	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	97	10	145
¹³ C ₁₂ -DeCB	209L	81	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	106	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	127	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	60	10	145

DATA REPORT

Client: City of Spokane
Client ID: S. RA. Jar #3
Field ID: #16-17824
PRL ID: PR164223

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/25/2017
HRMS File: FS01251706

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0027	0.0002	BJ	0.0049
3-MoCB	PCB-002	2051-61-8	0.0029	0.0003	J	0.0049
4-MoCB	PCB-003	2051-62-9	0.0031	0.0002	J	0.0049
2,6-DiCB	PCB-010	33146-45-1	0.0008	0.0008	UJ	0.0049
2,2'-DiCB	PCB-004	13029-08-8	0.0037	0.001	J	0.0049
2,5-DiCB	PCB-009	34883-39-1	0.0008	0.0008	UJ	0.0049
2,4-DiCB	PCB-007	33284-50-3	0.001	0.0004	J	0.0049
2,3'-DiCB	PCB-006	25569-80-6	0.0005	0.0005	UJ	0.0049
2,3/2,4'-DiCB	PCB-005/008		0.011	0.0005		0.0049
3,5-DiCB	PCB-014	34883-41-5	0.0005	0.0005	UJ	0.0049
3,3'-DiCB	PCB-011	2050-67-1	0.0537	0.0005		0.0049
3,4/3,4'-DiCB	PCB-012/013		0.0005	0.0005	UJ	0.0049
4,4'-DiCB	PCB-015	2050-68-2	0.04	0.0008		0.0049
2,2',6-TrCB	PCB-019	38444-73-4	0.0033	0.0019	J	0.0049
2,4,6-TrCB	PCB-030	35693-92-6	0.0038	0.0038	UJ	0.0049
2,2',5-TrCB	PCB-018	37680-65-2	0.0598	0.0049		0.0049
2,2',4-TrCB	PCB-017	37680-66-3	0.0377	0.0066		0.0049
2,3,6-TrCB	PCB-024	55702-45-9	0.0079	0.0079	U	0.0049
2,3',6-TrCB	PCB-027	38444-76-7	0.0038	0.0038	UJ	0.0049
2,4',6-TrCB	PCB-032	38444-77-8	0.151	0.007		0.0049
2,2',3-TrCB	PCB-016	38444-78-9	0.0374	0.0015		0.0049
2,3,5-TrCB	PCB-023	55720-44-0	0.0008	0.0008	UJ	0.0049
2,3',5'-TrCB	PCB-034	37680-68-5	0.0005	0.0005	UJ	0.0049
2,4,5-TrCB	PCB-029	15862-07-4	0.0005	0.0005	UJ	0.0049
2,3',5-TrCB	PCB-026	38444-81-4	0.0237	0.0006		0.0049
2,3',4-TrCB	PCB-025	55712-37-3	0.0204	0.0006		0.0049
2,4',5-TrCB	PCB-031	16606-02-3	0.106	0.0005		0.0049
2,4,4'-TrCB	PCB-028	7012-37-5	0.234	0.0006		0.0049
2,3,4-TrCB	PCB-021	55702-46-0	0.0011	0.0011	UJ	0.0049
	PCB-020/033		0.0634	0.0007		0.0049
2,3,4'-TrCB	PCB-022	38444-85-8	0.0817	0.0007		0.0049
3,3',5-TrCB	PCB-036	38444-87-0	0.0007	0.0007	UJ	0.0049
3,4',5-TrCB	PCB-039	38444-88-1	0.0006	0.0006	UJ	0.0049
3,4,5-TrCB	PCB-038	53555-66-1	0.0008	0.0008	UJ	0.0049
3,3',4-TrCB	PCB-035	37680-69-6	0.001	0.001	UJ	0.0049
3,4,4'-TrCB	PCB-037	38444-90-5	0.14	0.0012		0.0049
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0017	0.0017	UJ	0.0049
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0033	0.0033	UJ	0.0049
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0649	0.0038		0.0049
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0088	0.0033		0.0049
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0436	0.0037		0.0049
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0276	0.0048		0.0049
	PCB-052/069		0.39	0.0032		0.0049
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0032	0.0032	UJ	0.0049
	PCB-043/049		0.193	0.0035		0.0049
	PCB-065/075		0.0031	0.0031	UJ	0.0049
	PCB-047/048		0.111	0.0029		0.0049
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0023	0.0023	UJ	0.0049
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.3	0.0048		0.0049
2,3,3',6-TeCB	PCB-059	74472-33-6	0.044	0.0023		0.0049
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.0869	0.003		0.0049
	PCB-064/072		0.118	0.0023		0.0049

DATA REPORT

Client: City of Spokane
Client ID: S. RA. Jar #3
Field ID: #16-17824
PRL ID: PR164223

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/25/2017
HRMS File: FS01251706

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.0851	0.0023		0.0049
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0438	0.0028		0.0049
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0019	0.0019	UJ	0.0049
	PCB-040/057		0.0716	0.0055		0.0049
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.003	0.003	UJ	0.0049
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0026	0.0026	UJ	0.0049
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0024	0.0024	UJ	0.0049
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.114	0.0021	UJ	0.0049
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.346	0.0027		0.0049
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.002	0.002		0.0049
	PCB-055/080		0.0023	0.0023	UJ	0.0049
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.244	0.0018		0.0049
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0025	0.0025	UJ	0.0049
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.228	0.0026		0.0049
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.002	0.002	UJ	0.0049
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0025	0.0025	UJ	0.0049
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0022	0.0022	UJ	0.0049
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.004	0.004	UJ	0.0049
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0516	0.005		0.0049
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.002	0.002	UJ	0.0049
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0053	0.0053	U	0.0049
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0067	0.0067	U	0.0049
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0136	0.0084	U	0.0049
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0107	0.0107	U	0.0049
	PCB-093/098/102		0.0071	0.0071	NJ	0.0049
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.465	0.0078		0.0049
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0099	0.0099	U	0.0049
	PCB-091/121		0.0066	0.0066	U	0.0049
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.143	0.0079		0.0049
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.0537	0.0076		0.0049
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0097	0.0097	U	0.0049
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0085	0.0085	U	0.0049
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.341	0.0056		0.0049
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0069	0.0069	U	0.0049
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.327	0.0107		0.0049
	PCB-112/119		0.0056	0.0056	U	0.0049
	PCB-083/109		0.0106	0.0106	U	0.0049
	PCB-086/117		0.0135	0.0135	U	0.0049
	PCB-097/116		0.306	0.012		0.0049
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0097	0.0097	U	0.0049
	PCB-087/115		0.193	0.0068		0.0049
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.005	0.005	U	0.0049
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.101	0.0072		0.0049
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0039	0.0039	UJ	0.0049
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.404	0.0037		0.0049
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.0948	0.0115		0.0049
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.008	0.008	U	0.0049
	PCB-107/108		0.0022	0.0022	UJ	0.0049
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0024	0.0024	UJ	0.0049
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0032	0.0032	UJ	0.0049
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.363	0.0024		0.0049
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0026	0.0026	UJ	0.0049

DATA REPORT

Client: City of Spokane
 Client ID: S. RA. Jar #3
 Field ID: #16-17824
 PRL ID: PR164223

Contact: Jeff Donovan
 Date Extracted: 12/29/2016
 Date Analysed: 1/25/2017
 HRMS File: FS01251706

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0025	0.0025	UJ	0.0049
	PCB-105/127		0.219	0.0032		0.0049
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.003	0.003	UJ	0.0049
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.0025	0.0025	UJ	0.0049
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0223	0.0223	U	0.0049
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0214	0.0214	U	0.0049
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.0329	0.0329	U	0.0049
	PCB-136/148		1.01	0.0342		0.0049
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0234	0.0234	U	0.0049
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.781	0.0307		0.0049
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.039	0.039	U	0.0049
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.128	0.0338	U	0.0049
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0353	0.0353	U	0.0049
	PCB-139/149		2.99	0.0341		0.0049
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0398	0.0398	U	0.0049
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0032	0.0032	UJ	0.0049
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.0642	0.0039		0.0049
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0044	0.0044	UJ	0.0049
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0045	0.0045	UJ	0.0049
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0024	0.0024	UJ	0.0049
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0031	0.0031	UJ	0.0049
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.11	0.0026		0.0049
	PCB-132/161		0.321	0.003		0.0049
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	0.76	0.0027		0.0049
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0022	0.0022	UJ	0.0049
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.205	0.0033		0.0049
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0364	0.0034		0.0049
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0034	0.0034	UJ	0.0049
	PCB-163/164		0.267	0.0027		0.0049
	PCB-138/160		0.536	0.0022		0.0049
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.0616	0.0017		0.0049
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.003	0.003	UJ	0.0049
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0021	0.0021	UJ	0.0049
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.0021	0.0021	UJ	0.0049
	PCB-128/162		0.134	0.0029		0.0049
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0281	0.0026		0.0049
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.0586	0.0026		0.0049
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0109	0.0024		0.0049
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0035	0.0035	UJ	0.0049
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0026	0.0026	UJ	0.0049
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0031	0.0031	UJ	0.0049
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.108	0.0029		0.0049
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0395	0.0033		0.0049
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0031	0.0031	UJ	0.0049
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0522	0.0043		0.0049
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0055	0.005	U	0.0049
	PCB-182/187		0.337	0.0044	NJ	0.0049
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.138	0.0042		0.0049
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0044	0.0044	UJ	0.0049
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.275	0.0047		0.0049
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0039	0.0039	UJ	0.0049
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.122	0.0043		0.0049

DATA REPORT

Client: City of Spokane
Client ID: S. RA. Jar #3
Field ID: #16-17824
PRL ID: PR164223

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/25/2017
HRMS File: FS01251706

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0517	0.0045		0.0049
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0048	0.0048	UJ	0.0049
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0437	0.0049		0.0049
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0041	0.0041	UJ	0.0049
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.581	0.0056		0.0049
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0041	0.0041	UJ	0.0049
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.016	0.0043		0.0049
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.178	0.0048		0.0049
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.041	0.0042		0.0049
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.0025	0.0025	UJ	0.0049
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0295	0.0015		0.0049
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0418	0.0028		0.0049
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0025	0.0025	UJ	0.0049
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0025	0.0025	UJ	0.0049
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0027	0.0027	UJ	0.0049
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0071	0.0071	U	0.0049
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.26	0.0051		0.0049
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.006	0.006	U	0.0049
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.252	0.0047		0.0049
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0275	0.0013		0.0049
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.0533	0.0013		0.0049
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0018	0.0018	UJ	0.0049
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0334	0.0044		0.0049
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0044	0.0044	UJ	0.0049
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.0687	0.0068		0.0049
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0137	0.0036		0.0049

Homologs	# of Congeners		
Monochlorobiphenyls	3	0.0087	0.0002
Dichlorobiphenyls	12	0.109	0.0004
Trichlorobiphenyls	24	0.958	0.0005
Tetrachlorobiphenyls	42	2.57	0.0017
Pentachlorobiphenyls	46	3.01	0.002
Hexachlorobiphenyls	42	7.37	0.0017
Heptachlorobiphenyls	24	1.98	0.0025
Octachlorobiphenyls	12	0.664	0.0013
Nonachlorobiphenyls	3	0.102	0.0044
Decachlorobiphenyl	1	0.0137	0.0036
Total PCB		16.8	0.0002

DATA REPORT

Client: City of Spokane
Client ID: S. RA. Jar #3
Field ID: #16-17824
PRL ID: PR164223

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/25/2017
HRMS File: FS01251706

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	60	5	145
¹³ C ₁₂ -4-MoCB	3L	64	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	66	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	69	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	142	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	99	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	75	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	52	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	56	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	105	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	119	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	115	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	114	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	111	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	85	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	141	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	56	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	47	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HxCB	157L	48	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	38	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	92	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	94	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	79	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	77	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	130	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	92	10	145
¹³ C ₁₂ -DeCB	209L	111	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	111	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	79	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	77	10	145

DATA REPORT

Client: City of Spokane
Client ID: TV Black Jar #3
Field ID: #16-18394
PRL ID: PR164224

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101715

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0033	0.0004	NJ	0.0051
3-MoCB	PCB-002	2051-61-8	0.0023	0.0005	J	0.0051
4-MoCB	PCB-003	2051-62-9	0.0035	0.0004	J	0.0051
2,6-DiCB	PCB-010	33146-45-1	0.0009	0.0009	UJ	0.0051
2,2'-DiCB	PCB-004	13029-08-8	0.0069	0.0015		0.0051
2,5-DiCB	PCB-009	34883-39-1	0.0009	0.0009	UJ	0.0051
2,4-DiCB	PCB-007	33284-50-3	0.0049	0.001	J	0.0051
2,3'-DiCB	PCB-006	25569-80-6	0.0037	0.0009	NJ	0.0051
2,3/2,4'-DiCB	PCB-005/008		0.0142	0.0009		0.0051
3,5-DiCB	PCB-014	34883-41-5	0.001	0.001	UJ	0.0051
3,3'-DiCB	PCB-011	2050-67-1	0.0604	0.0011		0.0051
3,4/3,4'-DiCB	PCB-012/013		0.0065	0.0012	NJ	0.0051
4,4'-DiCB	PCB-015	2050-68-2	0.0589	0.0009		0.0051
2,2',6-TrCB	PCB-019	38444-73-4	0.0028	0.0028	UJ	0.0051
2,4,6-TrCB	PCB-030	35693-92-6	0.0017	0.0017	UJ	0.0051
2,2',5-TrCB	PCB-018	37680-65-2	0.0208	0.002		0.0051
2,2',4-TrCB	PCB-017	37680-66-3	0.0188	0.0026		0.0051
2,3,6-TrCB	PCB-024	55702-45-9	0.002	0.002	UJ	0.0051
2,3',6-TrCB	PCB-027	38444-76-7	0.0042	0.0012	J	0.0051
2,4',6-TrCB	PCB-032	38444-77-8	0.0114	0.0012	B	0.0051
2,2',3-TrCB	PCB-016	38444-78-9	0.0084	0.0005		0.0051
2,3,5-TrCB	PCB-023	55720-44-0	0.0002	0.0002	UJ	0.0051
2,3',5'-TrCB	PCB-034	37680-68-5	0.0003	0.0003	UJ	0.0051
2,4,5-TrCB	PCB-029	15862-07-4	0.0002	0.0002	UJ	0.0051
2,3',5-TrCB	PCB-026	38444-81-4	0.0068	0.0002		0.0051
2,3',4-TrCB	PCB-025	55712-37-3	0.0036	0.0003	J	0.0051
2,4',5-TrCB	PCB-031	16606-02-3	0.0323	0.0002		0.0051
2,4,4'-TrCB	PCB-028	7012-37-5	0.0665	0.0004		0.0051
2,3,4-TrCB	PCB-021	55702-46-0	0.0005	0.0005	UJ	0.0051
	PCB-020/033		0.0241	0.0004		0.0051
2,3,4'-TrCB	PCB-022	38444-85-8	0.0529	0.0004		0.0051
3,3',5-TrCB	PCB-036	38444-87-0	0.003	0.0004	J	0.0051
3,4',5-TrCB	PCB-039	38444-88-1	0.0005	0.0005	UJ	0.0051
3,4,5-TrCB	PCB-038	53555-66-1	0.0005	0.0005	UJ	0.0051
3,3',4-TrCB	PCB-035	37680-69-6	0.0042	0.0005	J	0.0051
3,4,4'-TrCB	PCB-037	38444-90-5	0.0481	0.0004		0.0051
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0011	0.0011	UJ	0.0051
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0018	0.0018	UJ	0.0051
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0349	0.002		0.0051
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0126	0.002		0.0051
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0312	0.0021		0.0051
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.012	0.0023	NJ	0.0051
	PCB-052/069		0.328	0.0017		0.0051
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0018	0.0018	UJ	0.0051
	PCB-043/049		0.22	0.0022		0.0051
	PCB-065/075		0.0014	0.0014	UJ	0.0051
	PCB-047/048		0.115	0.0019		0.0051
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0018	0.0018	UJ	0.0051
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.257	0.0024		0.0051
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0318	0.0017		0.0051
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.11	0.0025		0.0051
	PCB-064/072		0.164	0.0017		0.0051

DATA REPORT

Client: City of Spokane
Client ID: TV Black Jar #3
Field ID: #16-18394
PRL ID: PR164224

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101715

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.0748	0.0015		0.0051
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0318	0.0028		0.0051
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0017	0.0017	UJ	0.0051
	PCB-040/057		0.0649	0.0029		0.0051
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0017	0.0017	UJ	0.0051
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0017	0.0017	UJ	0.0051
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0017	0.0017	UJ	0.0051
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.002	0.002	UJ	0.0051
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.139	0.0018		0.0051
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.357	0.0019		0.0051
	PCB-055/080		0.0018	0.0018	UJ	0.0051
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.214	0.0018		0.0051
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0121	0.0019		0.0051
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.0963	0.0019		0.0051
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.209	0.0021		0.0051
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0023	0.0023	UJ	0.0051
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0044	0.0027	NJ	0.0051
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0076	0.0028	NJ	0.0051
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0274	0.0029		0.0051
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0021	0.0021	UJ	0.0051
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0044	0.0044	UJ	0.0051
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0056	0.0056	U	0.0051
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0058	0.0058	U	0.0051
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.007	0.007	U	0.0051
	PCB-093/098/102		0.007	0.007	U	0.0051
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.354	0.0059		0.0051
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0066	0.0066	U	0.0051
	PCB-091/121		0.0585	0.0063	NJ	0.0051
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.205	0.0068		0.0051
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.0068	0.0068	U	0.0051
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0066	0.0066	U	0.0051
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0062	0.0062	U	0.0051
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.382	0.0056		0.0051
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.005	0.005	UJ	0.0051
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.16	0.0059		0.0051
	PCB-112/119		0.0045	0.0045	UJ	0.0051
	PCB-083/109		0.0048	0.0048	UJ	0.0051
	PCB-086/117		0.0072	0.0072	U	0.0051
	PCB-097/116		0.148	0.006		0.0051
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0051	0.0051	U	0.0051
	PCB-087/115		0.165	0.0061		0.0051
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0057	0.0057		0.0051
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.0669	0.0057		0.0051
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0051	0.0051	U	0.0051
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.511	0.0053		0.0051
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.0532	0.0085		0.0051
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0359	0.0017		0.0051
	PCB-107/108		0.0377	0.0016		0.0051
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.009	0.0015	NJ	0.0051
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0017	0.0017	UJ	0.0051
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.304	0.0015		0.0051
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0235	0.0019		0.0051

