

Herrera Environmental Consultants, Inc.

Memorandum

To Mindy Roberts, Department of Ecology
From Herrera Environmental Consultants
Date March 21, 2011
Subject Relative Percent Differences in Field Duplicates for the Phase 3 Toxics Loading Study

For Phase 3 of the Toxics Loading study, Ecology and Environment carried out an extensive data quality/usability review on water quality data being collected. Their review did not include an analysis of field duplicates. This memorandum presents an evaluation of field duplicate data collected for the project. Results for the following sample and filed duplicate pairs were evaluated:

| Watershed | Location | Date collected |
|-----------|----------|----------------|
| Snohomish | CB335 | 4/02/2010 |
| Snohomish | RB111 | 4/21/2010 |
| Puyallup | FB130 | 5/13/2010 |
| Snohomish | FB200 | 5/14/2010 |
| Puyallup | CBA | 5/19/2010 |
| Puyallup | RB53 | 5/28/2010 |
| Snohomish | AG174 | 7/07/2010 |
| Puyallup | AG62 | 7/28/2010 |

Methods

The relative percent difference (RPD) was calculated for all field duplicates. Relative percent difference between field duplicates is defined as:

$$RPD = (X_2 - X_1) / ((X_2 + X_1) / 2) * 100,$$

where X_2 and X_1 are the sample concentration and the field duplicate concentrations. We did not calculate relative percent differences if the sample and/or field replicate was not detected.

Results

Table R-1 shows the calculated RPD values from each duplicate sample by parameter. Non-detect values from individual samples are abbreviated “ND” in this table and non-calculable RPDs are indicated by “NC.” This table highlights RPDs with a * symbol when the sample or

jr /appendix r - memo regarding field duplicates

field duplicate concentration are less than five times the method reporting limit. This shows that many of the high relative percent differences observed were associated with concentrations near the detection limit, where the measurement error is generally greatest.

Table R-2 shows the mean RPDs for each parameter measured in the study, excluding the parameters with RPDs that were not calculable because of non-detects. Based on these data, the potential uncertainty in the concentrations from sampling and analysis error averaged 30 percent across all the monitoring parameters. PCB congeners had the highest mean RPD (40 percent), followed by PBDE congeners (29 percent); however, 52 percent of these results were very close to the reporting limit. The RPD for the remaining parameters averaged 14 percent.

For individual parameters, this error ranged from <1.0 to 131.0 percent on average; however, extremely high error values were typically associated with sample and duplicate concentrations that were near the reporting limit where the analysis error is generally greatest but of low concern. All parameters with mean RPDs >20 percent were associated with values less than five times the reporting limit except 4-Nitrophenol and Chlorpyrifos.

Table R-1. Calculated relative percent differences values from each duplicate sample by parameter.

| Parameter Class | Parameter | Site | Date | Relative Percent Difference ^a | Sample Concentration | Field Duplicate Concentration | Reporting Limit | Units |
|-----------------|---------------------------|-------|---------|--|----------------------|-------------------------------|-----------------|-------|
| Conventionals | Ammonia | CB335 | 4/2/10 | 3.17%* | 0.032 | 0.031 | 0.01 | mg/L |
| Conventionals | Ammonia | CBA | 5/19/10 | 97.74%* | 0.034 | 0.099 | 0.01 | mg/L |
| Conventionals | Ammonia | FB130 | 5/13/10 | NC | ND | ND | 0.01 | mg/L |
| Conventionals | Ammonia | FB200 | 5/14/10 | NC | ND | ND | 0.01 | mg/L |
| Conventionals | Ammonia | RB111 | 4/21/10 | 33.33%* | 0.01 | 0.014 | 0.01 | mg/L |
| Conventionals | Dissolved Organic Carbon | CB335 | 4/2/10 | 4.65%* | 2.1 | 2.2 | 1 | mg/L |
| Conventionals | Dissolved Organic Carbon | CBA | 5/19/10 | 7.77% | 9.9 | 10.7 | 1 | mg/L |
| Conventionals | Dissolved Organic Carbon | FB130 | 5/13/10 | 9.52%* | 2.2 | 2 | 1 | mg/L |
| Conventionals | Dissolved Organic Carbon | FB200 | 5/14/10 | 0%* | 2.3 | 2.3 | 1 | mg/L |
| Conventionals | Dissolved Organic Carbon | RB111 | 4/21/10 | 3.82% | 8 | 7.7 | 1 | mg/L |
| Conventionals | Hardness as CaCO3 | CB335 | 4/2/10 | 0.68% | 14.8 | 14.7 | 0.3 | mg/L |
| Conventionals | Hardness as CaCO3 | FB130 | 5/13/10 | 4.16% | 22.1 | 21.2 | 0.3 | mg/L |
| Conventionals | Hardness as CaCO3 | FB200 | 5/14/10 | 3.36% | 9.96 | 10.3 | 0.3 | mg/L |
| Conventionals | Hardness as CaCO3 | RB111 | 4/21/10 | 2.05% | 44.3 | 43.4 | 0.3 | mg/L |
| Conventionals | Nitrate-Nitrite as N | CB335 | 4/2/10 | 2.9% | 0.105 | 0.102 | 0.01 | mg/L |
| Conventionals | Nitrate-Nitrite as N | CBA | 5/19/10 | 0.82% | 0.122 | 0.123 | 0.01 | mg/L |
| Conventionals | Nitrate-Nitrite as N | FB130 | 5/13/10 | 0%* | 0.04 | 0.04 | 0.01 | mg/L |
| Conventionals | Nitrate-Nitrite as N | FB200 | 5/14/10 | 20%* | 0.018 | 0.022 | 0.01 | mg/L |
| Conventionals | Nitrate-Nitrite as N | RB111 | 4/21/10 | 1.9% | 0.424 | 0.416 | 0.01 | mg/L |
| Conventionals | Ortho-Phosphate | CB335 | 4/2/10 | 0%* | 0.0133 | 0.0133 | 0.003 | mg/L |
| Conventionals | Ortho-Phosphate | CBA | 5/19/10 | 23.34%* | 0.014 | 0.0177 | 0.003 | mg/L |
| Conventionals | Ortho-Phosphate | FB130 | 5/13/10 | 5.61%* | 0.0052 | 0.0055 | 0.003 | mg/L |
| Conventionals | Ortho-Phosphate | FB200 | 5/14/10 | NC | ND | ND | 0.003 | mg/L |
| Conventionals | Ortho-Phosphate | RB111 | 4/21/10 | 6.79%* | 0.0137 | 0.0128 | 0.003 | mg/L |
| Conventionals | Total Organic Carbon | CB335 | 4/2/10 | 0%* | 2.4 | 2.4 | 1 | mg/L |
| Conventionals | Total Organic Carbon | CBA | 5/19/10 | 2.82% | 10.5 | 10.8 | 1 | mg/L |
| Conventionals | Total Organic Carbon | FB130 | 5/13/10 | 4.65%* | 2.2 | 2.1 | 1 | mg/L |
| Conventionals | Total Organic Carbon | FB200 | 5/14/10 | 0%* | 2.2 | 2.2 | 1 | mg/L |
| Conventionals | Total Organic Carbon | RB111 | 4/21/10 | 3.97% | 7.7 | 7.4 | 1 | mg/L |
| Conventionals | Total Persulfate Nitrogen | CB335 | 4/2/10 | 13.11% | 0.221 | 0.252 | 0.025 | mg/L |
| Conventionals | Total Persulfate Nitrogen | CBA | 5/19/10 | 3.05% | 0.517 | 0.533 | 0.025 | mg/L |
| Conventionals | Total Persulfate Nitrogen | FB130 | 5/13/10 | 2.55%* | 0.116 | 0.119 | 0.025 | mg/L |
| Conventionals | Total Persulfate Nitrogen | FB200 | 5/14/10 | 10.62%* | 0.107 | 0.119 | 0.025 | mg/L |
| Conventionals | Total Persulfate Nitrogen | RB111 | 4/21/10 | 3% | 0.656 | 0.676 | 0.025 | mg/L |
| Conventionals | Total Phosphorus | CB335 | 4/2/10 | 13.04% | 0.0301 | 0.0343 | 0.005 | mg/L |
| Conventionals | Total Phosphorus | CBA | 5/19/10 | 4.88% | 0.0776 | 0.0739 | 0.005 | mg/L |
| Conventionals | Total Phosphorus | FB130 | 5/13/10 | 4.06%* | 0.0176 | 0.0169 | 0.005 | mg/L |
| Conventionals | Total Phosphorus | FB200 | 5/14/10 | 7.59%* | 0.0076 | 0.0082 | 0.005 | mg/L |
| Conventionals | Total Phosphorus | RB111 | 4/21/10 | 10.15% | 0.0683 | 0.0617 | 0.005 | mg/L |
| Conventionals | Total Suspended Solids | CB335 | 4/2/10 | 40%* | 12 | 8 | 2 | mg/L |
| Conventionals | Total Suspended Solids | CBA | 5/19/10 | 0%* | 4 | 4 | 2 | mg/L |
| Conventionals | Total Suspended Solids | FB130 | 5/13/10 | 40%* | 2 | 3 | 1 | mg/L |
| Conventionals | Total Suspended Solids | FB200 | 5/14/10 | 40%* | 2 | 3 | 1 | mg/L |
| Conventionals | Total Suspended Solids | RB111 | 4/21/10 | 9.3% | 45 | 41 | 3 | mg/L |
| Herbicides | 2,4,5-T | CB335 | 4/2/10 | NC | ND | ND | 0.064 | ug/L |
| Herbicides | 2,4,5-T | CBA | 5/19/10 | NC | ND | ND | 0.06 | ug/L |
| Herbicides | 2,4,5-T | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | 2,4,5-T | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | 2,4,5-T | RB111 | 4/21/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | 2,4,5-T | RB53 | 5/28/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | 2,4,5-TP (Silvex) | CB335 | 4/2/10 | NC | ND | ND | 0.064 | ug/L |
| Herbicides | 2,4,5-TP (Silvex) | CBA | 5/19/10 | NC | ND | ND | 0.06 | ug/L |
| Herbicides | 2,4,5-TP (Silvex) | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | 2,4,5-TP (Silvex) | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | 2,4,5-TP (Silvex) | RB111 | 4/21/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | 2,4,5-TP (Silvex) | RB53 | 5/28/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | 2,4-D | CB335 | 4/2/10 | NC | ND | ND | 0.064 | ug/L |
| Herbicides | 2,4-D | CBA | 5/19/10 | 12.5%* | 0.17 | 0.15 | 0.06 | ug/L |
| Herbicides | 2,4-D | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | 2,4-D | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | 2,4-D | RB111 | 4/21/10 | 23.26%* | 0.076 | 0.096 | 0.061 | ug/L |
| Herbicides | 2,4-D | RB53 | 5/28/10 | 22.68%* | 0.043 | 0.054 | 0.061 | ug/L |
| Herbicides | 2,4-DB | CB335 | 4/2/10 | NC | ND | ND | 0.064 | ug/L |
| Herbicides | 2,4-DB | CBA | 5/19/10 | NC | ND | ND | 0.06 | ug/L |
| Herbicides | 2,4-DB | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | 2,4-DB | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | 2,4-DB | RB111 | 4/21/10 | NC | ND | ND | 0.061 | ug/L |

^a The * symbol on relative percent differences indicates one or both samples were within five times the reporting limit.

Table R-1. Calculated relative percent differences values from each duplicate sample by parameter.

| Parameter Class | Parameter | Site | Date | Relative Percent Difference ^a | Sample Concentration | Field Duplicate Concentration | Reporting Limit | Units |
|-----------------|--------------------------|-------|---------|--|----------------------|-------------------------------|-----------------|-------|
| Herbicides | 2,4-DB | RB53 | 5/28/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | 3,5-Dichlorobenzoic Acid | CB335 | 4/2/10 | NC | ND | ND | 0.064 | ug/L |
| Herbicides | 3,5-Dichlorobenzoic Acid | CBA | 5/19/10 | NC | ND | ND | 0.06 | ug/L |
| Herbicides | 3,5-Dichlorobenzoic Acid | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | 3,5-Dichlorobenzoic Acid | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | 3,5-Dichlorobenzoic Acid | RB111 | 4/21/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | 3,5-Dichlorobenzoic Acid | RB53 | 5/28/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Acifluorfen (Blazer) | CB335 | 4/2/10 | NC | ND | ND | 0.064 | ug/L |
| Herbicides | Acifluorfen (Blazer) | CBA | 5/19/10 | NC | ND | ND | 0.06 | ug/L |
| Herbicides | Acifluorfen (Blazer) | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Acifluorfen (Blazer) | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Acifluorfen (Blazer) | RB111 | 4/21/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Acifluorfen (Blazer) | RB53 | 5/28/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Bentazon | CB335 | 4/2/10 | NC | ND | ND | 0.064 | ug/L |
| Herbicides | Bentazon | CBA | 5/19/10 | NC | ND | ND | 0.06 | ug/L |
| Herbicides | Bentazon | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Bentazon | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Bentazon | RB111 | 4/21/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Bentazon | RB53 | 5/28/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Bromoxynil | CB335 | 4/2/10 | NC | ND | ND | 0.064 | ug/L |
| Herbicides | Bromoxynil | CBA | 5/19/10 | NC | ND | ND | 0.06 | ug/L |
| Herbicides | Bromoxynil | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Bromoxynil | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Bromoxynil | RB111 | 4/21/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Bromoxynil | RB53 | 5/28/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Clopyralid | CB335 | 4/2/10 | NC | ND | ND | 0.064 | ug/L |
| Herbicides | Clopyralid | CBA | 5/19/10 | NC | ND | ND | 0.06 | ug/L |
| Herbicides | Clopyralid | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Clopyralid | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Clopyralid | RB111 | 4/21/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Clopyralid | RB53 | 5/28/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Dicamba | CB335 | 4/2/10 | NC | ND | ND | 0.064 | ug/L |
| Herbicides | Dicamba | CBA | 5/19/10 | NC | 0.014 | ND | 0.06 | ug/L |
| Herbicides | Dicamba | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Dicamba | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Dicamba | RB111 | 4/21/10 | 0%* | 0.03 | 0.03 | 0.061 | ug/L |
| Herbicides | Dicamba | RB53 | 5/28/10 | NC | ND | 0.014 | 0.061 | ug/L |
| Herbicides | Dichlorprop | CB335 | 4/2/10 | NC | ND | ND | 0.064 | ug/L |
| Herbicides | Dichlorprop | CBA | 5/19/10 | NC | ND | ND | 0.06 | ug/L |
| Herbicides | Dichlorprop | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Dichlorprop | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Dichlorprop | RB111 | 4/21/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Dichlorprop | RB53 | 5/28/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Diclofop-Methyl | CB335 | 4/2/10 | NC | ND | ND | 0.064 | ug/L |
| Herbicides | Diclofop-Methyl | CBA | 5/19/10 | NC | ND | ND | 0.06 | ug/L |
| Herbicides | Diclofop-Methyl | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Diclofop-Methyl | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Diclofop-Methyl | RB111 | 4/21/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Diclofop-Methyl | RB53 | 5/28/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Dinoseb | CB335 | 4/2/10 | NC | ND | ND | 0.064 | ug/L |
| Herbicides | Dinoseb | CBA | 5/19/10 | NC | ND | ND | 0.06 | ug/L |
| Herbicides | Dinoseb | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Dinoseb | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Dinoseb | RB111 | 4/21/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Dinoseb | RB53 | 5/28/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Ioxynil | CB335 | 4/2/10 | NC | ND | ND | 0.064 | ug/L |
| Herbicides | Ioxynil | CBA | 5/19/10 | NC | ND | ND | 0.06 | ug/L |
| Herbicides | Ioxynil | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Ioxynil | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Ioxynil | RB111 | 4/21/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Ioxynil | RB53 | 5/28/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | MCPA | CB335 | 4/2/10 | NC | ND | ND | 0.064 | ug/L |
| Herbicides | MCPA | CBA | 5/19/10 | NC | ND | ND | 0.06 | ug/L |
| Herbicides | MCPA | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | MCPA | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | MCPA | RB111 | 4/21/10 | 19.51%* | 0.074 | 0.09 | 0.061 | ug/L |
| Herbicides | MCPA | RB53 | 5/28/10 | NC | ND | ND | 0.061 | ug/L |

^a The * symbol on relative percent differences indicates one or both samples were within five times the reporting limit.