DATA REPORT

Client: City of Spokane
Client ID: TV Black Jar #3
Field ID: #16-18394
PRL ID: PR164224

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101715

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0101	0.0018	NJ	0.0051
	PCB-105/127		0.149	0.0014		0.0051
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0205	0.0015		0.0051
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.0023	0.0023	UJ	0.0051
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0039	0.0039	UJ	0.0051
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.0035	0.0035	UJ	0.0051
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.004	0.004	UJ	0.0051
	PCB-136/148		0.113	0.0037		0.0051
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0041	0.0041	UJ	0.0051
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.138	0.0047		0.0051
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.11	0.0059		0.0051
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.0229	0.0047		0.0051
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0061	0.0061	U	0.0051
	PCB-139/149		0.494	0.0046		0.0051
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.001	0.001	UJ	0.0051
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0011	0.0011	UJ	0.0051
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.0433	0.0015		0.0051
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0014	0.0014	UJ	0.0051
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0015	0.0015	UJ	0.0051
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0013	0.0013	UJ	0.0051
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.001	0.001	UJ	0.0051
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.0847	0.0011		0.0051
	PCB-132/161		0.29	0.0014		0.0051
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	0.456	0.0009		0.0051
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0011	0.0011	UJ	0.0051
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.132	0.0012		0.0051
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0259	0.0014		0.0051
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0434	0.0015		0.0051
	PCB-163/164		0.195	0.001		0.0051
	PCB-138/160		0.479	0.0013		0.0051
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.0576	0.0009		0.0051
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.0294	0.0014	NJ	0.0051
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0025	0.0011	NJ	0.0051
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.0063	0.0014		0.0051
	PCB-128/162		0.0925	0.0014		0.0051
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0279	0.0016		0.0051
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.0548	0.0017		0.0051
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0152	0.0016	NJ	0.0051
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0073	0.0022	NJ	0.0051
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0013	0.0013	UJ	0.0051
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0012	0.0012	UJ	0.0051
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.0675	0.0011		0.0051
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0146	0.0011		0.0051
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0013	0.0013	UJ	0.0051
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0232	0.0016	NJ	0.0051
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0069	0.0015	NJ	0.0051
	PCB-182/187		0.151	0.0015		0.0051
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.0774	0.0015		0.0051
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0071	0.0017	NJ	0.0051
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.108	0.0016		0.0051
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0019	0.0019	UJ	0.0051
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.0493	0.0017		0.0051

DATA REPORT

Client: City of Spokane
 Client ID: TV Black Jar #3
 Field ID: #16-18394
 PRL ID: PR164224

Contact: Jeff Donovan
 Date Extracted: 12/29/2016
 Date Analysed: 1/11/2017
 HRMS File: DF01101715

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0242	0.0018		0.0051
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0021	0.0021	UJ	0.0051
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0164	0.0023	NJ	0.0051
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.002	0.002	UJ	0.0051
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.176	0.0019		0.0051
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0019	0.0019	UJ	0.0051
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.002	0.002	UJ	0.0051
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.0835	0.0032		0.0051
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0212	0.0026		0.0051
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.0086	0.0016	NJ	0.0051
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0166	0.0017	NJ	0.0051
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0039	0.0012	NJ	0.0051
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0013	0.0013	UJ	0.0051
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0014	0.0014	UJ	0.0051
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0013	0.0013	UJ	0.0051
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0026	0.0026	NJ	0.0051
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.096	0.0026	NJ	0.0051
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.0795	0.0027		0.0051
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.0784	0.0032		0.0051
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0277	0.0022	NJ	0.0051
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.137	0.0036		0.0051
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0018	0.0018	UJ	0.0051
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.0551	0.0215	NJ	0.0051
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0296	0.0236	NJ	0.0051
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.138	0.0467	NJ	0.0051
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0053	0.0053	U	0.0051

Homologs	# of Congeners			
Monochlorobiphenyls	3	0.0058	0.0004	B
Dichlorobiphenyls	12	0.145	0.0009	
Trichlorobiphenyls	24	0.305	0.0002	
Tetrachlorobiphenyls	42	2.53	0.0011	
Pentachlorobiphenyls	46	2.68	0.0014	
Hexachlorobiphenyls	42	2.87	0.0009	
Heptachlorobiphenyls	24	0.773	0.0011	
Octachlorobiphenyls	12	0.295	0.0012	
Nonachlorobiphenyls	3	0.0215	0.0215	U
Decachlorobiphenyl	1	0.0053	0.0053	U
Total PCB		9.6	0.0002	

DATA REPORT

Client: City of Spokane
 Client ID: TV Black Jar #3
 Field ID: #16-18394
 PRL ID: PR164224

Contact: Jeff Donovan
 Date Extracted: 12/29/2016
 Date Analysed: 1/11/2017
 HRMS File: DF01101715

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	72	5	145
¹³ C ₁₂ -4-MoCB	3L	83	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	72	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	91	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	68	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	102	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	68	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	73	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	78	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	76	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	144	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	135	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	134	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	138	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	110	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	74	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	52	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	49	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HxCB	157L	51	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	59	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	103	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	121	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	44	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	97	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	72	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	81	10	145
¹³ C ₁₂ -DeCB	209L	96	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	82	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	110	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	68	10	145

DATA REPORT

Client: City of Spokane
Client ID: P. Djamor Jar #2
Field ID: #16-18395
PRL ID: PR164225

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101714

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0039	0.0003	BJ	0.0046
3-MoCB	PCB-002	2051-61-8	0.0038	0.0003	J	0.0046
4-MoCB	PCB-003	2051-62-9	0.0062	0.0003		0.0046
2,6-DiCB	PCB-010	33146-45-1	0.0007	0.0007	UJ	0.0046
2,2'-DiCB	PCB-004	13029-08-8	0.0069	0.0011		0.0046
2,5-DiCB	PCB-009	34883-39-1	0.0015	0.0007	J	0.0046
2,4-DiCB	PCB-007	33284-50-3	0.0037	0.0008	J	0.0046
2,3'-DiCB	PCB-006	25569-80-6	0.0081	0.0007		0.0046
2,3/2,4'-DiCB	PCB-005/008		0.0465	0.0007		0.0046
3,5-DiCB	PCB-014	34883-41-5	0.0008	0.0008	UJ	0.0046
3,3'-DiCB	PCB-011	2050-67-1	0.277	0.0009		0.0046
3,4/3,4'-DiCB	PCB-012/013		0.0009	0.0009	UJ	0.0046
4,4'-DiCB	PCB-015	2050-68-2	0.0662	0.0008		0.0046
2,2',6-TrCB	PCB-019	38444-73-4	0.0104	0.002	NJ	0.0046
2,4,6-TrCB	PCB-030	35693-92-6	0.0014	0.0014	UJ	0.0046
2,2',5-TrCB	PCB-018	37680-65-2	0.0537	0.0017		0.0046
2,2',4-TrCB	PCB-017	37680-66-3	0.0432	0.0022		0.0046
2,3,6-TrCB	PCB-024	55702-45-9	0.0017	0.0017	UJ	0.0046
2,3',6-TrCB	PCB-027	38444-76-7	0.0035	0.001	NJ	0.0046
2,4',6-TrCB	PCB-032	38444-77-8	0.369	0.0011		0.0046
2,2',3-TrCB	PCB-016	38444-78-9	0.034	0.0004		0.0046
2,3,5-TrCB	PCB-023	55720-44-0	0.0006	0.0002	NJ	0.0046
2,3',5'-TrCB	PCB-034	37680-68-5	0.0007	0.0003	NJ	0.0046
2,4,5-TrCB	PCB-029	15862-07-4	0.001	0.0002	NJ	0.0046
2,3',5-TrCB	PCB-026	38444-81-4	0.0244	0.0002	NJ	0.0046
2,3',4-TrCB	PCB-025	55712-37-3	0.0194	0.0002		0.0046
2,4',5-TrCB	PCB-031	16606-02-3	0.212	0.0002		0.0046
2,4,4'-TrCB	PCB-028	7012-37-5	0.325	0.0003		0.0046
2,3,4-TrCB	PCB-021	55702-46-0	0.0005	0.0004	NJ	0.0046
	PCB-020/033		0.105	0.0003		0.0046
2,3,4'-TrCB	PCB-022	38444-85-8	0.103	0.0004		0.0046
3,3',5-TrCB	PCB-036	38444-87-0	0.0015	0.0003	NJ	0.0046
3,4',5-TrCB	PCB-039	38444-88-1	0.002	0.0004	NJ	0.0046
3,4,5-TrCB	PCB-038	53555-66-1	0.0009	0.0004	NJ	0.0046
3,3',4-TrCB	PCB-035	37680-69-6	0.0117	0.0005		0.0046
3,4,4'-TrCB	PCB-037	38444-90-5	0.117	0.0004		0.0046
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0022	0.0009	J	0.0046
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0017	0.0017	UJ	0.0046
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0475	0.0018		0.0046
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0325	0.0018		0.0046
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0729	0.0019		0.0046
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0348	0.0021		0.0046
	PCB-052/069		0.367	0.0016		0.0046
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0016	0.0016	UJ	0.0046
	PCB-043/049		0.463	0.002		0.0046
	PCB-065/075		0.0012	0.0012	UJ	0.0046
	PCB-047/048		0.229	0.0018		0.0046
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0016	0.0016	UJ	0.0046
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.458	0.0022		0.0046
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0478	0.0015		0.0046
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.194	0.0023		0.0046
	PCB-064/072		0.375	0.0016		0.0046

DATA REPORT

Client: City of Spokane
Client ID: P. Djamor Jar #2
Field ID: #16-18395
PRL ID: PR164225

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101714

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.172	0.0014		0.0046
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0432	0.0025		0.0046
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0026	0.0016	NJ	0.0046
	PCB-040/057		0.11	0.0026		0.0046
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.019	0.0016	NJ	0.0046
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0016	0.0016	NJ	0.0046
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0309	0.0016	NJ	0.0046
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0018	0.0018	UJ	0.0046
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.29	0.0017		0.0046
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.642	0.0017		0.0046
	PCB-055/080		0.0085	0.0017		0.0046
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.528	0.0016		0.0046
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0222	0.0018		0.0046
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.165	0.0018		0.0046
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.307	0.0019		0.0046
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.003	0.0021	NJ	0.0046
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0033	0.0024	NJ	0.0046
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0126	0.0029		0.0046
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0624	0.0031		0.0046
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0018	0.0018	UJ	0.0046
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.0043	0.0043	UJ	0.0046
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0055	0.0055	U	0.0046
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0057	0.0057	U	0.0046
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.0069	0.0069	U	0.0046
	PCB-093/098/102		0.007	0.007	U	0.0046
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.624	0.0058		0.0046
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0065	0.0065	U	0.0046
	PCB-091/121		0.154	0.0062	NJ	0.0046
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.356	0.0067		0.0046
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.0067	0.0067	U	0.0046
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0065	0.0065	U	0.0046
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0061	0.0061	U	0.0046
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.635	0.0055		0.0046
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.005	0.005	U	0.0046
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.292	0.0058		0.0046
	PCB-112/119		0.008	0.0044	NJ	0.0046
	PCB-083/109		0.0144	0.0047	NJ	0.0046
	PCB-086/117		0.0072	0.0072	U	0.0046
	PCB-097/116		0.246	0.0059		0.0046
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.005	0.005	U	0.0046
	PCB-087/115		0.326	0.0061		0.0046
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0057	0.0057		0.0046
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.144	0.0057		0.0046
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.005	0.005	U	0.0046
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.917	0.0053		0.0046
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.104	0.0084		0.0046
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0464	0.0015		0.0046
	PCB-107/108		0.0498	0.0016		0.0046
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0182	0.0015	NJ	0.0046
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0017	0.0017	UJ	0.0046
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.484	0.0016		0.0046
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0321	0.0019		0.0046

DATA REPORT

Client: City of Spokane
Client ID: P. Djamor Jar #2
Field ID: #16-18395
PRL ID: PR164225

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101714

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.006	0.0018	NJ	0.0046
	PCB-105/127		0.239	0.0014		0.0046
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0216	0.0015		0.0046
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.0028	0.0028	UJ	0.0046
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.0044	0.0044	UJ	0.0046
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.004	0.004	UJ	0.0046
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.0045	0.0045	UJ	0.0046
	PCB-136/148		0.169	0.0042		0.0046
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0047	0.0047	U	0.0046
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.242	0.0054		0.0046
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.141	0.0066		0.0046
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.0156	0.0053	NJ	0.0046
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0198	0.0069	NJ	0.0046
	PCB-139/149		0.808	0.0053		0.0046
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0043	0.0012	NJ	0.0046
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0013	0.0013	UJ	0.0046
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.0839	0.0017		0.0046
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0015	0.0015	UJ	0.0046
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0121	0.0017	NJ	0.0046
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0084	0.0015	NJ	0.0046
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0011	0.0011	UJ	0.0046
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.178	0.0013		0.0046
	PCB-132/161		0.516	0.0015		0.0046
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	0.812	0.001		0.0046
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0012	0.0012	UJ	0.0046
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.232	0.0014		0.0046
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0543	0.0016		0.0046
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0755	0.0017		0.0046
	PCB-163/164		0.337	0.0011		0.0046
	PCB-138/160		0.837	0.0015		0.0046
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.118	0.0011		0.0046
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.069	0.0016		0.0046
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0073	0.0012		0.0046
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.009	0.0016	UJ	0.0046
	PCB-128/162		0.188	0.0015	NJ	0.0046
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0538	0.0017		0.0046
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.106	0.0019		0.0046
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.031	0.0017		0.0046
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.034	0.0025		0.0046
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0019	0.0019	UJ	0.0046
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0016	0.0016	UJ	0.0046
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.125	0.0015		0.0046
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0377	0.0016		0.0046
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0018	0.0018	UJ	0.0046
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0599	0.0022		0.0046
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0085	0.0021	NJ	0.0046
	PCB-182/187		0.321	0.0021		0.0046
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.133	0.002		0.0046
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0293	0.0024		0.0046
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.22	0.0022		0.0046
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0027	0.0027	UJ	0.0046
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.115	0.0024		0.0046

DATA REPORT

Client: City of Spokane
 Client ID: P. Djamor Jar #2
 Field ID: #16-18395
 PRL ID: PR164225

Contact: Jeff Donovan
 Date Extracted: 12/29/2016
 Date Analysed: 1/11/2017
 HRMS File: DF01101714

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0578	0.0025		0.0046
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0065	0.0029		0.0046
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0575	0.0032		0.0046
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0027	0.0027	UJ	0.0046
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.438	0.0026		0.0046
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0026	0.0026	UJ	0.0046
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.0062	0.0028	NJ	0.0046
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.219	0.0044		0.0046
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0642	0.0035		0.0046
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.027	0.0021		0.0046
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.0682	0.0017		0.0046
2,2',3,3',4,5',6,6'-OxCB	PCB-201	40186-71-8	0.0324	0.0015		0.0046
2,2',3,4,4',5,6,6'-OxCB	PCB-204	74472-52-9	0.0016	0.0016	UJ	0.0046
2,2',3,3',4,4',6,6'-OxCB	PCB-197	33091-17-7	0.0065	0.0016	NJ	0.0046
2,2',3,3',4,5,6,6'-OxCB	PCB-200	52663-73-7	0.0315	0.0016	NJ	0.0046
2,2',3,3',4,5,5',6-OxCB	PCB-198	68194-17-2	0.0031	0.0031	UJ	0.0046
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.215	0.0031		0.0046
2,2',3,3',4,4',5,6'-OxCB	PCB-196	42740-50-1	0.089	0.0032		0.0046
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.151	0.0038		0.0046
2,2',3,3',4,4',5,6-OxCB	PCB-195	52663-78-2	0.0705	0.0026		0.0046
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.227	0.0043		0.0046
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.0339	0.0026		0.0046
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.101	0.0201	NJ	0.0046
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0508	0.0216	NJ	0.0046
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.157	0.0404	NJ	0.0046
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0568	0.0127	NJ	0.0046

Homologs	# of Congeners			
Monochlorobiphenyls	3	0.0139	0.0003	
Dichlorobiphenyls	12	0.41	0.0007	
Trichlorobiphenyls	24	1.39	0.0002	
Tetrachlorobiphenyls	42	4.69	0.0009	
Pentachlorobiphenyls	46	4.71	0.0014	
Hexachlorobiphenyls	42	5.09	0.001	
Heptachlorobiphenyls	24	1.91	0.0015	
Octachlorobiphenyls	12	0.887	0.0015	
Nonachlorobiphenyls	3	0.0201	0.0201	U
Decachlorobiphenyl	1	0.0127	0.0127	U
Total PCB		19.1	0.0002	

DATA REPORT

Client: City of Spokane
 Client ID: P. Djamor Jar #2
 Field ID: #16-18395
 PRL ID: PR164225

Contact: Jeff Donovan
 Date Extracted: 12/29/2016
 Date Analysed: 1/11/2017
 HRMS File: DF01101714

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	75	5	145
¹³ C ₁₂ -4-MoCB	3L	93	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	71	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	84	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	77	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	100	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	75	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	69	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	72	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	92	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	141	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	144	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	144	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	140	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	120	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	81	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	64	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	58	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HxCB	157L	62	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	64	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	108	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	118	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	62	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	100	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	80	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	84	10	145
¹³ C ₁₂ -DeCB	209L	82	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	110	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	130	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	81	10	145

QC REPORT - BLANK

Client: City of Spokane
Client ID: BLANK
Field ID:
PRL ID: PC161629B

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 12/24/2016 1/25/2017
HRMS File: FS01241709 FS01251704