Table R-1. Calculated relative percent differences values from each duplicate sample by parameter.

| Parameter Class | Parameter | Site | Date | Relative Percent Difference ^a | Sample Concentration | Field Duplicate Concentration | Reporting Limit | Units |
|-----------------|------------------------|-------|---------|--|----------------------|-------------------------------|-----------------|-------|
| Herbicides | MCPP (Mecoprop) | CB335 | 4/2/10 | NC | ND | ND | 0.064 | ug/L |
| Herbicides | MCPP (Mecoprop) | CBA | 5/19/10 | NC | ND | ND | 0.06 | ug/L |
| Herbicides | MCPP (Mecoprop) | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | MCPP (Mecoprop) | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | MCPP (Mecoprop) | RB111 | 4/21/10 | 5.56%* | 0.074 | 0.07 | 0.061 | ug/L |
| Herbicides | MCPP (Mecoprop) | RB53 | 5/28/10 | 9.52%* | 0.02 | 0.022 | 0.061 | ug/L |
| Herbicides | Picloram | CB335 | 4/2/10 | NC | ND | ND | 0.064 | ug/L |
| Herbicides | Picloram | CBA | 5/19/10 | NC | ND | ND | 0.06 | ug/L |
| Herbicides | Picloram | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Picloram | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Picloram | RB111 | 4/21/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Picloram | RB53 | 5/28/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Triclopyr | CB335 | 4/2/10 | NC | ND | ND | 0.064 | ug/L |
| Herbicides | Triclopyr | CBA | 5/19/10 | 13.56%* | 0.063 | 0.055 | 0.06 | ug/L |
| Herbicides | Triclopyr | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Triclopyr | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Herbicides | Triclopyr | RB111 | 4/21/10 | 9.84%* | 0.029 | 0.032 | 0.061 | ug/L |
| Herbicides | Triclopyr | RB53 | 5/28/10 | NC | ND | 0.03 | 0.061 | ug/L |
| HPAHs | Benzo(a)anthracene | CB335 | 4/2/10 | NC | 0.02 | ND | 0.01 | ug/L |
| HPAHs | Benzo(a)pyrene | CB335 | 4/2/10 | 24.3%* | 0.012 | 0.0094 | 0.01 | ug/L |
| HPAHs | Benzo(b)fluoranthene | CB335 | 4/2/10 | 19.05%* | 0.023 | 0.019 | 0.01 | ug/L |
| HPAHs | Benzo(ghi)perylene | CB335 | 4/2/10 | 4.65%* | 0.044 | 0.042 | 0.01 | ug/L |
| HPAHs | Benzo(k)fluoranthene | CB335 | 4/2/10 | NC | ND | ND | 0.01 | ug/L |
| HPAHs | Chrysene | CB335 | 4/2/10 | 41.86%* | 0.026 | 0.017 | 0.01 | ug/L |
| HPAHs | Dibenzo(a,h)anthracene | CB335 | 4/2/10 | NC | ND | ND | 0.021 | ug/L |
| HPAHs | Fluoranthene | CB335 | 4/2/10 | 23.38%* | 0.043 | 0.034 | 0.01 | ug/L |
| HPAHs | Indeno(1,2,3-cd)pyrene | CB335 | 4/2/10 | 5.41%* | 0.018 | 0.019 | 0.021 | ug/L |
| HPAHs | Pyrene | CB335 | 4/2/10 | 12.12%* | 0.035 | 0.031 | 0.01 | ug/L |
| LPAHs | Acenaphthene | CB335 | 4/2/10 | NC | ND | ND | 0.01 | ug/L |
| LPAHs | Acenaphthylene | CB335 | 4/2/10 | NC | ND | ND | 0.01 | ug/L |
| LPAHs | Anthracene | CB335 | 4/2/10 | NC | ND | ND | 0.01 | ug/L |
| LPAHs | Fluorene | CB335 | 4/2/10 | NC | 0.01 | ND | 0.01 | ug/L |
| LPAHs | Naphthalene | CB335 | 4/2/10 | NC | ND | ND | 0.01 | ug/L |
| LPAHs | Phenanthrene | CB335 | 4/2/10 | 33.33%* | 0.014 | 0.01 | 0.01 | ug/L |
| Metals | Arsenic (Dissolved) | CB335 | 4/2/10 | 1.6% | 0.63 | 0.62 | 0.1 | ug/L |
| Metals | Arsenic (Dissolved) | CBA | 5/19/10 | 1.01% | 0.99 | 1 | 0.1 | ug/L |
| Metals | Arsenic (Dissolved) | FB130 | 5/13/10 | 0%* | 0.21 | 0.21 | 0.1 | ug/L |
| Metals | Arsenic (Dissolved) | FB200 | 5/14/10 | 12.35%* | 0.43 | 0.38 | 0.1 | ug/L |
| Metals | Arsenic (Dissolved) | RB111 | 4/21/10 | 1.38% | 0.73 | 0.72 | 0.1 | ug/L |
| Metals | Arsenic (Dissolved) | RB53 | 5/28/10 | 0.98% | 1.03 | 1.02 | 0.1 | ug/L |
| Metals | Arsenic (Total) | CB335 | 4/2/10 | 3.77% | 0.81 | 0.78 | 0.1 | ug/L |
| Metals | Arsenic (Total) | CBA | 5/19/10 | 1.6% | 1.26 | 1.24 | 0.1 | ug/L |
| Metals | Arsenic (Total) | FB130 | 5/13/10 | 7.41%* | 0.26 | 0.28 | 0.1 | ug/L |
| Metals | Arsenic (Total) | FB200 | 5/14/10 | 4.08%* | 0.5 | 0.48 | 0.1 | ug/L |
| Metals | Arsenic (Total) | RB111 | 4/21/10 | 5.45% | 1.07 | 1.13 | 0.1 | ug/L |
| Metals | Arsenic (Total) | RB53 | 5/28/10 | 2.26% | 1.31 | 1.34 | 0.1 | ug/L |
| Metals | Cadmium (Dissolved) | CB335 | 4/2/10 | 4.17%* | 0.098 | 0.094 | 0.02 | ug/L |
| Metals | Cadmium (Dissolved) | CBA | 5/19/10 | 21.28%* | 0.026 | 0.021 | 0.02 | ug/L |
| Metals | Cadmium (Dissolved) | FB130 | 5/13/10 | NC | ND | ND | 0.02 | ug/L |
| Metals | Cadmium (Dissolved) | FB200 | 5/14/10 | NC | ND | ND | 0.02 | ug/L |
| Metals | Cadmium (Dissolved) | RB111 | 4/21/10 | NC | ND | ND | 0.02 | ug/L |
| Metals | Cadmium (Dissolved) | RB53 | 5/28/10 | NC | ND | ND | 0.02 | ug/L |
| Metals | Cadmium (Total) | CB335 | 4/2/10 | 7.41%* | 0.14 | 0.13 | 0.1 | ug/L |
| Metals | Cadmium (Total) | CBA | 5/19/10 | NC | ND | ND | 0.1 | ug/L |
| Metals | Cadmium (Total) | FB130 | 5/13/10 | NC | ND | ND | 0.1 | ug/L |
| Metals | Cadmium (Total) | FB200 | 5/14/10 | NC | ND | ND | 0.1 | ug/L |
| Metals | Cadmium (Total) | RB111 | 4/21/10 | NC | ND | ND | 0.1 | ug/L |
| Metals | Cadmium (Total) | RB53 | 5/28/10 | NC | ND | ND | 0.1 | ug/L |
| Metals | Copper (Dissolved) | CB335 | 4/2/10 | 0% | 2.27 | 2.27 | 0.1 | ug/L |
| Metals | Copper (Dissolved) | CBA | 5/19/10 | 4.34% | 2.03 | 2.12 | 0.1 | ug/L |
| Metals | Copper (Dissolved) | FB130 | 5/13/10 | 11.24%* | 0.42 | 0.47 | 0.1 | ug/L |
| Metals | Copper (Dissolved) | FB200 | 5/14/10 | 2.9%* | 0.35 | 0.34 | 0.1 | ug/L |
| Metals | Copper (Dissolved) | RB111 | 4/21/10 | 2.44% | 0.81 | 0.83 | 0.1 | ug/L |
| Metals | Copper (Dissolved) | RB53 | 5/28/10 | 7.27% | 2.12 | 2.28 | 0.1 | ug/L |
| Metals | Copper (Total) | CB335 | 4/2/10 | 0% | 3.87 | 3.87 | 0.1 | ug/L |
| Metals | Copper (Total) | CBA | 5/19/10 | 5.5% | 2.65 | 2.8 | 0.1 | ug/L |
| Metals | Copper (Total) | FB130 | 5/13/10 | 4.96% | 0.59 | 0.62 | 0.1 | ug/L |

^a The * symbol on relative percent differences indicates one or both samples were within five times the reporting limit.

Table R-1. Calculated relative percent differences values from each duplicate sample by parameter.

| Parameter Class | Parameter | Site | Date | Relative Percent Difference ^a | Sample Concentration | Field Duplicate Concentration | Reporting Limit | Units |
|--------------------------------------|---------------------------|-------|---------|--|----------------------|-------------------------------|-----------------|-------|
| Metals | Copper (Total) | FB200 | 5/14/10 | 2.3%* | 0.43 | 0.44 | 0.1 | ug/L |
| Metals | Copper (Total) | RB111 | 4/21/10 | 9.43% | 2.22 | 2.02 | 0.1 | ug/L |
| Metals | Copper (Total) | RB53 | 5/28/10 | 6.91% | 3.63 | 3.89 | 0.1 | ug/L |
| Metals | Lead (Dissolved) | CB335 | 4/2/10 | 2.45% | 0.124 | 0.121 | 0.02 | ug/L |
| Metals | Lead (Dissolved) | CBA | 5/19/10 | 5.68% | 0.342 | 0.362 | 0.02 | ug/L |
| Metals | Lead (Dissolved) | FB130 | 5/13/10 | NC | ND | ND | 0.02 | ug/L |
| Metals | Lead (Dissolved) | FB200 | 5/14/10 | 49.28%* | 0.043 | 0.026 | 0.02 | ug/L |
| Metals | Lead (Dissolved) | RB111 | 4/21/10 | 7.17% | 0.13 | 0.121 | 0.02 | ug/L |
| Metals | Lead (Dissolved) | RB53 | 5/28/10 | 8.7% | 0.132 | 0.144 | 0.02 | ug/L |
| Metals | Lead (Total) | CB335 | 4/2/10 | 1.27% | 0.78 | 0.79 | 0.1 | ug/L |
| Metals | Lead (Total) | CBA | 5/19/10 | 0% | 0.76 | 0.76 | 0.1 | ug/L |
| Metals | Lead (Total) | FB130 | 5/13/10 | NC | ND | ND | 0.1 | ug/L |
| Metals | Lead (Total) | FB200 | 5/14/10 | NC | ND | 0.1 | 0.1 | ug/L |
| Metals | Lead (Total) | RB111 | 4/21/10 | 6.83% | 0.99 | 1.06 | 0.1 | ug/L |
| Metals | Lead (Total) | RB53 | 5/28/10 | 4.69% | 1.04 | 1.09 | 0.1 | ug/L |
| Metals | Mercury (Dissolved) | CB335 | 4/2/10 | NC | ND | ND | 0.002 | ug/L |
| Metals | Mercury (Dissolved) | CBA | 5/19/10 | 4.55%* | 0.0086 | 0.009 | 0.002 | ug/L |
| Metals | Mercury (Dissolved) | FB130 | 5/13/10 | NC | ND | ND | 0.002 | ug/L |
| Metals | Mercury (Dissolved) | FB200 | 5/14/10 | NC | ND | ND | 0.002 | ug/L |
| Metals | Mercury (Dissolved) | RB111 | 4/21/10 | 0%* | 0.005 | 0.005 | 0.002 | ug/L |
| Metals | Mercury (Dissolved) | RB53 | 5/28/10 | 2.94%* | 0.0067 | 0.0069 | 0.002 | ug/L |
| Metals | Mercury (Total) | CB335 | 4/2/10 | 5.71%* | 0.0034 | 0.0036 | 0.002 | ug/L |
| Metals | Mercury (Total) | CBA | 5/19/10 | 0%* | 0.0056 | 0.0056 | 0.002 | ug/L |
| Metals | Mercury (Total) | FB130 | 5/13/10 | NC | ND | ND | 0.002 | ug/L |
| Metals | Mercury (Total) | FB200 | 5/14/10 | NC | ND | ND | 0.002 | ug/L |
| Metals | Mercury (Total) | RB111 | 4/21/10 | 8.6%* | 0.0089 | 0.0097 | 0.002 | ug/L |
| Metals | Mercury (Total) | RB53 | 5/28/10 | 1.11%* | 0.0091 | 0.009 | 0.002 | ug/L |
| Metals | Zinc (Dissolved) | CB335 | 4/2/10 | 4.45% | 43.6 | 41.7 | 1 | ug/L |
| Metals | Zinc (Dissolved) | CBA | 5/19/10 | 0.8% | 12.5 | 12.4 | 1 | ug/L |
| Metals | Zinc (Dissolved) | FB130 | 5/13/10 | 5%* | 3.9 | 4.1 | 1 | ug/L |
| Metals | Zinc (Dissolved) | FB200 | 5/14/10 | NC | ND | 1 | 1 | ug/L |
| Metals | Zinc (Dissolved) | RB111 | 4/21/10 | 60.24%* | 2.9 | 5.4 | 1 | ug/L |
| Metals | Zinc (Dissolved) | RB53 | 5/28/10 | 14.29%* | 2.6 | 3 | 1 | ug/L |
| Metals | Zinc (Total) | CB335 | 4/2/10 | 0.97% | 51.1 | 51.6 | 5 | ug/L |
| Metals | Zinc (Total) | CBA | 5/19/10 | 9.29%* | 15.4 | 16.9 | 5 | ug/L |
| Metals | Zinc (Total) | FB130 | 5/13/10 | NC | ND | ND | 5 | ug/L |
| Metals | Zinc (Total) | FB200 | 5/14/10 | NC | ND | ND | 5 | ug/L |
| Metals | Zinc (Total) | RB111 | 4/21/10 | 12.12%* | 9.3 | 10.5 | 5 | ug/L |
| Metals | Zinc (Total) | RB53 | 5/28/10 | 21.18%* | 7.6 | 9.4 | 5 | ug/L |
| Other Base/Neutral/Acid Extractables | 1-Methylnaphthalene | CB335 | 4/2/10 | NC | ND | 0.011 | 0.01 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,3,4,5-Tetrachlorophenol | CB335 | 4/2/10 | NC | ND | ND | 0.064 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,3,4,5-Tetrachlorophenol | CBA | 5/19/10 | NC | ND | ND | 0.06 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,3,4,5-Tetrachlorophenol | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,3,4,5-Tetrachlorophenol | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,3,4,5-Tetrachlorophenol | RB111 | 4/21/10 | NC | ND | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,3,4,5-Tetrachlorophenol | RB53 | 5/28/10 | NC | ND | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,3,4,6-Tetrachlorophenol | CB335 | 4/2/10 | NC | ND | ND | 0.064 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,3,4,6-Tetrachlorophenol | CBA | 5/19/10 | NC | ND | ND | 0.06 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,3,4,6-Tetrachlorophenol | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,3,4,6-Tetrachlorophenol | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,3,4,6-Tetrachlorophenol | RB111 | 4/21/10 | NC | ND | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,3,4,6-Tetrachlorophenol | RB53 | 5/28/10 | NC | ND | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,4,5-Trichlorophenol | CB335 | 4/2/10 | NC | ND | ND | 0.064 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,4,5-Trichlorophenol | CBA | 5/19/10 | NC | ND | ND | 0.06 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,4,5-Trichlorophenol | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,4,5-Trichlorophenol | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,4,5-Trichlorophenol | RB111 | 4/21/10 | NC | ND | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,4,5-Trichlorophenol | RB53 | 5/28/10 | NC | ND | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,4,6-Trichlorophenol | CB335 | 4/2/10 | NC | ND | ND | 0.064 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,4,6-Trichlorophenol | CBA | 5/19/10 | NC | ND | ND | 0.06 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,4,6-Trichlorophenol | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,4,6-Trichlorophenol | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,4,6-Trichlorophenol | RB111 | 4/21/10 | NC | ND | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | 2,4,6-Trichlorophenol | RB53 | 5/28/10 | NC | ND | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | 2-Chloronaphthalene | CB335 | 4/2/10 | NC | ND | ND | 0.01 | ug/L |
| Other Base/Neutral/Acid Extractables | 2-Methylnaphthalene | CB335 | 4/2/10 | NC | ND | ND | 0.01 | ug/L |
| Other Base/Neutral/Acid Extractables | 4-Nitrophenol | CB335 | 4/2/10 | 27.96% | 0.53 | 0.4 | 0.064 | ug/L |