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2-MoCB	PCB-001	2051-60-7	0.0014	0.0003	J	0.002
3-MoCB	PCB-002	2051-61-8	0.0003	0.0003	UJ	0.002
4-MoCB	PCB-003	2051-62-9	0.0003	0.0003	UJ	0.002
2,6-DiCB	PCB-010	33146-45-1	0.0009	0.0009	UJ	0.002
2,2'-DiCB	PCB-004	13029-08-8	0.0013	0.0013	UJ	0.002
2,5-DiCB	PCB-009	34883-39-1	0.001	0.001	UJ	0.002
2,4-DiCB	PCB-007	33284-50-3	0.0005	0.0005	UJ	0.002
2,3'-DiCB	PCB-006	25569-80-6	0.0006	0.0006	UJ	0.002
2,3/2,4'-DiCB	PCB-005/008		0.0006	0.0006	UJ	0.002
3,5-DiCB	PCB-014	34883-41-5	0.0006	0.0006	UJ	0.002
3,3'-DiCB	PCB-011	2050-67-1	0.0057	0.0006		0.002
3,4/3,4'-DiCB	PCB-012/013		0.0006	0.0006	UJ	0.002
4,4'-DiCB	PCB-015	2050-68-2	0.0008	0.0008	UJ	0.002
2,2',6-TrCB	PCB-019	38444-73-4	0.0013	0.0013	UJ	0.002
2,4,6-TrCB	PCB-030	35693-92-6	0.0012	0.0012	UJ	0.002
2,2',5-TrCB	PCB-018	37680-65-2	0.0012	0.0012	UJ	0.002
2,2',4-TrCB	PCB-017	37680-66-3	0.0021	0.0021	U	0.002
2,3,6-TrCB	PCB-024	55702-45-9	0.0026	0.0026	U	0.002
2,3',6-TrCB	PCB-027	38444-76-7	0.0009	0.0009	UJ	0.002
2,4',6-TrCB	PCB-032	38444-77-8	0.0164	0.0023		0.002
2,2',3-TrCB	PCB-016	38444-78-9	0.0005	0.0005	UJ	0.002
2,3,5-TrCB	PCB-023	55720-44-0	0.0002	0.0002	UJ	0.002
2,3',5'-TrCB	PCB-034	37680-68-5	0.0002	0.0002	UJ	0.002
2,4,5-TrCB	PCB-029	15862-07-4	0.0001	0.0001	UJ	0.002
2,3',5-TrCB	PCB-026	38444-81-4	0.0001	0.0001	UJ	0.002
2,3',4-TrCB	PCB-025	55712-37-3	0.0002	0.0002	UJ	0.002
2,4',5-TrCB	PCB-031	16606-02-3	0.0013	0.0001	J	0.002
2,4,4'-TrCB	PCB-028	7012-37-5	0.0013	0.0002	J	0.002
2,3,4-TrCB	PCB-021	55702-46-0	0.0004	0.0004	UJ	0.002
	PCB-020/033		0.001	0.0002	J	0.002
2,3,4'-TrCB	PCB-022	38444-85-8	0.0002	0.0002	UJ	0.002
3,3',5-TrCB	PCB-036	38444-87-0	0.0002	0.0002	UJ	0.002
3,4',5-TrCB	PCB-039	38444-88-1	0.0002	0.0002	UJ	0.002
3,4,5-TrCB	PCB-038	53555-66-1	0.0003	0.0003	UJ	0.002
3,3',4-TrCB	PCB-035	37680-69-6	0.0003	0.0003	UJ	0.002
3,4,4'-TrCB	PCB-037	38444-90-5	0.0003	0.0003	UJ	0.002
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.0003	0.0003	UJ	0.002
2,2',4,6-TeCB	PCB-050	62796-65-0	0.0003	0.0003	UJ	0.002
2,2',5,6'-TeCB	PCB-053	41464-41-9	0.0004	0.0004	UJ	0.002
2,2',4,6'-TeCB	PCB-051	68194-04-7	0.0003	0.0003	UJ	0.002
2,2',3,6-TeCB	PCB-045	70362-45-7	0.0004	0.0004	UJ	0.002
2,2',3,6'-TeCB	PCB-046	41464-47-5	0.0005	0.0005	UJ	0.002
	PCB-052/069		0.001	0.0003	J	0.002
2,3',5',6-TeCB	PCB-073	74338-23-1	0.0008	0.0003	NJ	0.002
	PCB-043/049		0.0003	0.0003	UJ	0.002
	PCB-065/075		0.0003	0.0003	UJ	0.002
	PCB-047/048		0.0009	0.0003	J	0.002
2,3,4,6-TeCB	PCB-062	54230-22-7	0.0002	0.0002	UJ	0.002
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.0005	0.0005	UJ	0.002
2,3,3',6-TeCB	PCB-059	74472-33-6	0.0002	0.0002	UJ	0.002
2,2',3,4'-TeCB	PCB-042	36559-22-5	0.0003	0.0003	UJ	0.002
	PCB-064/072		0.0002	0.0002	UJ	0.002

QC REPORT - BLANK

Client: City of Spokane
 Client ID: BLANK
 Field ID:
 PRL ID: PC161629B

Contact: Jeff Donovan
 Date Extracted: 12/29/2016
 Date Analysed: 12/24/2016 1/25/2017
 HRMS File: FS01241709 FS01251704

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3',4',6'-TeCB	PCB-071	41464-46-4	0.0004	0.0002	NJ	0.002
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.0003	0.0003	NJ	0.002
2,3',4,5'-TeCB	PCB-068	73575-52-7	0.0002	0.0002	UJ	0.002
	PCB-040/057		0.0005	0.0005	UJ	0.002
2,3',4,5'-TeCB	PCB-067	73575-53-8	0.0003	0.0003	UJ	0.002
2,3,4',5'-TeCB	PCB-063	74472-34-7	0.0002	0.0002	UJ	0.002
2,3,3',5'-TeCB	PCB-058	41464-49-7	0.0002	0.0002	UJ	0.002
2,3,4,5'-TeCB	PCB-061	33284-53-6	0.0002	0.0002	UJ	0.002
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.0007	0.0002	J	0.002
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.0023	0.0003		0.002
	PCB-055/080		0.0002	0.0002	UJ	0.002
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.0013	0.0002	J	0.002
2,3',4',5'-TeCB	PCB-076	70362-48-0	0.0002	0.0002	UJ	0.002
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.0003	0.0003	UJ	0.002
2,3,3',4'-TeCB	PCB-056	41464-43-1	0.0002	0.0002	UJ	0.002
3,3',4,5'-TeCB	PCB-079	41464-48-6	0.0002	0.0002	UJ	0.002
3,3',4,5'-TeCB	PCB-078	70362-49-1	0.0002	0.0002	UJ	0.002
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.0003	0.0003	UJ	0.002
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.0003	0.0003	UJ	0.002
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.0007	0.0007	UJ	0.002
2,2',3,6,6'-PeCB	PCB-096	73575-54-9	0.001	0.001	UJ	0.002
2,2',4,5',6'-PeCB	PCB-103	60145-21-3	0.0012	0.0012	UJ	0.002
2,2',4,4',6'-PeCB	PCB-100	39485-83-1	0.0016	0.0016	UJ	0.002
2,2',3,5,6'-PeCB	PCB-094	73575-55-0	0.002	0.002	U	0.002
	PCB-093/098/102		0.0013	0.0013	UJ	0.002
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.0014	0.0014	UJ	0.002
2,2',3,4,6'-PeCB	PCB-088	55215-17-3	0.0018	0.0018	UJ	0.002
	PCB-091/121		0.0012	0.0012	UJ	0.002
2,2',3,3',6'-PeCB	PCB-084	52663-60-2	0.0015	0.0015	UJ	0.002
2,2',3,5,5'-PeCB	PCB-092	52663-61-3	0.0014	0.0014	UJ	0.002
2,2',3,4,6'-PeCB	PCB-089	73575-57-2	0.0018	0.0018	UJ	0.002
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.0016	0.0016	UJ	0.002
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.0018	0.001	J	0.002
2,3,3',5',6'-PeCB	PCB-113	68194-10-5	0.0013	0.0013	UJ	0.002
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.002	0.002	U	0.002
	PCB-112/119		0.001	0.001	UJ	0.002
	PCB-083/109		0.002	0.002	U	0.002
	PCB-086/117		0.0012	0.0012	UJ	0.002
	PCB-097/116		0.0022	0.0022	U	0.002
2,3',4',5',6'-PeCB	PCB-125	74472-39-2	0.0018	0.0018	UJ	0.002
	PCB-087/115		0.0013	0.0013	UJ	0.002
2,3,3',5,5'-PeCB	PCB-111	39635-32-0	0.0009	0.0009	UJ	0.002
2,2',3,4,4'-PeCB	PCB-085	65510-45-4	0.0013	0.0013	UJ	0.002
2,3',4,5,5'-PeCB	PCB-120	68194-12-7	0.0007	0.0007	UJ	0.002
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.0007	0.0007	UJ	0.002
2,2',3,3',4'-PeCB	PCB-082	52663-62-4	0.0021	0.0021	U	0.002
2,3',4',5,5'-PeCB	PCB-124	70424-70-3	0.0009	0.0009	UJ	0.002
	PCB-107/108		0.0004	0.0004	UJ	0.002
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.0004	0.0004	UJ	0.002
2,3,3',4,5'-PeCB	PCB-106	70424-69-0	0.0006	0.0006	UJ	0.002
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.0004	0.0004	UJ	0.002
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.0005	0.0005	UJ	0.002

QC REPORT - BLANK

Client: City of Spokane
 Client ID: BLANK
 Field ID:
 PRL ID: PC161629B

Contact: Jeff Donovan
 Date Extracted: 12/29/2016
 Date Analysed: 12/24/2016 1/25/2017
 HRMS File: FS01241709 FS01251704

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,3,3',4',5'-PeCB	PCB-122	76842-07-4	0.0005	0.0005	UJ	0.002
	PCB-105/127		0.0005	0.0005	UJ	0.002
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.0004	0.0004	UJ	0.002
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.0005	0.0005	UJ	0.002
2,2',3,4',6,6'-HxCB	PCB-150	68194-08-1	0.002	0.002	U	0.002
2,2',3,5,6,6'-HxCB	PCB-152	68194-09-2	0.002	0.002	U	0.002
2,2',3,4,6,6'-HxCB	PCB-145	74472-40-5	0.003	0.003	U	0.002
	PCB-136/148		0.0031	0.0031	U	0.002
2,2',4,4',5,6'-HxCB	PCB-154	60145-22-4	0.0021	0.0021	U	0.002
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.0028	0.0028	U	0.002
2,2',3,3',5,6'-HxCB	PCB-135	52744-13-5	0.0036	0.0036	U	0.002
2,2',3,4,5',6'-HxCB	PCB-144	68194-14-9	0.0031	0.0031	U	0.002
2,2',3,4',5,6'-HxCB	PCB-147	68194-13-8	0.0032	0.0032	U	0.002
	PCB-139/149		0.0137	0.0031	NJ	0.002
2,2',3,4,4',6'-HxCB	PCB-140	59291-64-4	0.0036	0.0036	U	0.002
2,2',3,4,5,6'-HxCB	PCB-143	68194-15-0	0.0003	0.0003	UJ	0.002
2,2',3,3',5,6'-HxCB	PCB-134	52704-70-8	0.0004	0.0004	UJ	0.002
2,2',3,4,5,6'-HxCB	PCB-142	41411-61-4	0.0004	0.0004	UJ	0.002
2,2',3,3',4,6'-HxCB	PCB-131	61798-70-7	0.0004	0.0004	UJ	0.002
2,2',3,3',5,5'-HxCB	PCB-133	35694-04-3	0.0002	0.0002	UJ	0.002
2,3,3',5,5',6'-HxCB	PCB-165	74472-46-1	0.0003	0.0003	UJ	0.002
2,2',3,4',5,5'-HxCB	PCB-146	51908-16-8	0.0018	0.0002	NJ	0.002
	PCB-132/161		0.0003	0.0003	UJ	0.002
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	0.008	0.0002		0.002
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.0002	0.0002	UJ	0.002
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.0003	0.0003	UJ	0.002
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.0003	0.0003	UJ	0.002
2,2',3,3',4,5'-HxCB	PCB-130	52663-66-8	0.0003	0.0003	UJ	0.002
	PCB-163/164		0.0024	0.0002		0.002
	PCB-138/160		0.0033	0.0002		0.002
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.0002	0.0002	UJ	0.002
2,2',3,3',4,5'-HxCB	PCB-129	55215-18-4	0.0003	0.0003	UJ	0.002
2,3,4,4',5,6'-HxCB	PCB-166	41411-63-6	0.0002	0.0002	UJ	0.002
2,3,3',4,5,5'-HxCB	PCB-159	39635-35-3	0.0002	0.0002	UJ	0.002
	PCB-128/162		0.0003	0.0003	UJ	0.002
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.0002	0.0002	UJ	0.002
2,3,3',4,4',5'-HxCB	PCB-156	38380-08-4	0.0014	0.0002	J	0.002
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.0002	0.0002	UJ	0.002
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.0003	0.0003	UJ	0.002
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.0011	0.0011	UJ	0.002
2,2',3,4,4',6,6'-HpCB	PCB-184	74472-48-3	0.0005	0.0005	UJ	0.002
2,2',3,3',5,6,6'-HpCB	PCB-179	52663-64-6	0.0005	0.0005	UJ	0.002
2,2',3,3',4,6,6'-HpCB	PCB-176	52663-65-7	0.0005	0.0005	UJ	0.002
2,2',3,4,5,6,6'-HpCB	PCB-186	74472-49-4	0.0005	0.0005	UJ	0.002
2,2',3,3',5,5',6'-HpCB	PCB-178	52663-67-9	0.0007	0.0007	UJ	0.002
2,2',3,3',4,5',6'-HpCB	PCB-175	40186-70-7	0.0008	0.0008	UJ	0.002
	PCB-182/187		0.0067	0.0007		0.002
2,2',3,4,4',5',6'-HpCB	PCB-183	52663-69-1	0.0007	0.0007	UJ	0.002
2,2',3,4,5,5',6'-HpCB	PCB-185	52712-05-7	0.0007	0.0007	UJ	0.002
2,2',3,3',4,5,6'-HpCB	PCB-174	38411-25-5	0.0007	0.0007	UJ	0.002
2,2',3,4,4',5,6'-HpCB	PCB-181	74472-47-2	0.0006	0.0006	UJ	0.002
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.0007	0.0007	UJ	0.002

QC REPORT - BLANK

Client: City of Spokane
 Client ID: BLANK
 Field ID:
 PRL ID: PC161629B

Contact: Jeff Donovan
 Date Extracted: 12/29/2016
 Date Analysed: 12/24/2016 1/25/2017
 HRMS File: FS01241709 FS01251704

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.0007	0.0007	UJ	0.002
2,2',3,3',4,5,6-HpCB	PCB-173	68194-16-1	0.0008	0.0008	UJ	0.002
2,2',3,3',4,5,5'-HpCB	PCB-172	52663-74-8	0.0008	0.0008	UJ	0.002
2,3,3',4,5,5',6-HpCB	PCB-192	74472-51-8	0.0007	0.0007	UJ	0.002
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.014	0.0009		0.002
2,3,3',4,5,5',6-HpCB	PCB-193	69782-91-8	0.0007	0.0007	UJ	0.002
2,3,3',4,4',5,6-HpCB	PCB-191	74472-50-7	0.0007	0.0007	UJ	0.002
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.0008	0.0008	UJ	0.002
2,3,3',4,4',5,6-HpCB	PCB-190	41411-64-7	0.0007	0.0007	UJ	0.002
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.0003	0.0003	UJ	0.002
2,2',3,3',5,5',6,6'-OoCB	PCB-202	2136-99-4	0.0012	0.0012	UJ	0.002
2,2',3,3',4,5',6,6'-OoCB	PCB-201	40186-71-8	0.0008	0.0008	UJ	0.002
2,2',3,4,4',5,6,6'-OoCB	PCB-204	74472-52-9	0.0007	0.0007	UJ	0.002
2,2',3,3',4,4',6,6'-OoCB	PCB-197	33091-17-7	0.0007	0.0007	UJ	0.002
2,2',3,3',4,5,6,6'-OoCB	PCB-200	52663-73-7	0.0008	0.0008	UJ	0.002
2,2',3,3',4,5,5',6-OoCB	PCB-198	68194-17-2	0.0021	0.0021	U	0.002
2,2',3,3',4,5,5',6'-OoCB	PCB-199	52663-75-9	0.0015	0.0015	UJ	0.002
2,2',3,3',4,4',5,6'-OoCB	PCB-196	42740-50-1	0.0018	0.0018	UJ	0.002
2,2',3,4,4',5,5',6-OoCB	PCB-203	52663-76-0	0.0014	0.0014	UJ	0.002
2,2',3,3',4,4',5,6-OoCB	PCB-195	52663-78-2	0.0004	0.0004	UJ	0.002
2,2',3,3',4,4',5,5'-OoCB	PCB-194	35694-08-7	0.0066	0.0004		0.002
2,3,3',4,4',5,5',6-OoCB	PCB-205	74472-53-0	0.0003	0.0003	UJ	0.002
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.002	0.002	U	0.002
2,2',3,3',4,4',5,6,6'-NoCB	PCB-207	52663-79-3	0.0018	0.0018	UJ	0.002
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.0023	0.0023	U	0.002
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.0015	0.0015	UJ	0.002

Homologs	# of Congeners			
Monochlorobiphenyls	3	0.0014	0.0003	J
Dichlorobiphenyls	12	0.0057	0.0005	
Trichlorobiphenyls	24	0.02	0.0001	
Tetrachlorobiphenyls	42	0.0062	0.0002	
Pentachlorobiphenyls	46	0.0018	0.0004	J
Hexachlorobiphenyls	42	0.0151	0.0002	
Heptachlorobiphenyls	24	0.0207	0.0003	
Octachlorobiphenyls	12	0.0066	0.0003	
Nonachlorobiphenyls	3	0.0018	0.0018	UJ
Decachlorobiphenyl	1	0.0015	0.0015	UJ
Total PCB		0.0775	0.0001	

QC REPORT - BLANK

Client: City of Spokane
 Client ID: BLANK
 Field ID:
 PRL ID: PC161629B

Contact: Jeff Donovan
 Date Extracted: 12/29/2016
 Date Analysed: 12/24/2016 1/25/2017
 HRMS File: FS01241709 FS01251704

IUPAC Name	PCB #	CAS #	Conc. ug/Kg	DL ug/Kg	Flag	EQL ug/Kg
------------	-------	-------	----------------	-------------	------	--------------