^a The * symbol on relative percent differences indicates one or both samples were within five times the reporting limit.

Table R-1. Calculated relative percent differences values from each duplicate sample by parameter.

| Parameter Class | Parameter | Site | Date | Relative Percent Difference ^a | Sample Concentration | Field Duplicate Concentration | Reporting Limit | Units |
|--------------------------------------|---------------------|-------|---------|--|----------------------|-------------------------------|-----------------|-------|
| Other Base/Neutral/Acid Extractables | 4-Nitrophenol | CBA | 5/19/10 | NC | ND | ND | 0.06 | ug/L |
| Other Base/Neutral/Acid Extractables | 4-Nitrophenol | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | 4-Nitrophenol | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | 4-Nitrophenol | RB111 | 4/21/10 | NC | ND | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | 4-Nitrophenol | RB53 | 5/28/10 | NC | ND | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | Carbazole | CB335 | 4/2/10 | 0%* | 0.014 | 0.014 | 0.01 | ug/L |
| Other Base/Neutral/Acid Extractables | Dibenzofuran | CB335 | 4/2/10 | NC | ND | ND | 0.01 | ug/L |
| Other Base/Neutral/Acid Extractables | Pentachlorophenol | CB335 | 4/2/10 | 13.33%* | 0.028 | 0.032 | 0.064 | ug/L |
| Other Base/Neutral/Acid Extractables | Pentachlorophenol | CBA | 5/19/10 | NC | ND | ND | 0.06 | ug/L |
| Other Base/Neutral/Acid Extractables | Pentachlorophenol | FB130 | 5/13/10 | NC | ND | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | Pentachlorophenol | FB200 | 5/14/10 | NC | ND | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | Pentachlorophenol | RB111 | 4/21/10 | 5.71%* | 0.018 | 0.017 | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | Pentachlorophenol | RB53 | 5/28/10 | NC | 0.016 | ND | 0.061 | ug/L |
| Other Base/Neutral/Acid Extractables | Retene | CB335 | 4/2/10 | NC | 0.006 | ND | 0.01 | ug/L |
| Pesticides | 2,4'-DDD | CB335 | 4/2/10 | NC | ND | ND | 0.21 | ng/L |
| Pesticides | 2,4'-DDD | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Pesticides | 2,4'-DDE | CB335 | 4/2/10 | 22.22%* | 0.35 | 0.28 | 0.21 | ng/L |
| Pesticides | 2,4'-DDE | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Pesticides | 2,4'-DDT | CB335 | 4/2/10 | NC | ND | ND | 0.21 | ng/L |
| Pesticides | 2,4'-DDT | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Pesticides | 4,4'-DDD | CB335 | 4/2/10 | NC | ND | ND | 0.21 | ng/L |
| Pesticides | 4,4'-DDD | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Pesticides | 4,4'-DDE | CB335 | 4/2/10 | NC | 0.57 | ND | 0.21 | ng/L |
| Pesticides | 4,4'-DDE | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Pesticides | 4,4'-DDT | CB335 | 4/2/10 | 13.04%* | 0.49 | 0.43 | 0.21 | ng/L |
| Pesticides | 4,4'-DDT | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Pesticides | Aldrin | CB335 | 4/2/10 | NC | ND | ND | 0.21 | ng/L |
| Pesticides | Aldrin | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Pesticides | Alpha-BHC | CB335 | 4/2/10 | NC | ND | ND | 0.21 | ng/L |
| Pesticides | Alpha-BHC | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Pesticides | Beta-BHC | CB335 | 4/2/10 | 14.29%* | 0.3 | 0.26 | 0.21 | ng/L |
| Pesticides | Beta-BHC | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Pesticides | Chlorpyrifos | CB335 | 4/2/10 | 46.81% | 2.9 | 1.8 | 0.21 | ng/L |
| Pesticides | Chlorpyrifos | RB111 | 4/21/10 | 32.26% | 1.3 | 1.8 | 0.2 | ng/L |
| Pesticides | Chlorthal-dimethyl | CB335 | 4/2/10 | NC | ND | ND | 0.21 | ug/L |
| Pesticides | Chlorthal-dimethyl | CB335 | 4/2/10 | NC | ND | ND | 0.21 | ng/L |
| Pesticides | Chlorthal-dimethyl | CBA | 5/19/10 | NC | ND | ND | 0.2 | ug/L |
| Pesticides | Chlorthal-dimethyl | FB130 | 5/13/10 | NC | ND | ND | 0.2 | ug/L |
| Pesticides | Chlorthal-dimethyl | FB200 | 5/14/10 | NC | ND | ND | 0.2 | ug/L |
| Pesticides | Chlorthal-dimethyl | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ug/L |
| Pesticides | Chlorthal-dimethyl | RB111 | 4/21/10 | NC | ND | 0.26 | 0.2 | ng/L |
| Pesticides | Chlorthal-dimethyl | RB53 | 5/28/10 | NC | ND | ND | 0.2 | ug/L |
| Pesticides | cis-Chlordane | CB335 | 4/2/10 | NC | ND | ND | 0.21 | ng/L |
| Pesticides | cis-Chlordane | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Pesticides | Cis-Nonachlor | CB335 | 4/2/10 | 22.22%* | 0.65 | 0.52 | 0.21 | ng/L |
| Pesticides | Cis-Nonachlor | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Pesticides | DDMU | CB335 | 4/2/10 | NC | ND | ND | 0.21 | ng/L |
| Pesticides | DDMU | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Pesticides | Delta-BHC | CB335 | 4/2/10 | NC | ND | ND | 0.21 | ng/L |
| Pesticides | Delta-BHC | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Pesticides | Dieldrin | CB335 | 4/2/10 | 24%* | 1.4 | 1.1 | 0.54 | ng/L |
| Pesticides | Dieldrin | RB111 | 4/21/10 | NC | ND | ND | 0.5 | ng/L |
| Pesticides | Endosulfan I | CB335 | 4/2/10 | 20.9%* | 0.37 | 0.3 | 0.21 | ng/L |
| Pesticides | Endosulfan I | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Pesticides | Endosulfan II | CB335 | 4/2/10 | NC | ND | ND | 0.21 | ng/L |
| Pesticides | Endosulfan II | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Pesticides | Endosulfan Sulfate | CB335 | 4/2/10 | 4.65% | 2.2 | 2.1 | 0.21 | ng/L |
| Pesticides | Endosulfan Sulfate | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Pesticides | Endrin | CB335 | 4/2/10 | NC | ND | ND | 0.54 | ng/L |
| Pesticides | Endrin | RB111 | 4/21/10 | NC | ND | ND | 0.5 | ng/L |
| Pesticides | Endrin Aldehyde | CB335 | 4/2/10 | 6.54%* | 0.79 | 0.74 | 0.21 | ng/L |
| Pesticides | Endrin Aldehyde | RB111 | 4/21/10 | 19.72%* | 0.39 | 0.32 | 0.2 | ng/L |
| Pesticides | Endrin Ketone | CB335 | 4/2/10 | NC | ND | ND | 0.8 | ng/L |
| Pesticides | Endrin Ketone | RB111 | 4/21/10 | NC | ND | ND | 0.75 | ng/L |
| Pesticides | Gamma-BHC (Lindane) | CB335 | 4/2/10 | 7.59%* | 0.41 | 0.38 | 0.21 | ng/L |
| Pesticides | Gamma-BHC (Lindane) | RB111 | 4/21/10 | 39.44%* | 0.57 | 0.85 | 0.2 | ng/L |
| Pesticides | Heptachlor | CB335 | 4/2/10 | NC | ND | ND | 0.21 | ng/L |

^a The * symbol on relative percent differences indicates one or both samples were within five times the reporting limit.