Surrogate Recoveries			Acceptance	
Chemical Name	IUPAC #	%	Min	Max
¹³ C ₁₂ -2-MoCB	1L	69	5	145
¹³ C ₁₂ -4-MoCB	3L	82	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	58	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	77	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	126	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	128	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	56	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	98	5	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	109	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	66	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	103	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	117	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	112	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	117	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	108	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	121	10	145
¹³ C ₁₂ -2,3',4,4',5'-HxCB	167L	78	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	78	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	157L	73	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	69	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	53	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	136	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OoCB	202L	29	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6-OoCB	205L	93	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	47	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6-NoCB	206L	48	10	145
¹³ C ₁₂ -DeCB	209L	42	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	104	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	86	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6-HpCB	178L	84	10	145

QC REPORT - SPIKE

Client: City of Spokane
Client ID: SPIKE (LCS)
Field ID:
PRL ID: PC161630S

Contact: Jeff Donovan
Date Extracted: 12/29/2016
Date Analysed: 1/11/2017
HRMS File: DF01101712

Polychlorinated Biphenyls				Accept. Recovery		Pass/Fail	Surrogate Recoveries
Chemical Name	IUPAC #	CAS No.	LOF ug/Kg	Recovery %	Min %	Max %	%
2-MoCB	PCB-001	2051-60-7	0.1	98.6	60	135	61
4-MoCB	PCB-003	2051-62-9	0.1	89.1	60	135	65
2,6-DiCB	PCB-010	33146-45-1	0.1	83.2			-
2,2'-DiCB	PCB-004	13029-08-8	0.1	81.1	60	135	54
	PCB-005/008		0.1	98.2			-
4,4'-DiCB	PCB-015	2050-68-2	0.1	89.0	60	135	67
2,2',6-TrCB	PCB-019	38444-73-4	0.1	105.4	60	135	55
2,2',5-TrCB	PCB-018	37680-65-2	0.1	85.5			-
2,4,4'-TrCB	PCB-028	7012-37-5	0.1	68.3			-
	PCB-020/033		0.1	61.1			-
2,3,4'-TrCB	PCB-022	38444-85-8	0.1	79.1			-
3,4,4'-TrCB	PCB-037	38444-90-5	0.1	66.2	60	135	76
2,2',6,6'-TeCB	PCB-054	15968-05-5	0.1	96.8	60	135	53
	PCB-052/069		0.1	78.1			-
	PCB-043/049		0.1	91.6			-
2,2',3,5'-TeCB	PCB-044	41464-39-5	0.1	103.3			-
2,2',3,4'-TeCB	PCB-041	52663-59-9	0.1	87.6			-
2,2',3,3'-TeCB	PCB-040	38444-93-8	0.1	91.5			-
2,4,4',5'-TeCB	PCB-074	32690-93-0	0.1	110.6			-
2,3',4',5'-TeCB	PCB-070	32598-11-1	0.1	125.5			-
2,3',4,4'-TeCB	PCB-066	32598-10-0	0.1	115.2			-
2,3,4,4'-TeCB	PCB-060	33025-41-1	0.1	122.5			-
3,4,4',5'-TeCB	PCB-081	70362-50-4	0.1	66.4	60	135	114
3,3',4,4'-TeCB	PCB-077	32598-13-3	0.1	67.0	60	135	108
2,2',4,6,6'-PeCB	PCB-104	56558-16-8	0.1	92.6	60	135	46
2,2',3,5',6'-PeCB	PCB-095	38379-99-6	0.1	84.3			-
2,2',3,4',5'-PeCB	PCB-090	68194-07-0	0.1	113.1			-
2,2',4,5,5'-PeCB	PCB-101	37680-73-2	0.1	89.8			-
2,2',4,4',5'-PeCB	PCB-099	38380-01-7	0.1	101.5			-
2,3',4,4',6'-PeCB	PCB-119	56558-17-9	0.1	90.4			-
	PCB-087/115		0.1	93.0			-
2,3,3',4',6'-PeCB	PCB-110	38380-03-9	0.1	130.0			-
2,3',4,4',5'-PeCB	PCB-123	65510-44-3	0.1	68.0	60	135	108
2,3',4,4',5'-PeCB	PCB-118	31508-00-6	0.1	66.9	60	135	106
2,3,4,4',5'-PeCB	PCB-114	74472-37-0	0.1	76.9	60	135	110
2,3,3',4,4'-PeCB	PCB-105	32598-14-4	0.1	61.9	60	135	102
3,3',4,4',5'-PeCB	PCB-126	57465-28-8	0.1	63.8	60	135	88
2,2',4,4',6,6'-HxCB	PCB-155	33979-03-2	0.1	91.2	60	135	66
2,2',3,5,5',6'-HxCB	PCB-151	52663-63-5	0.1	89.1			-
	PCB-139/149		0.1	104.8			-
2,2',4,4',5,5'-HxCB	PCB-153	35065-27-1	0.1	90.5			-
2,3',4,4',5',6'-HxCB	PCB-168	59291-65-5	0.1	118.2			-
2,2',3,4,5,5'-HxCB	PCB-141	52712-04-6	0.1	110.9			-
2,2',3,4,4',5'-HxCB	PCB-137	35694-06-5	0.1	110.0			-
2,2',3,4,4',5'-HxCB	PCB-138	35065-28-2	0.1	104.0			-
2,3,3',4,4',6'-HxCB	PCB-158	74472-42-7	0.1	97.0			-

QC REPORT - SPIKE

Client: City of Spokane
 Client ID: SPIKE (LCS)
 Field ID:
 PRL ID: PC161630S

Contact: Jeff Donovan
 Date Extracted: 12/29/2016
 Date Analysed: 1/11/2017
 HRMS File: DF01101712

Polychlorinated Biphenyls				Accept. Recovery		Pass/Fail	Surrogate Recoveries
Chemical Name	IUPAC #	CAS No.	LOF ug/Kg	Recovery %	Min %	Max %	
2,2',3,3',4,5-HxCB	PCB-129	55215-18-4	0.1	91.8			-
2,2',3,3',4,4'-HxCB	PCB-128	38380-07-3	0.1	89.8			-
2,3',4,4',5,5'-HxCB	PCB-167	52663-72-6	0.1	85.0	60	135	Pass 67
2,3,3',4,4',5-HxCB	PCB-156	38380-08-4	0.1	79.6	60	135	Pass 60
2,3,3',4,4',5'-HxCB	PCB-157	69782-90-7	0.1	80.1	60	135	Pass 58
3,3',4,4',5,5'-HxCB	PCB-169	32774-16-6	0.1	64.9	60	135	Pass 58
2,2',3,4',5,6,6'-HpCB	PCB-188	74487-85-7	0.1	91.1	60	135	Pass 101
2,2',3,3',5,5',6-HpCB	PCB-178	52663-67-9	0.1	78.4			-
	PCB-182/187		0.1	78.2			-
2,2',3,4,4',5',6-HpCB	PCB-183	52663-69-1	0.1	71.0			-
2,2',3,3',4,5',6'-HpCB	PCB-177	52663-70-4	0.1	74.0			-
2,2',3,3',4,4',6-HpCB	PCB-171	52663-71-5	0.1	64.7			-
2,2',3,4,4',5,5'-HpCB	PCB-180	35065-29-3	0.1	122.2			-
2,3,3',4',5,5',6-HpCB	PCB-193	69782-91-8	0.1	122.2			-
2,3,3',4,4',5',6-HpCB	PCB-191	74472-50-7	0.1	68.7			-
2,2',3,3',4,4',5-HpCB	PCB-170	35065-30-6	0.1	67.4			-
2,3,3',4,4',5,5'-HpCB	PCB-189	39635-31-9	0.1	74.4	60	135	Pass 98
2,2',3,3',5,5',6,6'-OxCB	PCB-202	2136-99-4	0.1	105.4	60	135	Pass 74
2,2',3,3',4,5',6'-OxCB	PCB-201	40186-71-8	0.1	91.9			-
2,2',3,3',4,5,5',6'-OxCB	PCB-199	52663-75-9	0.1	82.3			-
2,2',3,4,4',5,5',6-OxCB	PCB-203	52663-76-0	0.1	104.9			-
2,2',3,3',4,4',5,5'-OxCB	PCB-194	35694-08-7	0.1	88.4			-
2,3,3',4,4',5,5',6-OxCB	PCB-205	74472-53-0	0.1	86.3	60	135	Pass 87
2,2',3,3',4,5,5',6,6'-NoCB	PCB-208	52663-77-1	0.1	98.4	60	135	Pass 95
2,2',3,3',4,4',5,5',6-NoCB	PCB-206	40186-72-9	0.1	93.0	60	135	Pass 96
2,2',3,3',4,4',5,5',6,6'-DeCB	PCB-209	2051-24-3	0.1	116.1	60	135	Pass 68

LOF - level of fortification

Acronyms used in reporting Polychlorinated Biphenyls (PCBs)

MoCB = Monochlorobiphenyl

HxCB = Hexachlorobiphenyl

DiCB = Dichlorobiphenyl

HpCB = Heptachlorobiphenyl

TrCB = Trichlorobiphenyl

OcCB = Octachlorobiphenyl

TeCB = Tetrachlorobiphenyl

NoCB = Nonachlorobiphenyl

PeCB = Pentachlorobiphenyl

DeCB = Decachlorobiphenyl

Acceptable recoveries for PCB Internal Standards - EPA 1668C

Chemical Name	IUPAC #	Min	Max
¹³ C ₁₂ -2-MoCB	1L	5	145
¹³ C ₁₂ -4-MoCB	3L	5	145
¹³ C ₁₂ -2,2'-DiCB	4L	5	145
¹³ C ₁₂ -4,4'-DiCB	15L	5	145
¹³ C ₁₂ -2,2',6'-TrCB	19L	5	145
¹³ C ₁₂ -3,4,4'-TrCB	37L	5	145
¹³ C ₁₂ -2,2',6,6'-TeCB	54L	5	145
¹³ C ₁₂ -3,4,4',5'-TeCB	81L	10	145
¹³ C ₁₂ -3,3',4,4'-TeCB	77L	10	145
¹³ C ₁₂ -2,2',4,6,6'-PeCB	104L	10	145
¹³ C ₁₂ -2',3,4,4',5'-PeCB	123L	10	145
¹³ C ₁₂ -2,3',4,4',5'-PeCB	118L	10	145
¹³ C ₁₂ -2,3,4,4',5'-PeCB	114L	10	145
¹³ C ₁₂ -2,3,3',4,4'-PeCB	105L	10	145
¹³ C ₁₂ -3,3',4,4',5'-PeCB	126L	10	145
¹³ C ₁₂ -2,2',4,4',6,6'-HxCB	155L	10	145
¹³ C ₁₂ -2,3',4,4',5,5'-HxCB	167L	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	156L	10	145
¹³ C ₁₂ -2,3,3',4,4',5'-HxCB	157L	10	145
¹³ C ₁₂ -3,3',4,4',5,5'-HxCB	169L	10	145
¹³ C ₁₂ -2,2',3,4',5,6,6'-HpCB	188L	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5'-HpCB	189L	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6,6'-OcCB	202L	10	145
¹³ C ₁₂ -2,3,3',4,4',5,5',6'-OcCB	205L	10	145
¹³ C ₁₂ -2,2',3,3',4',5,5',6,6'-NoCB	208L	10	145
¹³ C ₁₂ -2,2',3,3',4,4',5,5',6'-NoCB	206L	10	145
¹³ C ₁₂ -DeCB	209L	10	145
¹³ C ₁₂ -2,4,4'-TrCB	28L	5	145
¹³ C ₁₂ -2,3,3',5,5'-PeCB	111L	10	145
¹³ C ₁₂ -2,2',3,3',5,5',6'-HpCB	178L	10	145



CHAIN OF CUSTODY RECORD

City of Spokane, Wastewater Management
Wastewater Laboratory
4401 N. Aubrey L. White Parkway
Spokane, WA 99205
(509) 625-4600

Page 1 of 4

From: Name: City of Spokane RPWRF
Address: North 4401 A.L. White Parkway
Spokane, WA 99205
Phone: (509)-625-4600
Contact: Jeff Donovan
Email: jdovonan@spokanecity.org

To: Name: Pacific Rim Laboratories Inc.
Address: #103, 19575 55A Ave
Surrey, BC V3S 8P8
Phone: 604-532-8711
Contact: Dave Hope
Purchase Order #: OPR 2012-0841
Shipper Tracking Number: 8014 23087193

Sample Transfer (sign below)

1. Relinquished By:		3. Relinquished By:	
(print) <u>Jeff Donovan</u>	Date: <u>12/5/2016</u>	(print)	Date:
(sign) <u>[Signature]</u>	Time: <u>1:00 PM</u>	(sign)	Time:
2. Received By:		4. Received By:	
(print)	Date:	(print)	Date:
(sign)	Time:	(sign)	Time:
Storage Location (Refrigerator Location):			

Test Parameters (include Method Number)

1. Relinquished By:			3. Relinquished By:			PCBs - EPA Method 1668C (209 Congeners)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
---------------------	--	--	---------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Matrix: DW = Drinking Water, GW = Ground Water, WW = Wastewater, L = Liquid, S = Solid/Sludge, SO = Soil

O = Other

Preservation: R = Refrigerate (4C), F = Freeze, N = Nitric Acid, H = Hydrochloric Acid, O = Other

SH = Sodium Hydroxide, S = Sulfuric Acid

Sample Type: G = Grab, C = Composite

Upon Rec'd Data, Complete Following Steps:

() Data Original to Respective File

() Data Copy File With This Document

() Invoice to Warehouse for Payment

Invoice #: _____

() Data file location _____

Version: 71703

CHAIN OF CUSTODY RECORD

City of Spokane, Wastewater Management
Wastewater Laboratory
4401 N. Aubrey L. White Parkway
Spokane, WA 99205
(509) 625-4600

Page 2 of 4

From: City of Spokane RPWRF
Address: North 4401 A.L. White Parkway
Spokane, WA 99205
Phone: (509)-625-4600
Contact: Jeff Donovan
Email: jdonovan@spokanecity.org

To:	Name:	Pacific Rim Laboratories Inc.
	Address:	#103, 19575 55A Ave
		Surrey, BC V3S 8P8
	Phone:	604-532-8711
	Contact:	Dave Hope
	Purchase Order # :	OPR 2012-0841
	Shipper Tracking Number:	801423087193

Sample Transfer (sign below)

Sample Number: 049000000		Sample ID: 049000000	
1. Relinquished By:		3. Relinquished By:	
(print) Jeff Donovan	Date: 12/5/2016	(print)	Date:
(sign) 	Time: 1:00 PM	(sign)	Time:
2. Received By:		4. Received By:	
(print)	Date:	(print)	Date:
(sign)	Time:	(sign)	Time:
Storage Location (Refrigerator Location):			

Test Parameters (include Method Number)

[illegible]

Matrix: DW = Drinking Water, GW = Ground Water, WW = Wastewater, L = Liquid, S= Solid/Sludge, SO = Soil

Q = Other

Preservation: R = Refrigerate (4C), F = Freeze, N = Nitric Acid, H = Hydrochloric Acid, O = Other

SH = Sodium Hydroxide, S = Sulfuric Acid

Sample Type: G = Grab, C = Composite

Version: 71703

Upon Rec'd Data, Complete Following Steps:

() Data Original to Respective File

☐ Data Copy File With This Document

() Invoice to Warehouse for Payment

Invoice #:

() Data file location

3 of 4



CHAIN OF CUSTODY RECORD / ANALYSIS REQUEST

Pacific Rim Laboratories Inc. #103, 19575 - 55A Avenue, Surrey, BC V3S 8P8 Tel: 604-532-8711 Fax: 604-532-8712

COMPANY: City of Spokane CONTACT: Jeff Donovan
 Address: 4401 N Aubrey L White Parkway PHONE: 509-625-4600
Spokane, Wa 99208
 Date: 12/5/2016 EMAIL: jdonovan@spokanecity.org

SAMPLE ID	PRL ID	DATE SAMPLED	SAMPLE MATRIX											COMMENTS
				NUMBER OF CONTAINERS	DIOXIN/FURAN	PCB - dioxin-like & homolog	PCB - 209 congener	PAH	PBDE	TBT	Nonylphenol	Date Requested		
L. E. Bell Jar #4 - 16-18396	PR104206	11/30/2016	solid				x							Frozen
G. F. Olga Jar #2 - 16-18397	4207	11/30/2016	solid				x							Frozen
P. Ost. Colum. Jar #2 - 16-18398	4208	11/30/2016	solid				x							Frozen
P. Ost. Brat Jar #2 - 16-18399	4209	11/30/2016	solid				x							Frozen
Vactor Waste Control - 16-18400	4210	11/30/2016	solid				x							Frozen
G. F. Olga Jar #1 - 16-18401	4211	11/30/2016	solid				x							Frozen
SRA Jar #1 - 16-18402	4212	11/30/2016	solid				x							Frozen
P. Wild CA Creek Jar #1 - 16-18403	4213	11/30/2016	solid				x							Frozen
L. E. Bell Jar #3 - 16-18404	4214	11/30/2016	solid				x							Frozen
VW + Sawdust Control - 16-18405	4215	11/30/2016	solid				x							Frozen

Sampler's Signature <i>Jeff Donovan</i>	Relinquished by: <i>Jeff Donovan</i>	Company <i>City of Spokane</i>	Date <i>12/5/16</i>	Time <i>1:00P</i>	Received by:
Comments:	Method of Shipment <i>Fedex</i>	Waybill No. <i>801423087193</i>	Rec'd for PRL <i>AK</i>		Date <i>12:30 PM</i>
	Shipment Condition <i>good</i>	Temp.: <i>10.2°C</i>	Cooler Opened By: <i>AK</i>		



CHAIN OF CUSTODY RECORD / ANALYSIS REQUEST

4 of 4

Pacific Rim Laboratories Inc. #103, 19575 - 55A Avenue, Surrey, BC V3S 8P8 Tel: 604-532-8711 Fax: 604-532-8712