Table R-1. Calculated relative percent differences values from each duplicate sample by parameter.

| Parameter Class | Parameter | Site | Date | Relative Percent Difference ^a | Sample Concentration | Field Duplicate Concentration | Reporting Limit | Units |
|--|--------------------|-------|---------|--|----------------------|-------------------------------|-----------------|-------|
| Pesticides | Heptachlor | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Pesticides | Heptachlor Epoxide | CB335 | 4/2/10 | NC | ND | ND | 0.21 | ng/L |
| Pesticides | Heptachlor Epoxide | RB111 | 4/21/10 | NC | ND | 0.23 | 0.2 | ng/L |
| Pesticides | Hexachlorobenzene | CB335 | 4/2/10 | NC | ND | ND | 0.21 | ng/L |
| Pesticides | Hexachlorobenzene | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Pesticides | Methoxychlor | CB335 | 4/2/10 | 20.69%* | 1.6 | 1.3 | 0.54 | ng/L |
| Pesticides | Methoxychlor | RB111 | 4/21/10 | NC | ND | ND | 0.5 | ng/L |
| Pesticides | Mirex | CB335 | 4/2/10 | NC | ND | ND | 0.21 | ng/L |
| Pesticides | Mirex | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Pesticides | Oxychlorane | CB335 | 4/2/10 | NC | ND | ND | 0.21 | ng/L |
| Pesticides | Oxychlorane | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Pesticides | Pentachloroanisole | CB335 | 4/2/10 | NC | ND | ND | 0.21 | ng/L |
| Pesticides | Pentachloroanisole | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Pesticides | Toxaphene | CB335 | 4/2/10 | 26.09%* | 13 | 10 | 11 | ng/L |
| Pesticides | Toxaphene | RB111 | 4/21/10 | NC | ND | ND | 9.9 | ng/L |
| Pesticides | trans-Chlordane | CB335 | 4/2/10 | 20.8%* | 0.69 | 0.56 | 0.21 | ng/L |
| Pesticides | trans-Chlordane | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Pesticides | Trans-Nonachlor | CB335 | 4/2/10 | NC | ND | ND | 0.21 | ng/L |
| Pesticides | Trans-Nonachlor | RB111 | 4/21/10 | NC | ND | ND | 0.2 | ng/L |
| Petroleum and Oil | #2 Diesel | CB335 | 4/2/10 | NC | ND | ND | 0.05 | mg/L |
| Petroleum and Oil | #2 Diesel | CBA | 5/19/10 | NC | ND | ND | 0.05 | mg/L |
| Petroleum and Oil | #2 Diesel | FB130 | 5/13/10 | NC | ND | ND | 0.05 | mg/L |
| Petroleum and Oil | #2 Diesel | FB200 | 5/14/10 | NC | ND | ND | 0.05 | mg/L |
| Petroleum and Oil | #2 Diesel | RB111 | 4/21/10 | NC | ND | ND | 0.05 | mg/L |
| Petroleum and Oil | #2 Diesel | RB53 | 5/28/10 | NC | ND | ND | 0.05 | mg/L |
| Petroleum and Oil | Gasoline | CBA | 5/19/10 | NC | ND | ND | 0.14 | mg/L |
| Petroleum and Oil | Gasoline | FB130 | 5/13/10 | NC | ND | ND | 0.14 | mg/L |
| Petroleum and Oil | Gasoline | FB200 | 5/14/10 | NC | ND | ND | 0.14 | mg/L |
| Petroleum and Oil | Gasoline | RB111 | 4/21/10 | NC | ND | ND | 0.14 | mg/L |
| Petroleum and Oil | Gasoline | RB53 | 5/28/10 | NC | ND | ND | 0.14 | mg/L |
| Petroleum and Oil | Lube Oil (TPHD) | CB335 | 4/2/10 | 4.65%* | 0.21 | 0.22 | 0.12 | mg/L |
| Petroleum and Oil | Lube Oil (TPHD) | CBA | 5/19/10 | NC | ND | ND | 0.12 | mg/L |
| Petroleum and Oil | Lube Oil (TPHD) | FB130 | 5/13/10 | NC | ND | ND | 0.12 | mg/L |
| Petroleum and Oil | Lube Oil (TPHD) | FB200 | 5/14/10 | NC | ND | ND | 0.12 | mg/L |
| Petroleum and Oil | Lube Oil (TPHD) | RB111 | 4/21/10 | NC | ND | ND | 0.12 | mg/L |
| Petroleum and Oil | Lube Oil (TPHD) | RB53 | 5/28/10 | NC | ND | ND | 0.12 | mg/L |
| Petroleum and Oil | Lube Oil (TPH-Dog) | CB335 | 4/2/10 | 18.87%* | 0.48 | 0.58 | 0.034 | mg/L |
| Petroleum and Oil | Lube Oil (TPH-Dog) | CBA | 5/19/10 | NC | ND | ND | 0.032 | mg/L |
| Petroleum and Oil | Lube Oil (TPH-Dog) | FB130 | 5/13/10 | NC | ND | ND | 0.032 | mg/L |
| Petroleum and Oil | Lube Oil (TPH-Dog) | FB200 | 5/14/10 | NC | ND | ND | 0.032 | mg/L |
| Petroleum and Oil | Lube Oil (TPH-Dog) | RB111 | 4/21/10 | NC | ND | ND | 0.032 | mg/L |
| Petroleum and Oil | Lube Oil (TPH-Dog) | RB53 | 5/28/10 | NC | ND | ND | 0.032 | mg/L |
| Petroleum and Oil | Oil and Grease | CB335 | 4/2/10 | NC | 0.6 | ND | 0.4 | mg/L |
| Petroleum and Oil | Oil and Grease | CBA | 5/19/10 | NC | ND | 0.5 | 0.4 | mg/L |
| Petroleum and Oil | Oil and Grease | FB130 | 5/13/10 | NC | 0.4 | ND | 0.4 | mg/L |
| Petroleum and Oil | Oil and Grease | FB200 | 5/14/10 | NC | ND | ND | 0.4 | mg/L |
| Petroleum and Oil | Oil and Grease | RB111 | 4/21/10 | NC | ND | 3.6 | 0.4 | mg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE007 | AG174 | 7/7/10 | NC | ND | ND | 26.3 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE007 | CB335 | 4/21/10 | NC | ND | ND | 33.8 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE007 | CBA | 5/19/10 | NC | ND | 5.2 | 25 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE007 | FB130 | 5/31/10 | NC | ND | ND | 26 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE010 | AG174 | 7/7/10 | NC | ND | ND | 26.3 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE010 | CB335 | 4/21/10 | NC | ND | ND | 33.8 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE010 | CBA | 5/19/10 | NC | ND | ND | 25 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE010 | FB130 | 5/31/10 | NC | ND | ND | 26 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE015 | AG174 | 7/7/10 | NC | ND | ND | 26.3 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE015 | CB335 | 4/21/10 | NC | ND | ND | 33.8 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE015 | CBA | 5/19/10 | NC | ND | ND | 25 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE015 | FB130 | 5/31/10 | NC | ND | ND | 26 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE017 | AG174 | 7/7/10 | NC | ND | ND | 26.3 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE017 | CB335 | 4/21/10 | 60.41%* | 22.2 | 11.9 | 33.8 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE017 | CBA | 5/19/10 | NC | ND | ND | 25 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE017 | FB130 | 5/31/10 | NC | ND | ND | 26 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE028 | AG174 | 7/7/10 | NC | ND | ND | 26.3 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE028 | CB335 | 4/21/10 | 66.19%* | 37.2 | 18.7 | 33.8 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE028 | CBA | 5/19/10 | NC | ND | ND | 25 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE028 | FB130 | 5/31/10 | NC | ND | ND | 26 | pg/L |

^a The * symbol on relative percent differences indicates one or both samples were within five times the reporting limit.