COMPANY: City of Spokane CONTACT: Jeff Donovan

Address: 4401 N Aubrey L White Parkway PHONE: 509-625-4600
Spokane, Wa 99208

Date: 12/5/2016 EMAIL: jdonovan@spokanecity.org

SAMPLE ID	PRL ID	DATE SAMPLED	SAMPLE MATRIX	ANALYTES										COMMENTS
				NUMBER OF CONTAINERS	DIOXIN/FURAN	PCB - dioxin-like & homolog	PCB - 209 congener	PAH	PBDE	TBT	Nonylphenol	Date Requested		
P. Wild CA Jar #2 - 16-17817	PR164216	11/15/2016	Solid				x							Frozen
P. Wild CA Jar #2 Dup - 16-17818	4217	11/15/2016	Solid				x							Frozen
P. Wild CA Jar #2 Trip - 16-17819	4218	11/15/2016	Solid				x							Frozen
P. Ost. Colum. Jar #1 - 16-17820	A219	11/15/2016	Solid				x							Frozen
T. V. Black Jar #2 - 16-17821	4220	11/15/2016	Solid				x							Frozen
P. Djamor Jar #1 - 16-17822	4221	11/17/2016	Solid				x							Frozen
P. Ost. Brat Jar #1 - 16-17823	A222	11/17/2016	Solid				x							Frozen
S. Ra. Jar #3 - 16-17824	A223	11/17/2016	Solid				x							Frozen
TV Black Jar #3 - 16-18394	A224	11/30/2016	Solid				x							Frozen
P. Djamor Jar #2 - 16-18395	4225	11/30/2016	Solid				x							Frozen

Sampler's Signature <i>[Signature]</i>	Relinquished by: <i>Jeff Donovan</i>	Company <i>City of Spokane</i>	Date <i>12/5/16</i>	Time <i>1:00 P</i>	Received by:
Comments	Method of Shipment <i>Fedex</i>	Waybill No.: <i>801423087193</i>	Rec'd for PRL:	Date	Time
	Shipment Condition	Temp.:	Cooler Opened By:		

Appendix F: Lisa Rodenburg's Information

Congener pattern analysis of fungal degradation data

Lisa A. Rodenburg
Department of Environmental Sciences
Rutgers, the State University of New Jersey

Challenges

- No one knows what to look for - no pattern to follow
- Only 30 samples – not enough for PMF factor analysis
- Differences between the SGE-HT8 and SPB-octyl columns make comparisons with Aroclors difficult →

DB-5	SGE-HT8	SPB-octyl	Matched Pattern
PCB-4+10	PCB-4 PCB-10	PCB-4 PCB-10	PCB-4+10
PCB-5+8	PCB-5+8	PCB-5 PCB-8	PCB-5+8
PCB-7+9	PCB-7 PCB-9	PCB-7 PCB-9	PCB-7+9
PCB-12+13	PCB-12+13	PCB-12+13	PCB-12+13
PCB-16+32	PCB-16 PCB-32	PCB-16 PCB-32	PCB-16+32
PCB-18 PCB-30	PCB-18 PCB-30	PCB-18+30	PCB-18+30
PCB-20+21+33 PCB-28	PCB-20+33 PCB-21 PCB-28	PCB-20+28 PCB-21+33	PCB-20+21+28+33
PCB-24+27	PCB-24 PCB-27	PCB-24 PCB-27	PCB-24+27
PCB-26 PCB-29	PCB-26 PCB-29	PCB-26+29	PCB-26+29
PCB-40 PCB-41+64+71+72 PCB-57	PCB-40+57 PCB-41 PCB-64+72 PCB-71	PCB-40+41+71 PCB-57 PCB-64 PCB-72	PCB-40+41+57+64+71+72
PCB-42+59 PCB-43+49 PCB-44 PCB-47 PCB-48+75 PCB-52+69 PCB-62 PCB-65	PCB-42 PCB-43+49 PCB-44 PCB-47+48 PCB-52+69 PCB-49 PCB-62 PCB-65+75	PCB-42 PCB-43 PCB-44+47+65 PCB-48 PCB-49+69 PCB-52 PCB-59+62+75	PCB-42+43+44+47+48+49+52+59+62+65+69+75
PCB-45 PCB-51	PCB-45 PCB-51	PCB-45+51	PCB-45+51
PCB-50 PCB-53	PCB-50 PCB-53	PCB-50+53	PCB-50+53
PCB-56+60	PCB-56 PCB-60	PCB-56 PCB-60	PCB-56+60
PCB-61+70 PCB-66+76 PCB-74	PCB-61 PCB-66 PCB-70 PCB-74 PCB-76	PCB-61+70+74+76 PCB-66	PCB-61+66+70+74+76
PCB-83 PCB-85+116	PCB-83+109 PCB-85	PCB-83+99 PCB-85+116+117	

Two Approaches

- Approach 1: compare % of total mass for each congener with controls
 - Anything with significantly different mass is investigated
- Approach 2: compare each sample to Aroclors
 - Construct a best-fit profile that is a linear combo of the 4 main Aroclors (1016, 1242, 1248, 1260)
 - Calculate the residuals between the best fit and the congener profile (again, % of total mass)
 - Look for congeners with significantly different residuals between the controls and the test bottles
 - This should screen out congeners that are not well described as Aroclors due to analytical problems or SGE-HT8 column

IUPAC	subs pattern	accum or dep?	in other list?	# coeluters	Boon group	ortho Cl	vicinal Cl?
16	2,2',3	dep	16	1	IV	2	yes
45	2,2',3,6	dep		2	V,V	3,3	yes
46	2,2',3,6'	dep		1	V	3	yes
50	2,2',4,6	dep		2	V,V	3,3	no
133	2,2',3,3',5,5'	dep	133	1	I	2	yes
175	2,2',3,3',4,5',6	dep	175	1	I	3	yes
191	2,3,3',4,4',5',6	dep		1	I	3	yes
201	2,2',3,3',4',5,5',6	dep	201	1	I	3	yes
202	2,2',3,3',5,5',6,6'	dep	202	1	I	4	yes
206	2,2',3,3',4,4',5,5',6	dep		1	I	3	yes
1	2	accum	1	1	VI	1	no
2	3	accum	2	1	VI	0	no
3	4	accum	3	1	VI	0	no
5	2,3	accum	5	2	VI,VI	1,1	yes
6	2,3'	accum		1	VI	1	no
7	2,4	accum		2	VI,VI	1,1	no
11	3,3'	accum	11	1	VI	0	no
15	4,4'	accum		1	III	0	no
20	2,3,3'	accum		4	VI OR III	1,1,1,1	yes
22	2,3,4'	accum		1	VI	1	yes
25	2,3',4	accum		1	VI	1	no
26	2,3',5	accum		2	VI,VI	1,1	no
36	3,3',5	accum	36	1	VI	0	no
37	3,4,4'	accum		1	III	0	yes
60	2,3,4,4'	accum	60	1	III	1	yes
61	2,3,4,5	accum	61	4	VI OR III	1,1,1,1	yes
66	2,3',4,4'	accum	66	1	III	1	yes
114	2,3,4,4',5	accum	114	1	III	1	yes

Results

These congeners are different via the Aroclor approach. Congeners in **red** are also different via the first approach.

Congeners that are depleted tend to have more Cl in the ortho positions

More ortho Cl = higher vapor pressure

But unlikely that congeners like 202 are volatilizing

Ortho Cl lead to non-planarity—less stable

What does it all mean?

- Not sure!
- Everything in the table is 'statistically significant' via ttest, two tails, unequal variances
- If there really is degradation, then
 - The congeners being degraded are not dioxin-like, and therefore are less toxic
 - It is encouraging that some high MW congeners are going away
 - The degradation pattern is totally different from the patterns seen in dechlorination (which cannot remove ortho chlorines) or cytochrome P450 oxidation (which attacks vicinal H)

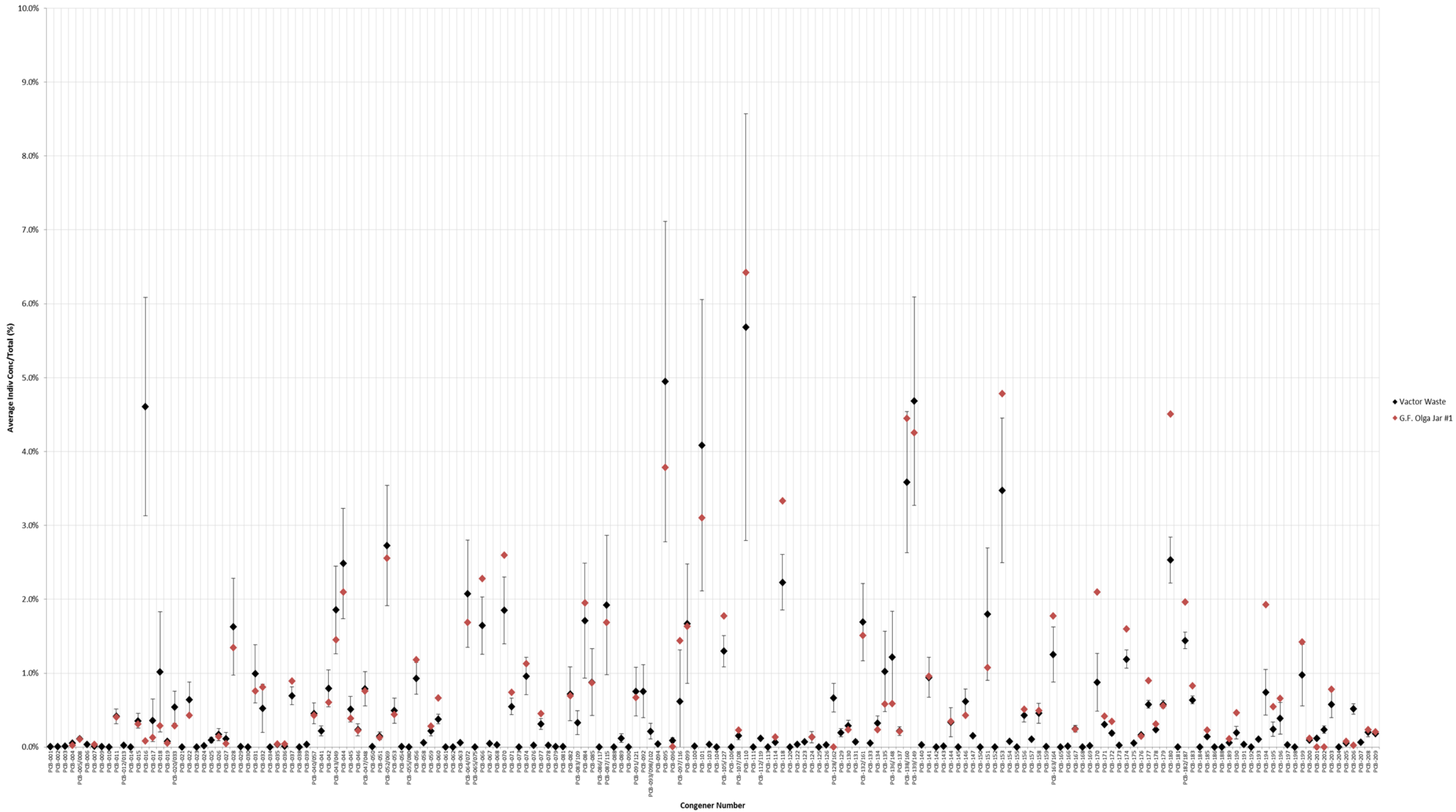
Further information

Lisa Rodenburg - Rutgers University

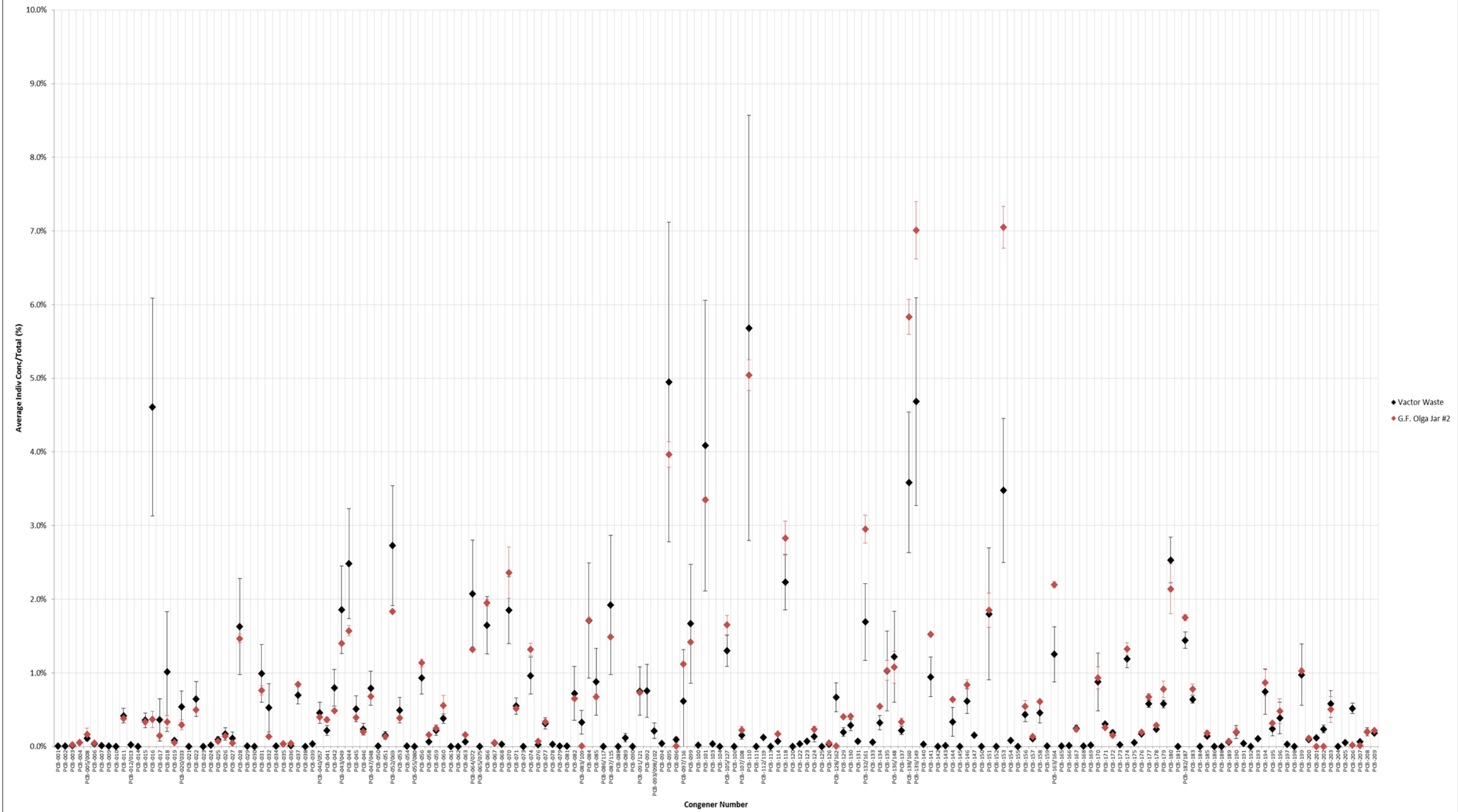
Lisa.Rodenburg@Rutgers.edu 848-932-5774

Appendix G: Percent Congeners to Total PCB Graphs

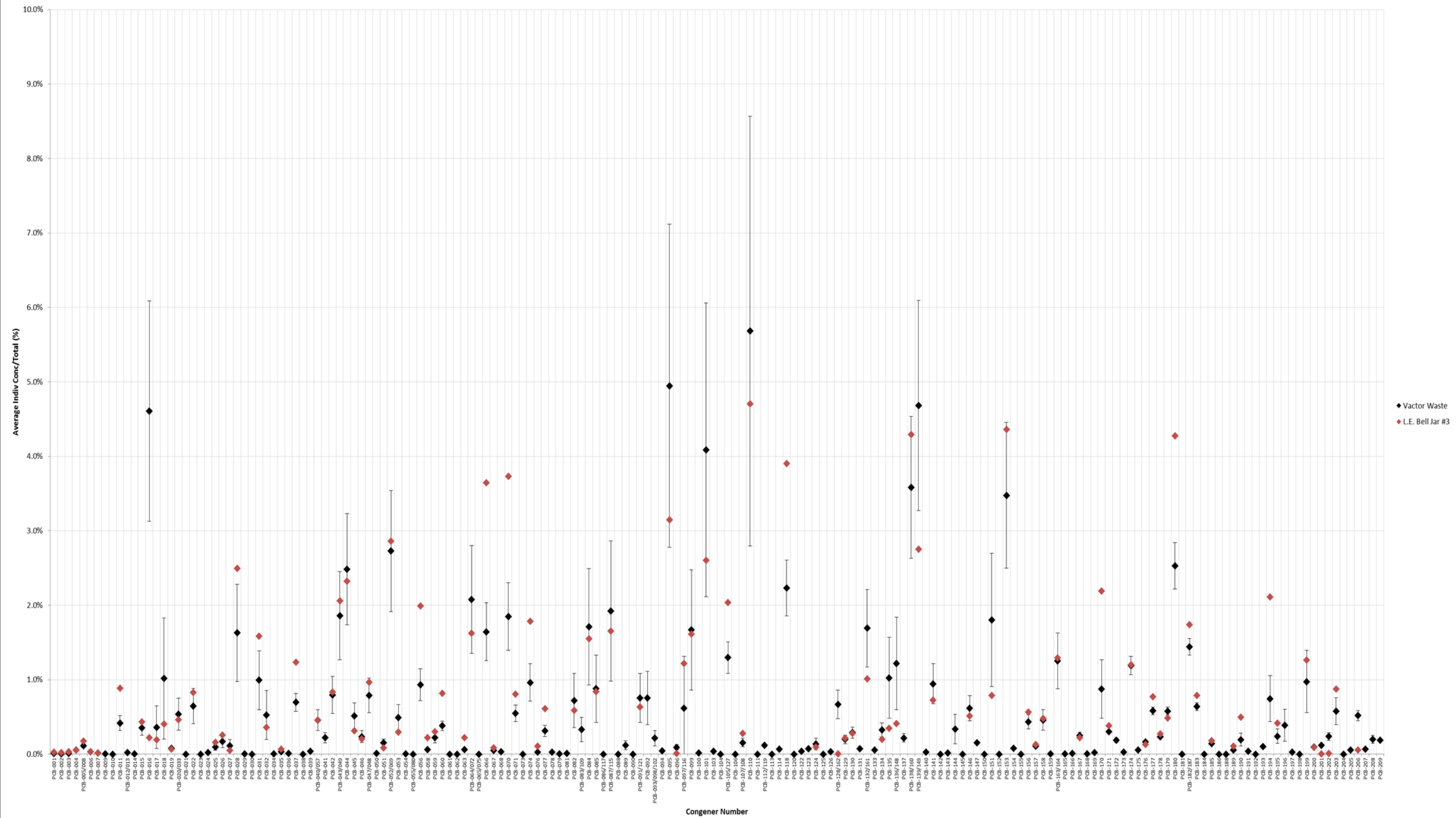
G.F. Olga Jar #1 PCBs

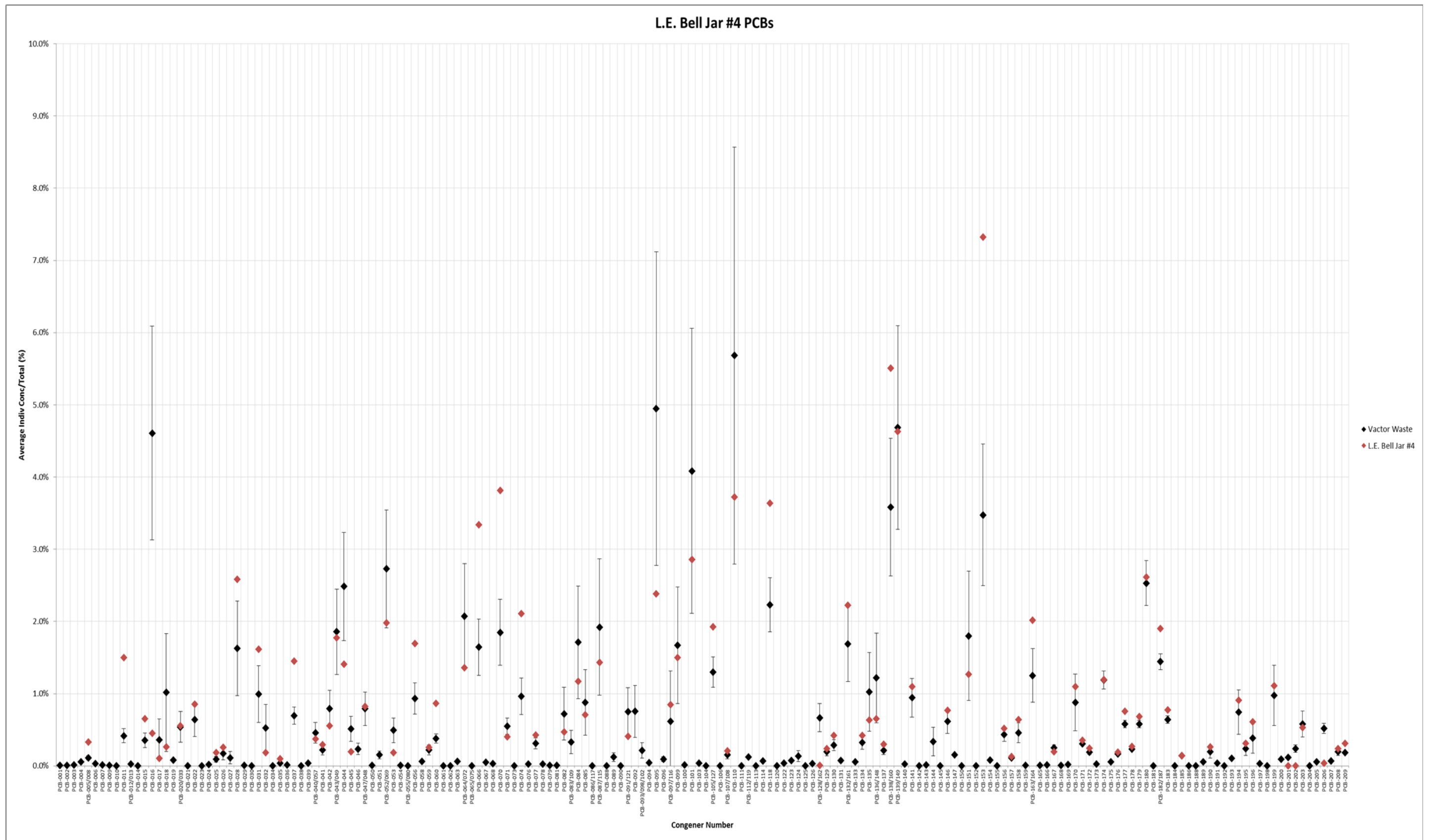


G.F. Olga Jar #2 PCBs

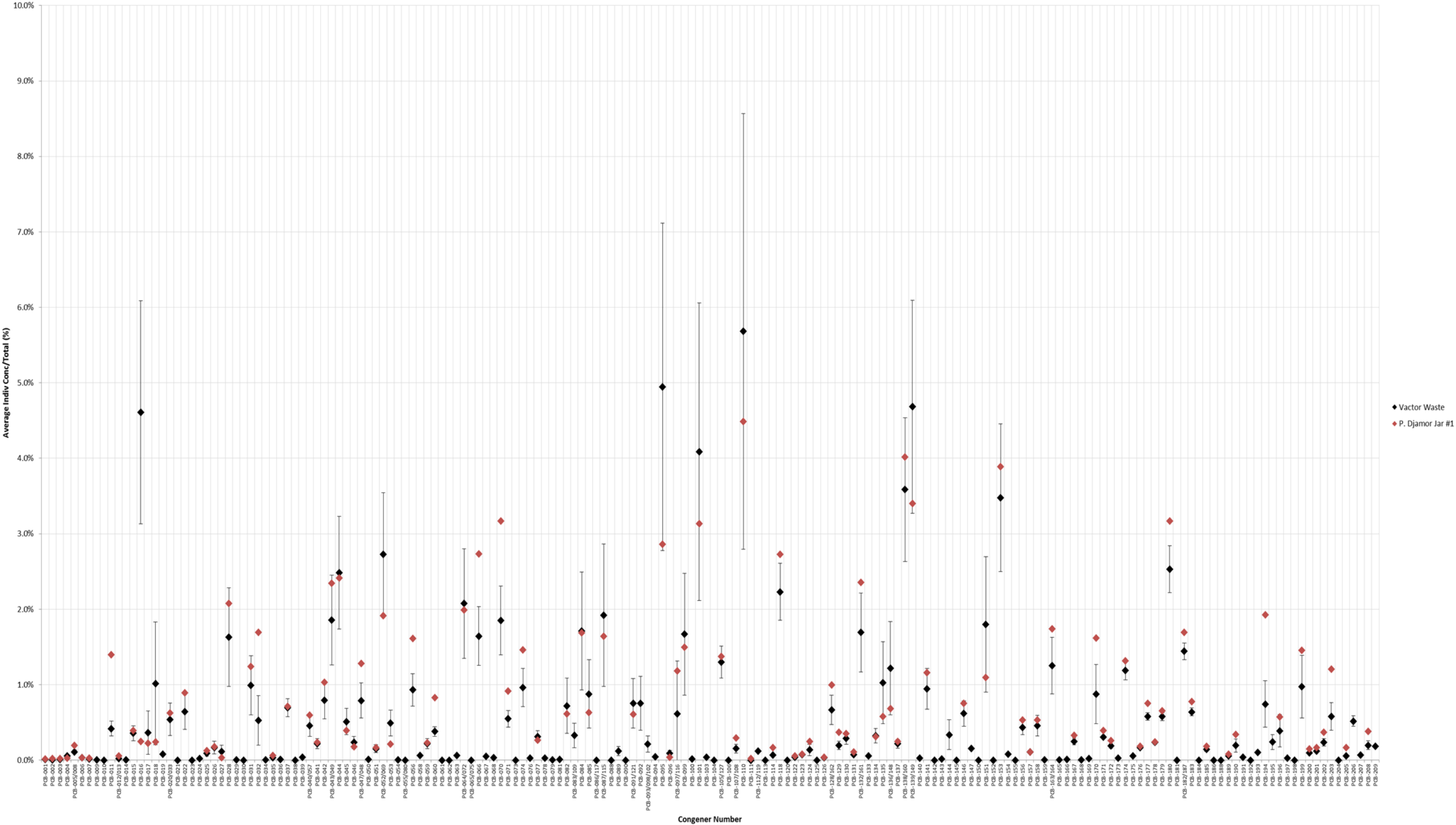


L.E. Bell Jar #3 PCBs