Table R-1. Calculated relative percent differences values from each duplicate sample by parameter.

| Parameter Class | Parameter | Site | Date | Relative Percent Difference ^a | Sample Concentration | Field Duplicate Concentration | Reporting Limit | Units |
|--|-------------|-------|---------|--|----------------------|-------------------------------|-----------------|-------|
| Polybrominated Diphenyl Ethers (Congeners) | PBDE030 | AG174 | 7/7/10 | NC | ND | ND | 26.3 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE030 | CB335 | 4/21/10 | NC | ND | ND | 33.8 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE030 | CBA | 5/19/10 | NC | ND | ND | 25 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE030 | FB130 | 5/31/10 | NC | ND | ND | 26 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE047 | AG174 | 7/7/10 | NC | ND | ND | 52.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE047 | CB335 | 4/21/10 | 30.23% | 990 | 730 | 67.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE047 | CBA | 5/19/10 | NC | ND | ND | 50 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE047 | FB130 | 5/31/10 | NC | ND | ND | 52.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE049 | AG174 | 7/7/10 | NC | ND | ND | 52.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE049 | CB335 | 4/21/10 | 50.89%* | 124 | 73.7 | 67.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE049 | CBA | 5/19/10 | NC | ND | ND | 50 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE049 | FB130 | 5/31/10 | NC | ND | ND | 52.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE066 | AG174 | 7/7/10 | NC | ND | ND | 52.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE066 | CB335 | 4/21/10 | 28.84%* | 60.3 | 45.1 | 67.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE066 | CBA | 5/19/10 | NC | ND | ND | 50 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE066 | FB130 | 5/31/10 | NC | ND | ND | 52.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE071 | AG174 | 7/7/10 | NC | ND | ND | 52.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE071 | CB335 | 4/21/10 | NC | 17.8 | ND | 67.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE071 | CBA | 5/19/10 | NC | ND | ND | 50 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE071 | FB130 | 5/31/10 | NC | ND | ND | 52.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE077 | AG174 | 7/7/10 | NC | ND | ND | 52.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE077 | CB335 | 4/21/10 | NC | ND | ND | 67.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE077 | CBA | 5/19/10 | NC | ND | ND | 50 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE077 | FB130 | 5/31/10 | NC | ND | ND | 52.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE085 | AG174 | 7/7/10 | NC | ND | ND | 52.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE085 | CB335 | 4/21/10 | 77.85%* | 71.2 | 31.3 | 67.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE085 | CBA | 5/19/10 | NC | ND | ND | 50 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE085 | FB130 | 5/31/10 | NC | ND | ND | 52.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE099 | AG174 | 7/7/10 | NC | ND | ND | 52.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE099 | CB335 | 4/21/10 | 9.41% | 1090 | 992 | 67.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE099 | CBA | 5/19/10 | NC | ND | ND | 50 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE099 | FB130 | 5/31/10 | NC | ND | ND | 52.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE100 | AG174 | 7/7/10 | NC | ND | ND | 52.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE100 | CB335 | 4/21/10 | 36.87%* | 257 | 177 | 67.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE100 | CBA | 5/19/10 | 23.96%* | 16.9 | 21.5 | 50 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE100 | FB130 | 5/31/10 | NC | ND | ND | 52.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE119 | AG174 | 7/7/10 | NC | ND | ND | 52.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE119 | CB335 | 4/21/10 | NC | ND | ND | 67.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE119 | CBA | 5/19/10 | NC | ND | ND | 50 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE119 | FB130 | 5/31/10 | NC | ND | ND | 52.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE126 | AG174 | 7/7/10 | NC | ND | ND | 52.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE126 | CB335 | 4/21/10 | NC | ND | ND | 67.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE126 | CBA | 5/19/10 | NC | ND | ND | 50 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE126 | FB130 | 5/31/10 | NC | ND | ND | 52.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE138 | AG174 | 7/7/10 | NC | ND | ND | 52.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE138 | CB335 | 4/21/10 | NC | 39.9 | ND | 67.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE138 | CBA | 5/19/10 | NC | ND | ND | 50 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE138 | FB130 | 5/31/10 | NC | ND | ND | 52.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE139 | AG174 | 7/7/10 | NC | ND | ND | 52.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE139 | CB335 | 4/21/10 | 37.06%* | 33.9 | 23.3 | 67.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE139 | CBA | 5/19/10 | NC | ND | ND | 50 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE139 | FB130 | 5/31/10 | NC | ND | ND | 52.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE140 | AG174 | 7/7/10 | NC | ND | ND | 52.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE140 | CB335 | 4/21/10 | 10.07%* | 19.8 | 21.9 | 67.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE140 | CBA | 5/19/10 | NC | ND | ND | 50 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE140 | FB130 | 5/31/10 | NC | ND | ND | 52.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE153 | AG174 | 7/7/10 | NC | ND | ND | 52.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE153 | CB335 | 4/21/10 | 43.22%* | 139 | 89.6 | 67.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE153 | CBA | 5/19/10 | NC | ND | ND | 50 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE153 | FB130 | 5/31/10 | NC | ND | ND | 52.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE154 | AG174 | 7/7/10 | NC | ND | ND | 52.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE154 | CB335 | 4/21/10 | 54.36%* | 146 | 83.6 | 67.6 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE154 | CBA | 5/19/10 | NC | ND | ND | 50 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE154 | FB130 | 5/31/10 | NC | ND | ND | 52.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE156/169 | AG174 | 7/7/10 | NC | ND | ND | 105.3 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE156/169 | CB335 | 4/21/10 | NC | ND | ND | 135.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE156/169 | CBA | 5/19/10 | NC | ND | ND | 100 | pg/L |

^a The * symbol on relative percent differences indicates one or both samples were within five times the reporting limit.

Table R-1. Calculated relative percent differences values from each duplicate sample by parameter.