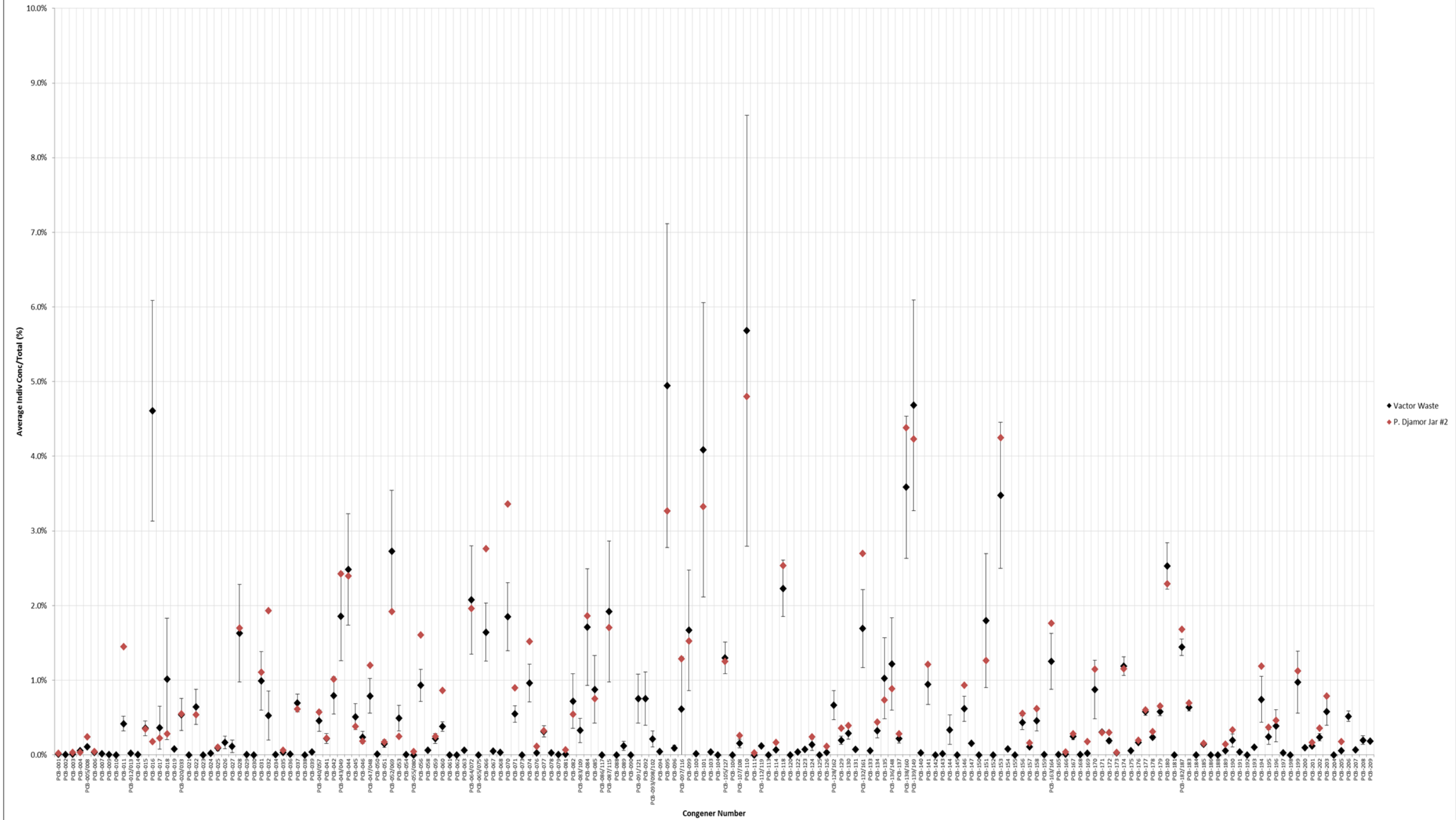




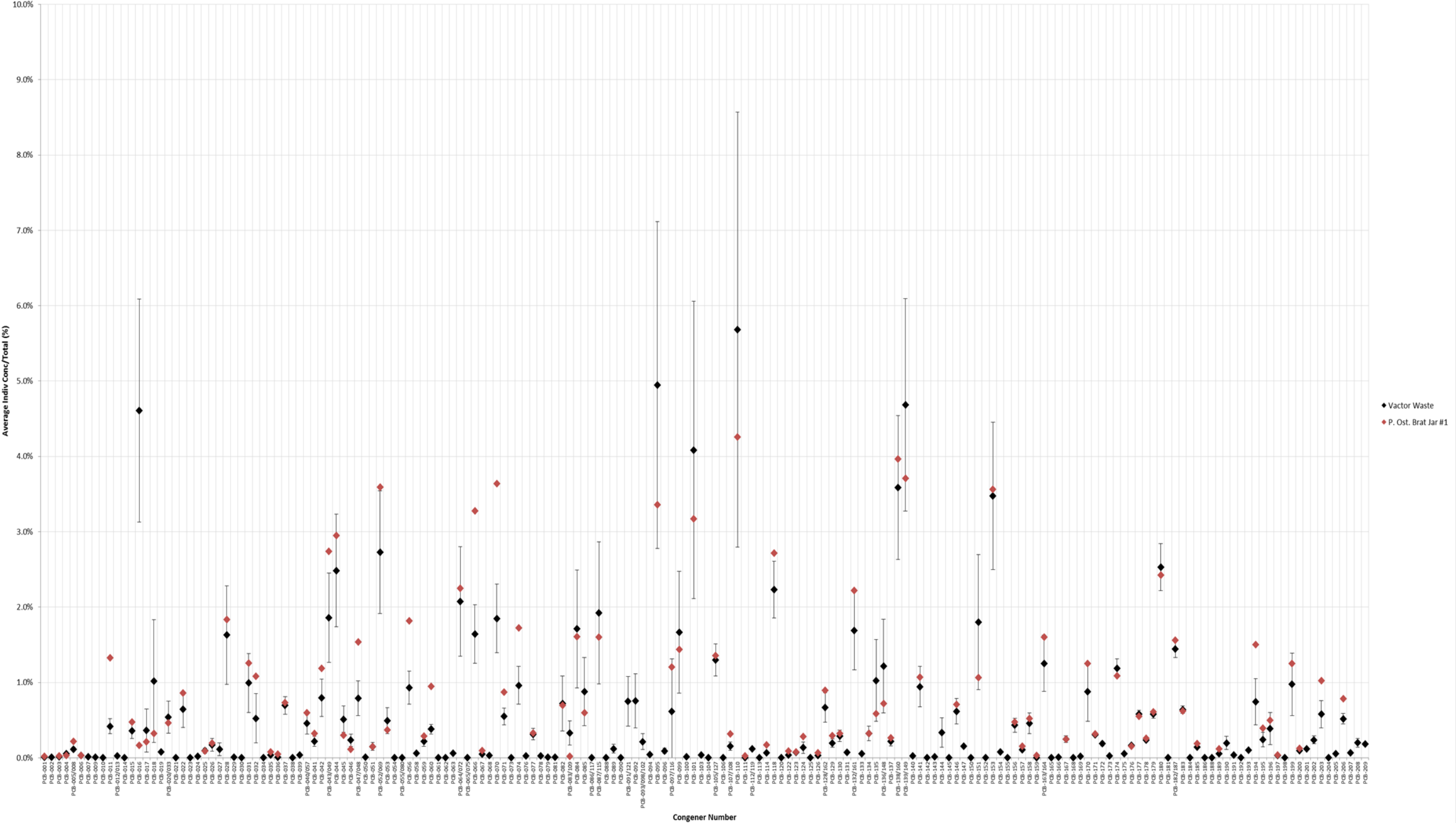
P. Djamor Jar #1 PCBs



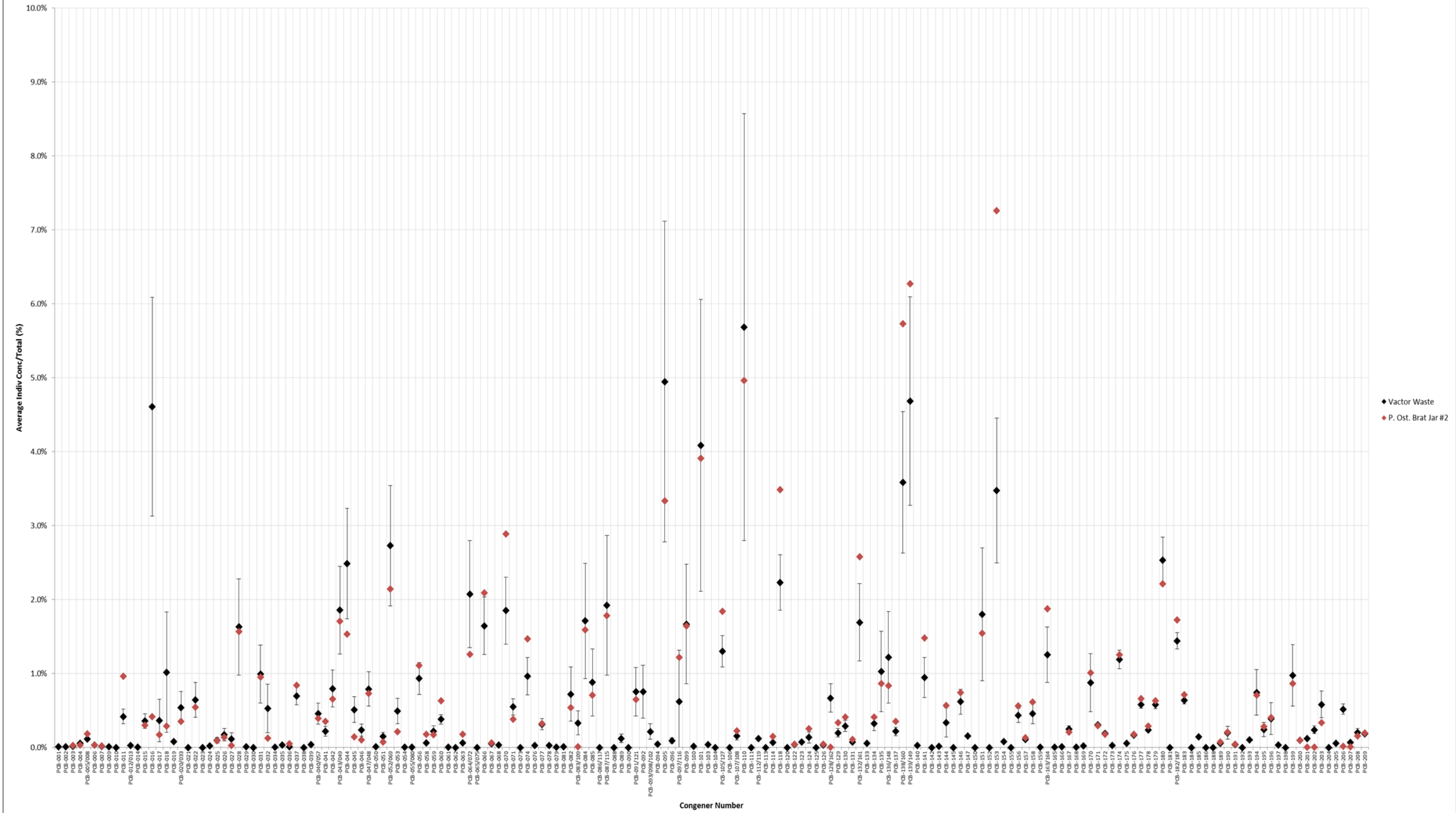
P. Djamor Jar #2 PCBs



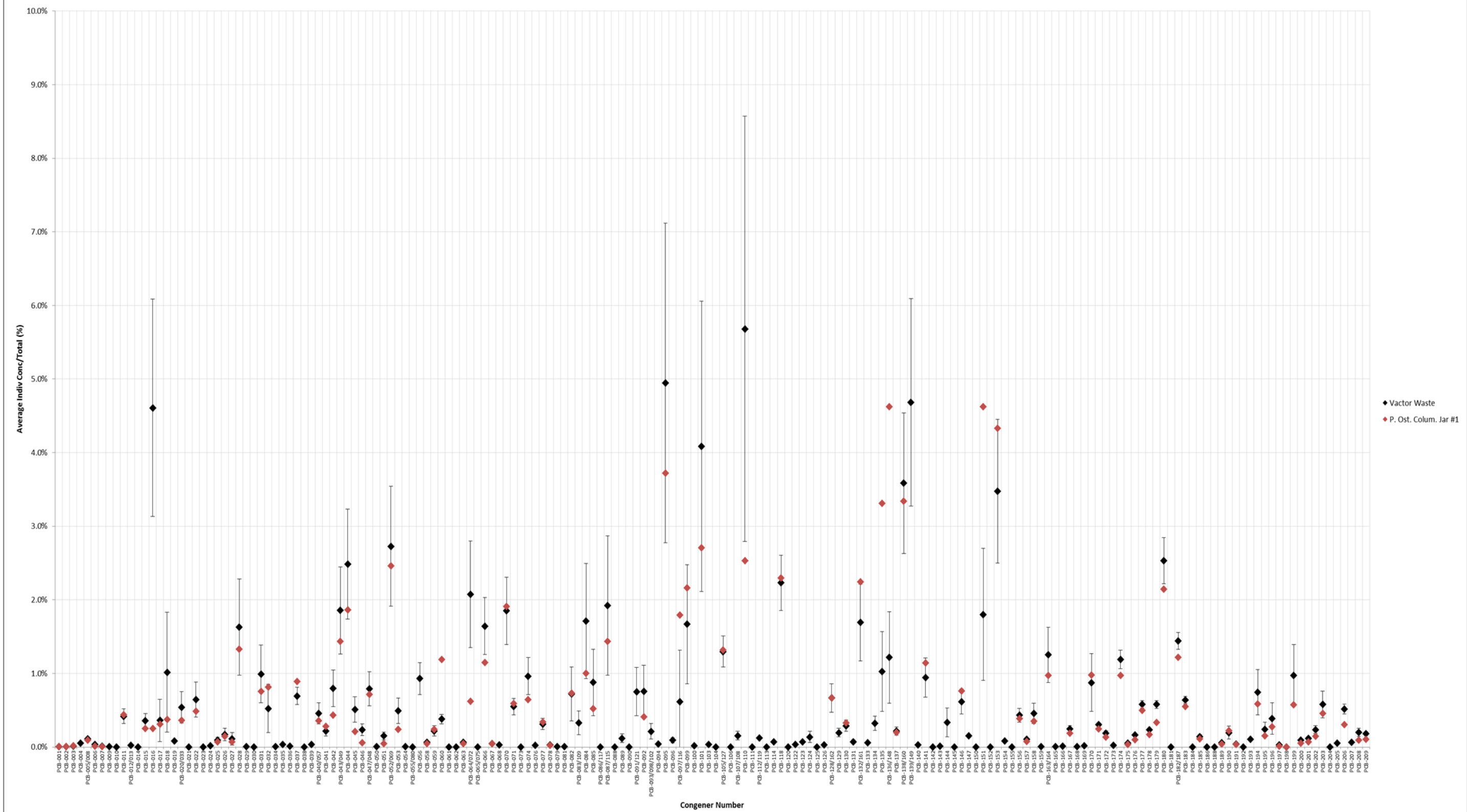
P. Ost. Brat Jar #1 PCBs



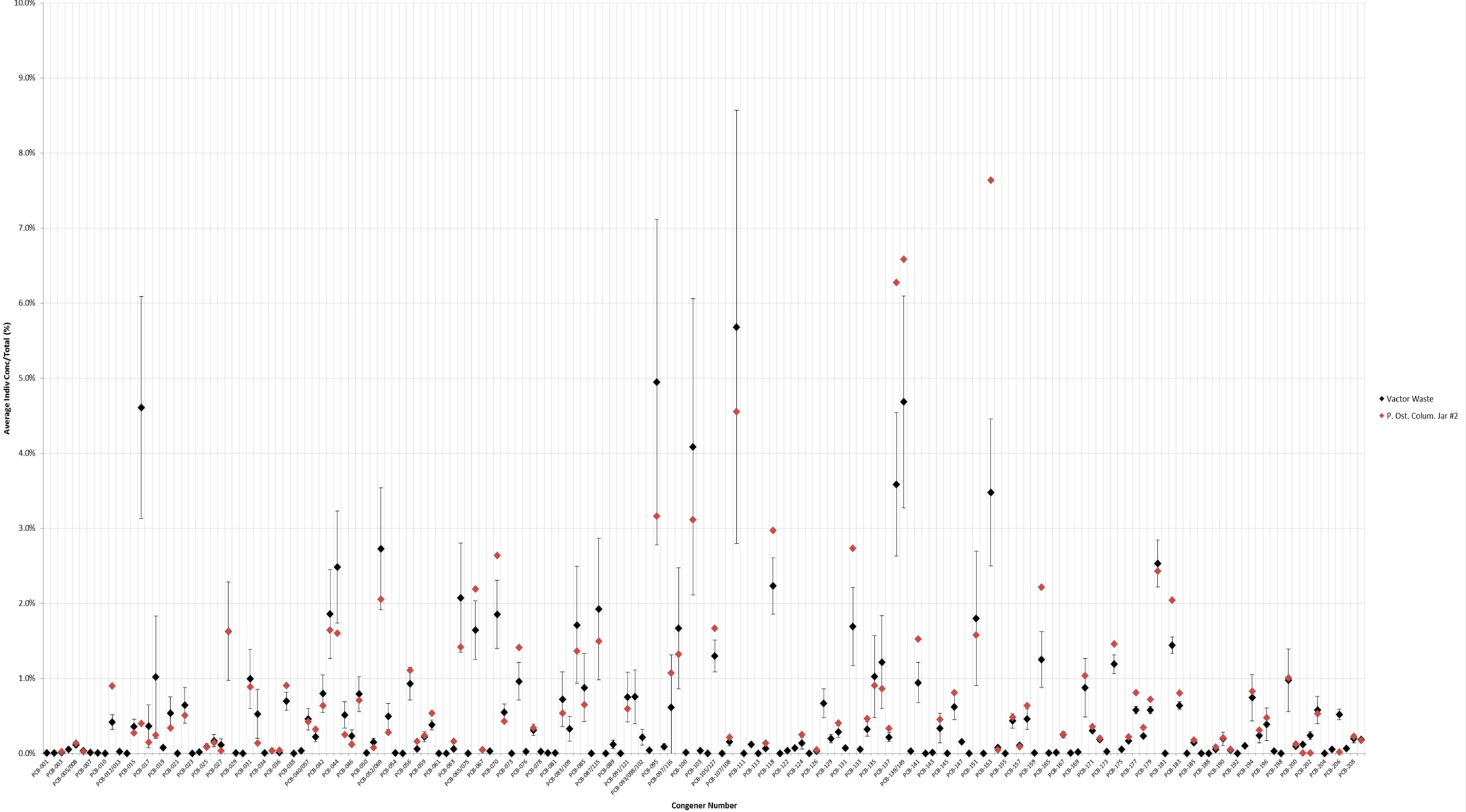
P. Ost. Brat Jar #2 PCBs



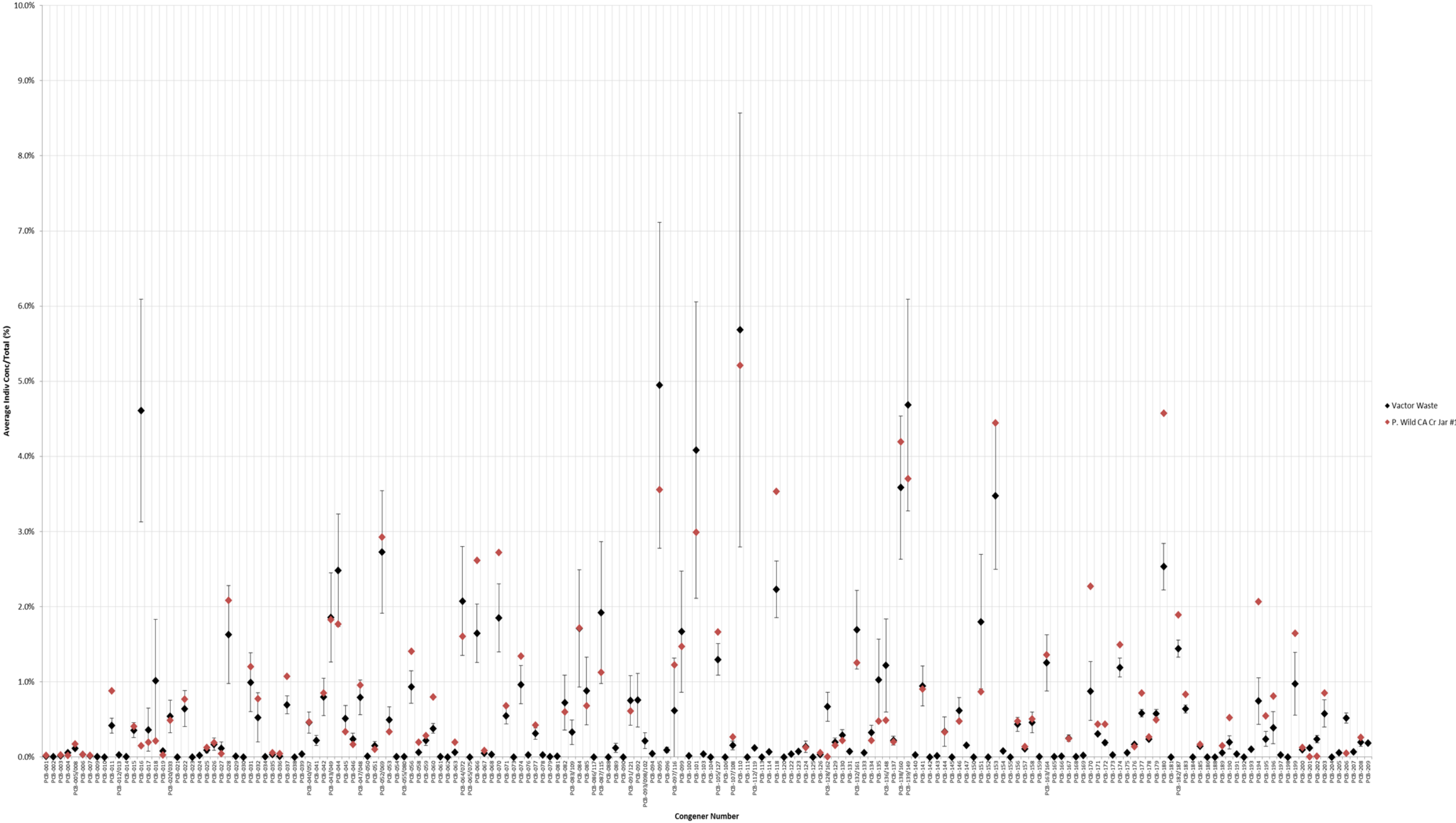
P. Ost. Colum. Jar #1 PCBs



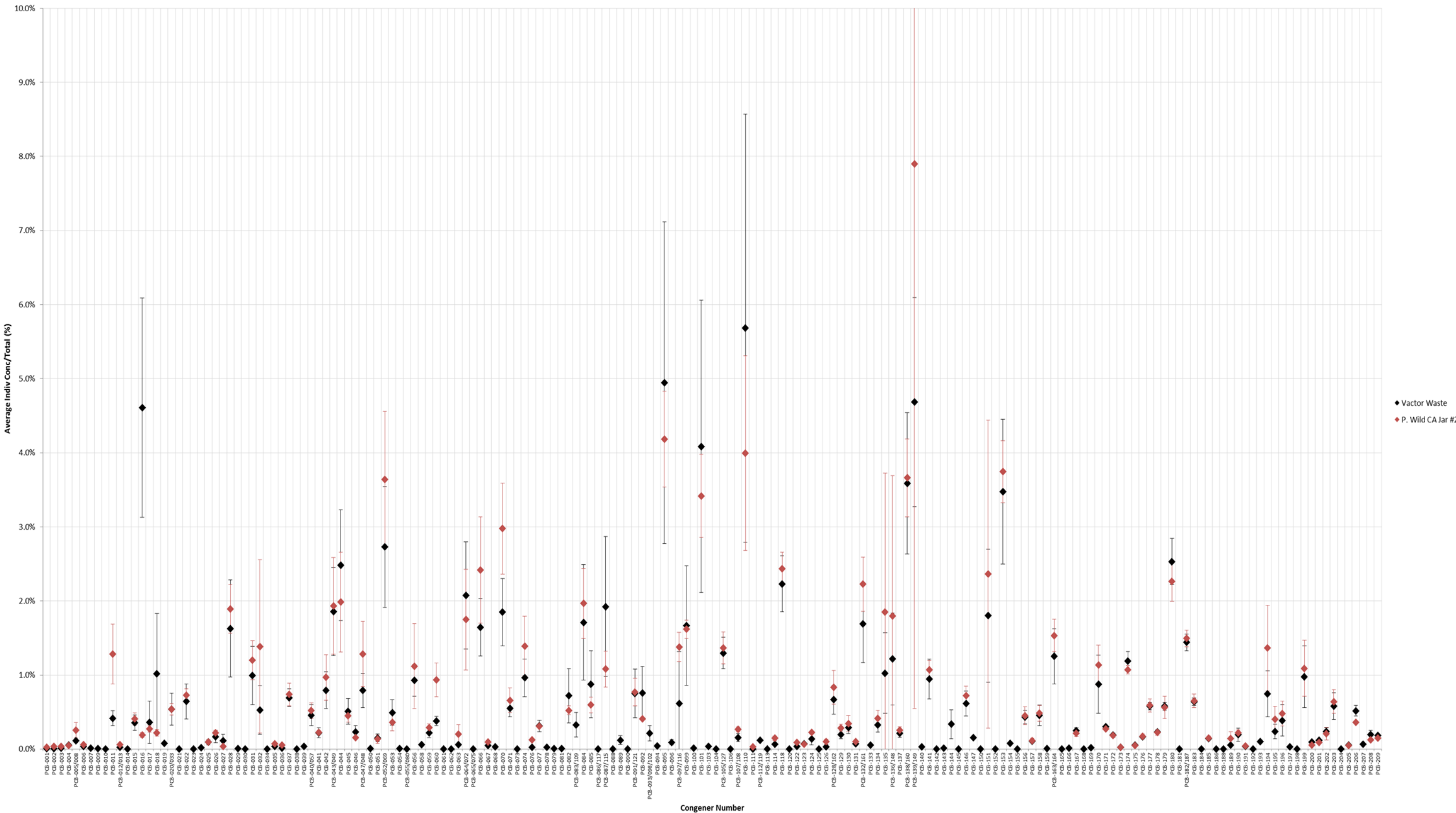
P. Ost. Colum. Jar #2 PCBs



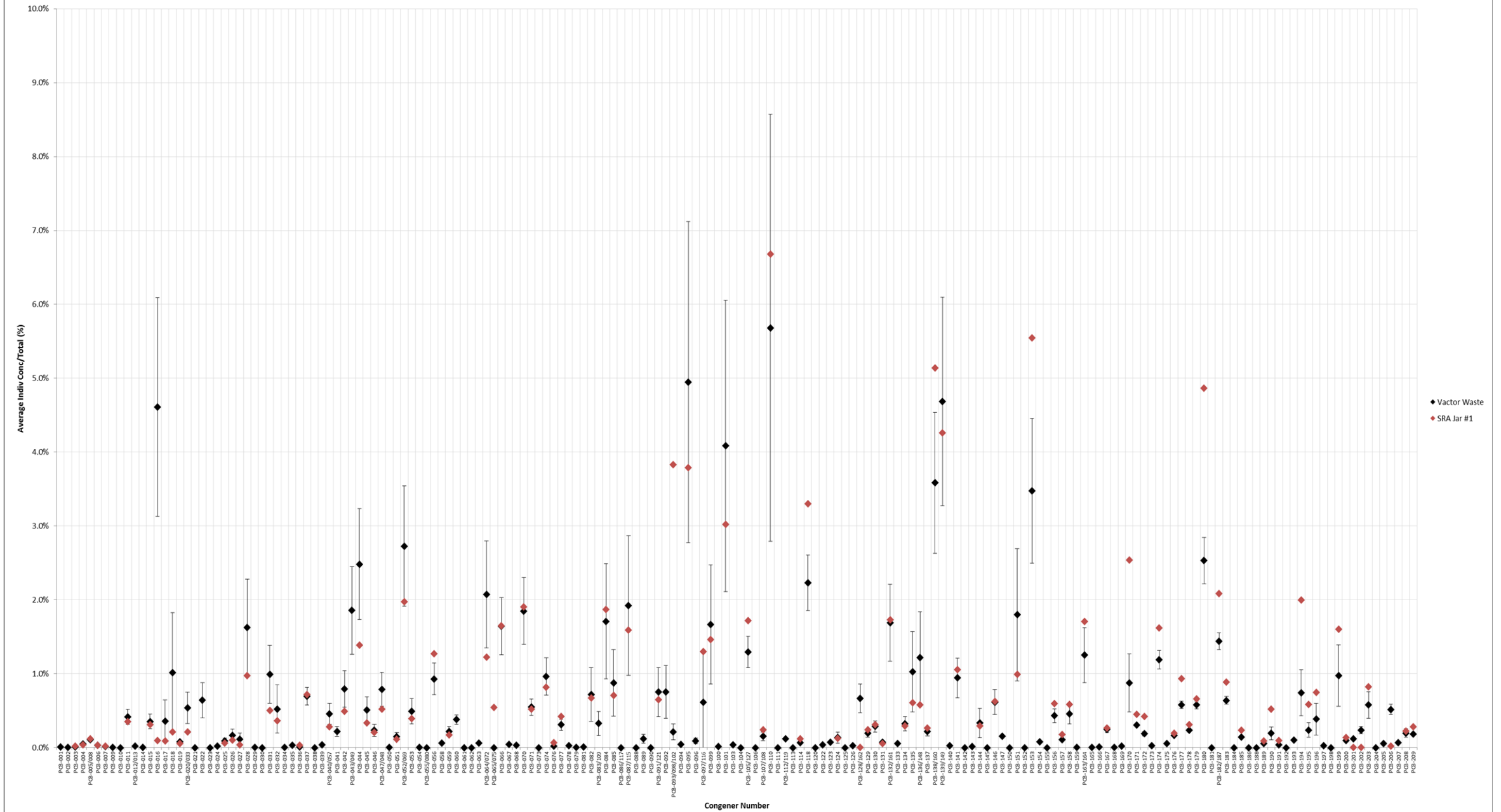
P. Wild CA Cr Jar #1 PCBs



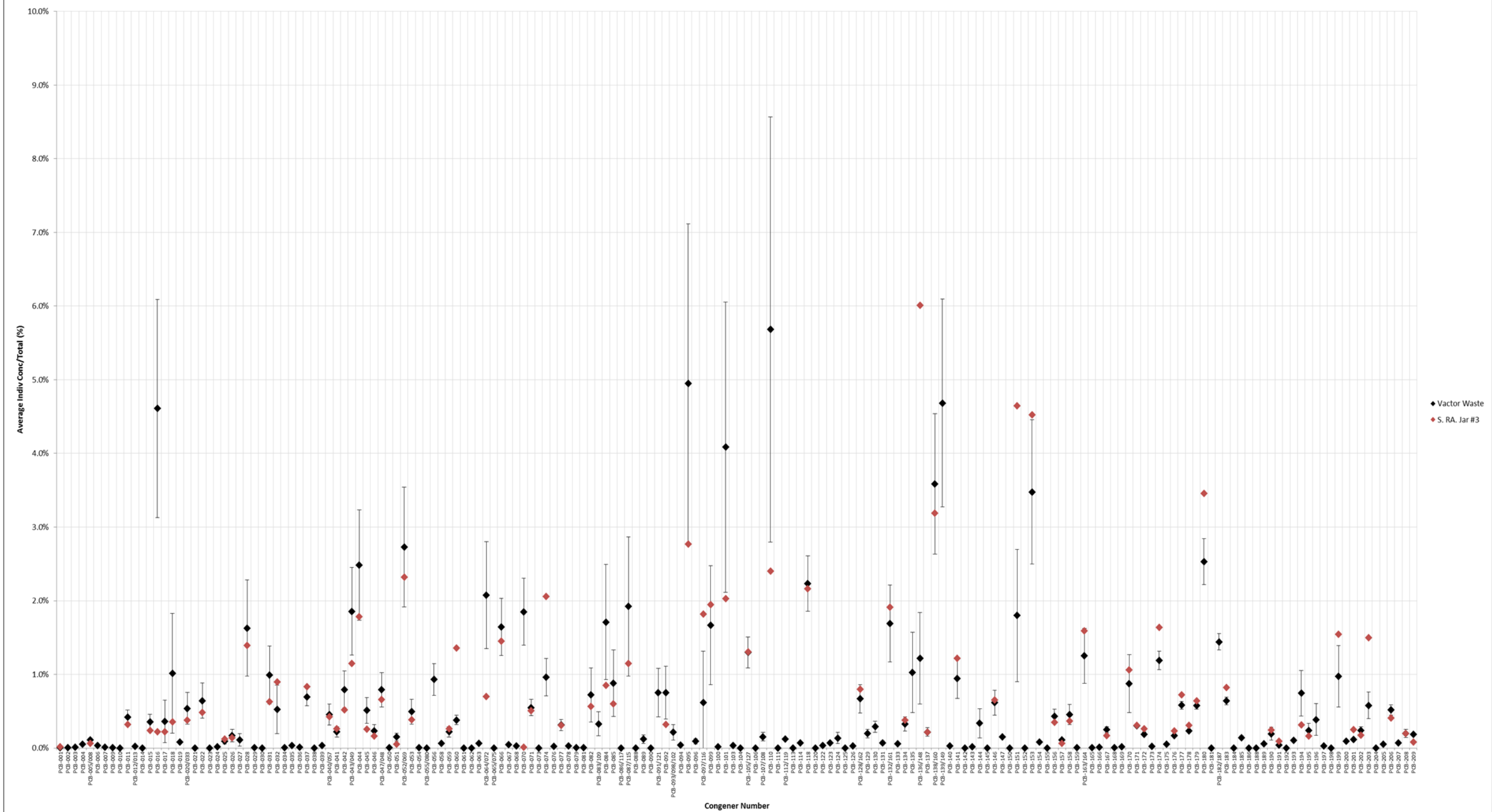
P. Wild CA Jar #2 PCBs



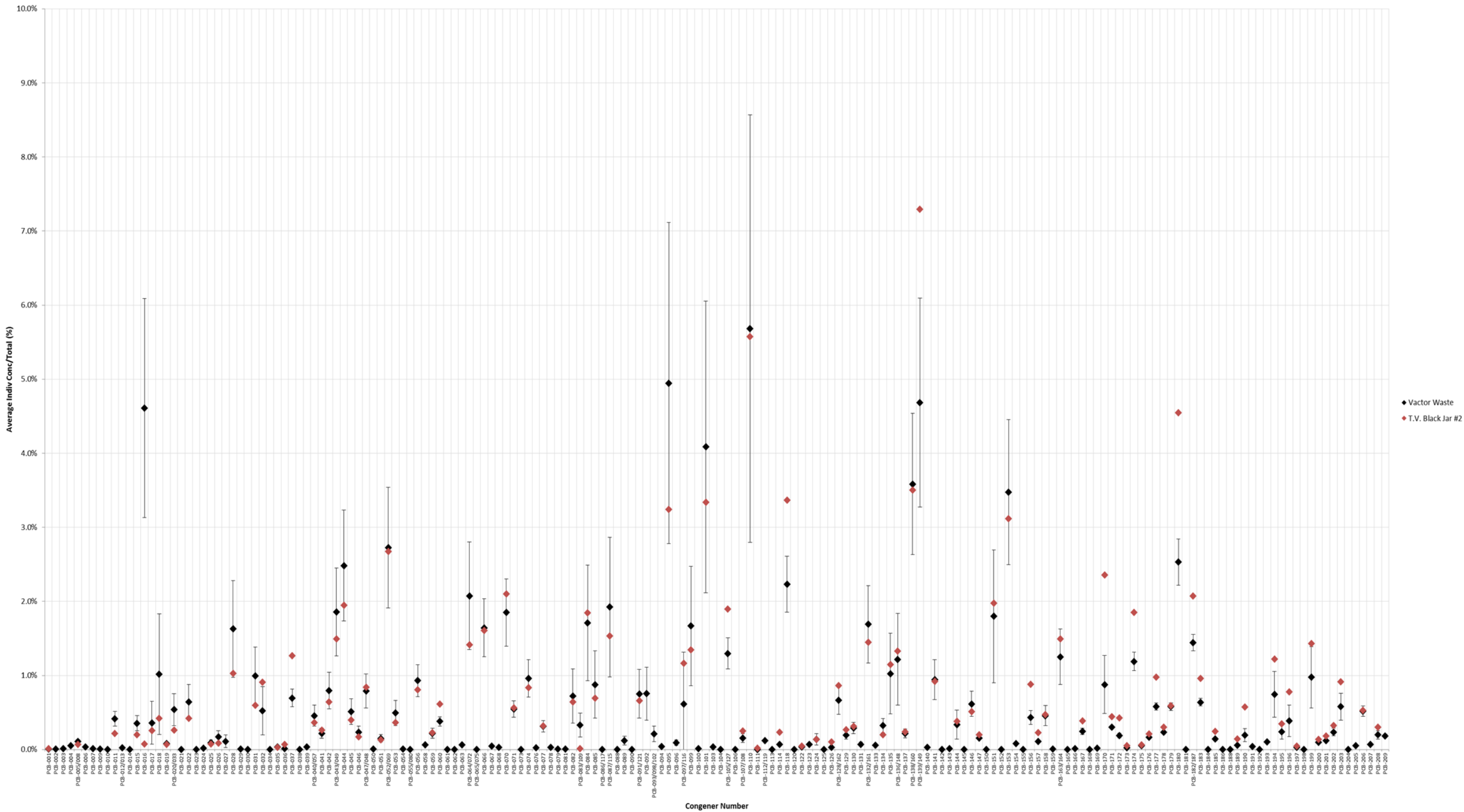
SRA Jar #1 PCBs



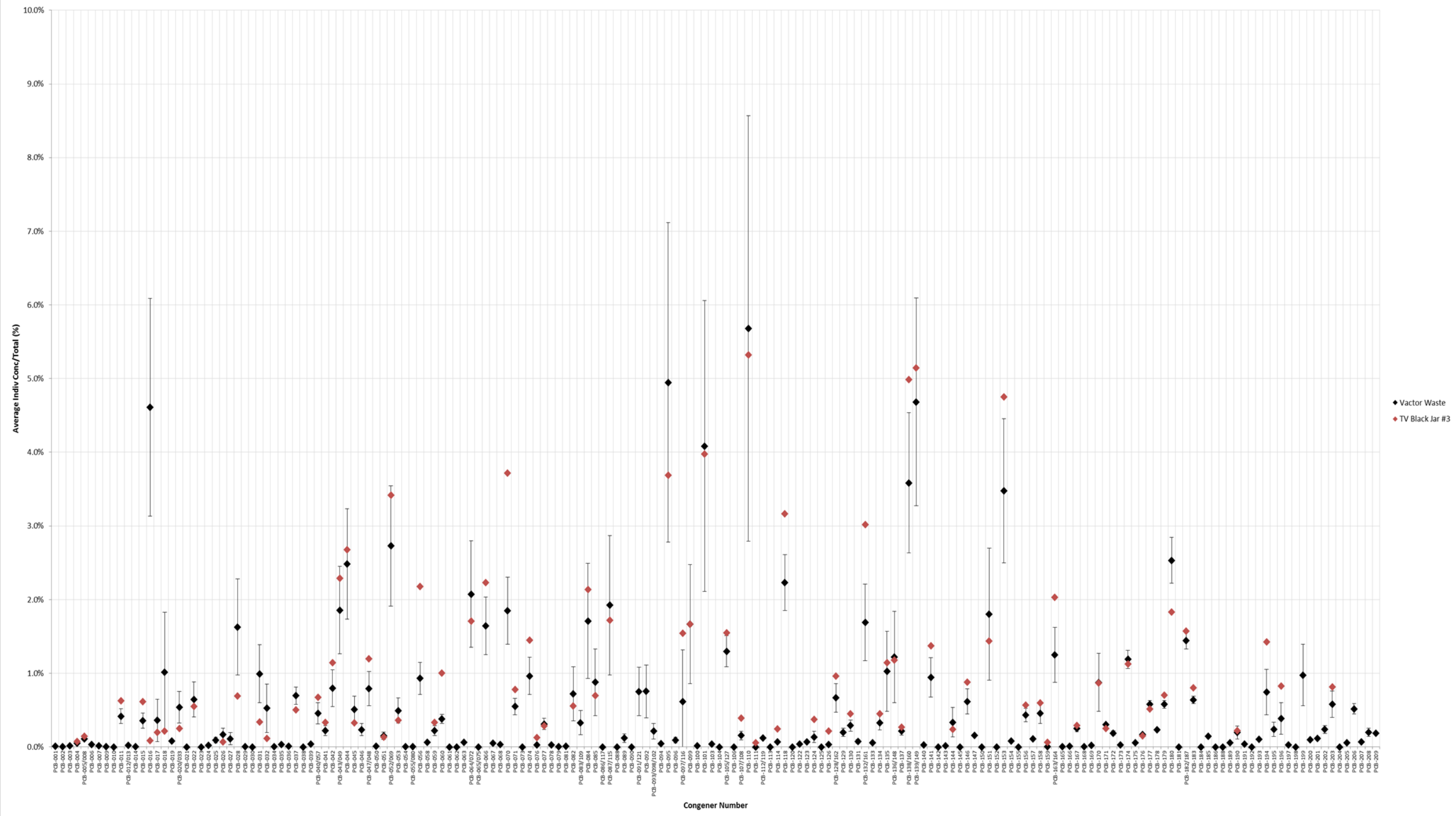
S. RA. Jar #3 PCBs



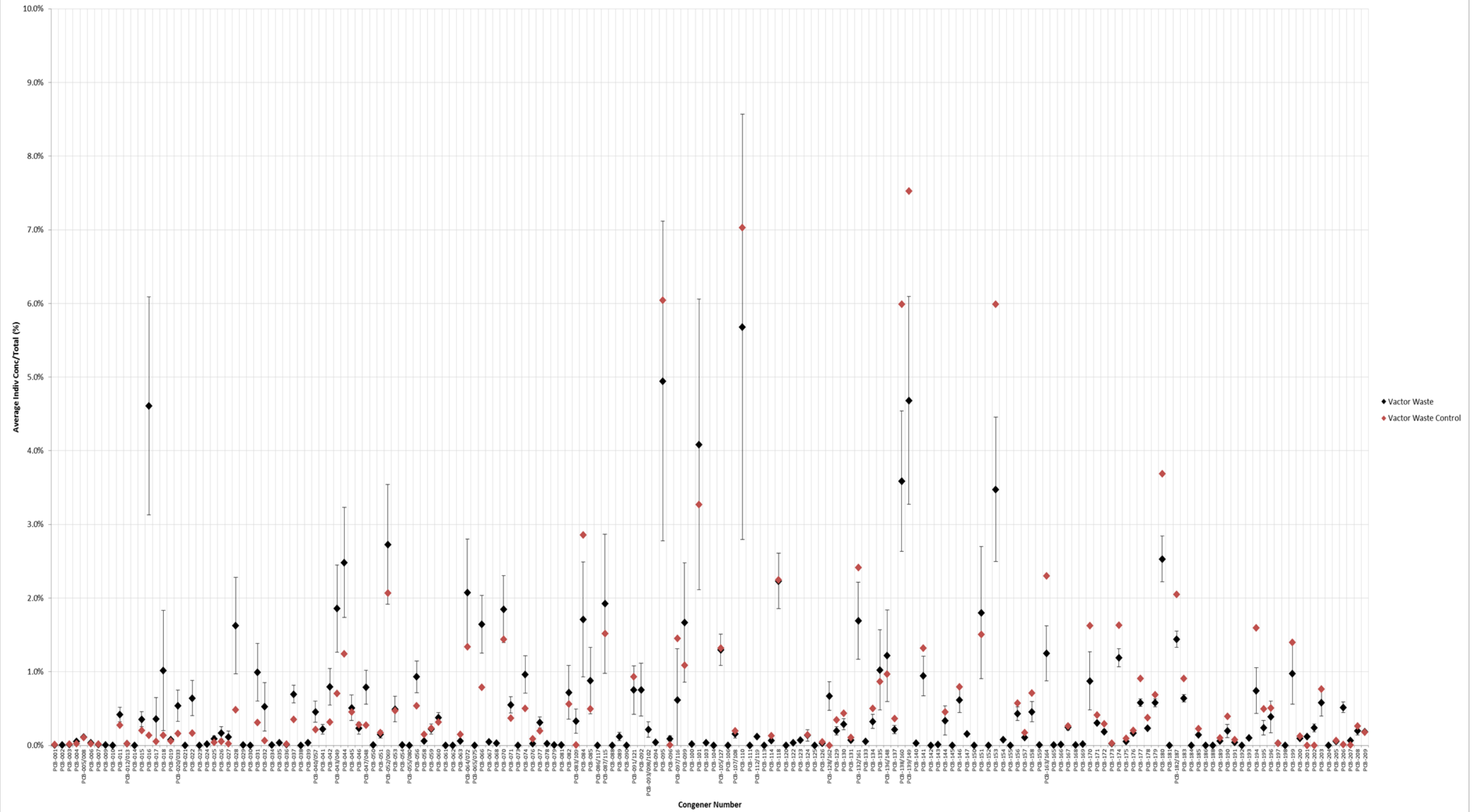
T.V. Black Jar #2 PCBs



TV Black Jar #3 PCBs



Vector Waste Control PCBs



VW + Sawdust Control PCBs