| Parameter Class | Parameter | Site | Date | Relative Percent Difference ^a | Sample Concentration | Field Duplicate Concentration | Reporting Limit | Units |
|--|-------------|-------|---------|--|----------------------|-------------------------------|-----------------|-------|
| Polybrominated Diphenyl Ethers (Congeners) | PBDE156/169 | FB130 | 5/31/10 | NC | ND | ND | 104.2 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE171 | AG174 | 7/7/10 | NC | ND | ND | 105.3 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE171 | CB335 | 4/21/10 | 20.48%* | 57.6 | 46.9 | 135.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE171 | CBA | 5/19/10 | NC | ND | ND | 100 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE171 | FB130 | 5/31/10 | NC | ND | ND | 104.2 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE180 | AG174 | 7/7/10 | NC | ND | ND | 105.3 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE180 | CB335 | 4/21/10 | 54.03%* | 71.7 | 41.2 | 135.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE180 | CBA | 5/19/10 | NC | ND | ND | 100 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE180 | FB130 | 5/31/10 | NC | ND | ND | 104.2 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE183 | AG174 | 7/7/10 | NC | ND | ND | 105.3 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE183 | CB335 | 4/21/10 | 24.82%* | 308 | 240 | 135.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE183 | CBA | 5/19/10 | NC | ND | ND | 100 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE183 | FB130 | 5/31/10 | NC | ND | ND | 104.2 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE184 | AG174 | 7/7/10 | NC | ND | ND | 105.3 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE184 | CB335 | 4/21/10 | NC | ND | ND | 135.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE184 | CBA | 5/19/10 | NC | ND | ND | 100 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE184 | FB130 | 5/31/10 | NC | ND | ND | 104.2 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE191 | AG174 | 7/7/10 | NC | ND | ND | 105.3 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE191 | CB335 | 4/21/10 | 6.9%* | 35 | 37.5 | 135.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE191 | CBA | 5/19/10 | NC | ND | ND | 100 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE191 | FB130 | 5/31/10 | NC | ND | ND | 104.2 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE196 | AG174 | 7/7/10 | NC | ND | ND | 105.3 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE196 | CB335 | 4/21/10 | 6.52% | 871 | 816 | 135.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE196 | CBA | 5/19/10 | NC | ND | ND | 100 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE196 | FB130 | 5/31/10 | NC | ND | ND | 104.2 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE197/204 | AG174 | 7/7/10 | NC | ND | ND | 105.3 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE197/204 | CB335 | 4/21/10 | 8.05%* | 530 | 489 | 270.3 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE197/204 | CBA | 5/19/10 | NC | ND | ND | 100 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE197/204 | FB130 | 5/31/10 | NC | ND | ND | 104.2 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE201 | AG174 | 7/7/10 | NC | ND | ND | 105.3 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE201 | CB335 | 4/21/10 | 12.23%* | 677 | 599 | 135.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE201 | CBA | 5/19/10 | NC | ND | ND | 100 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE201 | FB130 | 5/31/10 | NC | ND | ND | 104.2 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE203 | AG174 | 7/7/10 | NC | ND | ND | 105.3 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE203 | CB335 | 4/21/10 | 7.61% | 1500 | 1390 | 135.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE203 | CBA | 5/19/10 | NC | ND | ND | 100 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE203 | FB130 | 5/31/10 | NC | ND | ND | 104.2 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE205 | AG174 | 7/7/10 | NC | ND | ND | 105.3 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE205 | CB335 | 4/21/10 | NC | 26.3 | ND | 135.1 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE205 | CBA | 5/19/10 | NC | ND | ND | 100 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE205 | FB130 | 5/31/10 | NC | ND | ND | 104.2 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE206 | AG174 | 7/7/10 | NC | ND | ND | 263 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE206 | CB335 | 4/21/10 | 10.53% | 14400 | 16000 | 338 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE206 | CBA | 5/19/10 | NC | ND | ND | 250 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE206 | FB130 | 5/31/10 | NC | ND | ND | 260 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE207 | AG174 | 7/7/10 | NC | ND | ND | 263 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE207 | CB335 | 4/21/10 | 4.41% | 13900 | 13300 | 338 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE207 | CBA | 5/19/10 | NC | ND | ND | 250 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE207 | FB130 | 5/31/10 | NC | ND | ND | 260 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE208 | AG174 | 7/7/10 | NC | ND | ND | 263 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE208 | CB335 | 4/21/10 | 0.82% | 12100 | 12200 | 338 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE208 | CBA | 5/19/10 | NC | ND | ND | 250 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE208 | FB130 | 5/31/10 | NC | ND | ND | 260 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE209 | AG174 | 7/7/10 | NC | ND | ND | 263 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE209 | CB335 | 4/21/10 | 2.64% | 224000 | 230000 | 338 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE209 | CBA | 5/19/10 | 88.24%* | 833 | 323 | 250 | pg/L |
| Polybrominated Diphenyl Ethers (Congeners) | PBDE209 | FB130 | 5/31/10 | NC | ND | ND | 260 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-001 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-001 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-001 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-001 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-002 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-002 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-002 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-002 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-003 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-003 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |

^a The * symbol on relative percent differences indicates one or both samples were within five times the reporting limit.

Table R-1. Calculated relative percent differences values from each duplicate sample by parameter.

| Parameter Class | Parameter | Site | Date | Relative Percent Difference ^a | Sample Concentration | Field Duplicate Concentration | Reporting Limit | Units |
|---------------------------------------|-----------------|-------|---------|--|----------------------|-------------------------------|-----------------|-------|
| Polychlorinated Biphenyls (Congeners) | PCB-003 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-003 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-004/010 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-004/010 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-004/010 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-004/010 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-006 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-006 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-006 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-006 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-007/009 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-007/009 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-007/009 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-007/009 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-008/005 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-008/005 | CB335 | 4/21/10 | NC | 24 | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-008/005 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-008/005 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-011 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-011 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-011 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-011 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-012/013 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-012/013 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-012/013 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-012/013 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-014 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-014 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-014 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-014 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-015 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-015 | CB335 | 4/21/10 | NC | 18 | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-015 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-015 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-016/032 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-016/032 | CB335 | 4/21/10 | 113.51%* | 58 | 16 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-016/032 | CBA | 5/19/10 | NC | 28 | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-016/032 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-017 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-017 | CB335 | 4/21/10 | NC | 34 | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-017 | CBA | 5/19/10 | NC | 21 | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-017 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-018 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-018 | CB335 | 4/21/10 | 131.03%* | 48 | 10 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-018 | CBA | 5/19/10 | NC | 29 | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-018 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-019 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-019 | CB335 | 4/21/10 | NC | 11 | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-019 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-019 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-020/021/033 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-020/021/033 | CB335 | 4/21/10 | NC | 36 | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-020/021/033 | CBA | 5/19/10 | NC | 27 | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-020/021/033 | FB200 | 5/21/10 | NC | ND | 12 | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-022 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-022 | CB335 | 4/21/10 | NC | 20 | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-022 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-022 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-023 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-023 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-023 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-023 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-024/027 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-024/027 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-024/027 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-024/027 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-025 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |

^a The * symbol on relative percent differences indicates one or both samples were within five times the reporting limit.

Table R-1. Calculated relative percent differences values from each duplicate sample by parameter.

| Parameter Class | Parameter | Site | Date | Relative Percent Difference ^a | Sample Concentration | Field Duplicate Concentration | Reporting Limit | Units |
|---------------------------------------|-----------------|-------|---------|--|----------------------|-------------------------------|-----------------|-------|
| Polychlorinated Biphenyls (Congeners) | PCB-025 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-025 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-025 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-026 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-026 | CB335 | 4/21/10 | NC | 18 | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-026 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-026 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-028 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-028 | CB335 | 4/21/10 | 111.11%* | 49 | 14 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-028 | CBA | 5/19/10 | NC | 44 | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-028 | FB200 | 5/21/10 | NC | ND | 14 | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-029 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-029 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-029 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-029 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-030 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-030 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-030 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-030 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-031 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-031 | CB335 | 4/21/10 | 124.44%* | 73 | 17 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-031 | CBA | 5/19/10 | NC | 47 | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-031 | FB200 | 5/21/10 | NC | ND | 13 | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-034 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-034 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-034 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-034 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-035 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-035 | CB335 | 4/21/10 | NC | 10 | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-035 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-035 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-036 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-036 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-036 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-036 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-037 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-037 | CB335 | 4/21/10 | 124.14%* | 47 | 11 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-037 | CBA | 5/19/10 | NC | 20 | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-037 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-038 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-038 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-038 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-038 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-039 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-039 | CB335 | 4/21/10 | NC | ND | 12 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-039 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-039 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-040 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-040 | CB335 | 4/21/10 | 37.04%* | 32 | 22 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-040 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-040 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-041/064/068 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-041/064/068 | CB335 | 4/21/10 | 40.74% | 130 | 86 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-041/064/068 | CBA | 5/19/10 | NC | 23 | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-041/064/068 | FB200 | 5/21/10 | NC | ND | 11 | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-042 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-042 | CB335 | 4/21/10 | 49.28%* | 43 | 26 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-042 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-042 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-043/049 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-043/049 | CB335 | 4/21/10 | 44.9% | 300 | 190 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-043/049 | CBA | 5/19/10 | NC | 37 | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-043/049 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-044 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-044 | CB335 | 4/21/10 | 34.92% | 370 | 260 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-044 | CBA | 5/19/10 | NC | 38 | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-044 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |

^a The * symbol on relative percent differences indicates one or both samples were within five times the reporting limit.

Table R-1. Calculated relative percent differences values from each duplicate sample by parameter.

| Parameter Class | Parameter | Site | Date | Relative Percent Difference ^a | Sample Concentration | Field Duplicate Concentration | Reporting Limit | Units |
|---------------------------------------|-----------------|-------|---------|--|----------------------|-------------------------------|-----------------|-------|
| Polychlorinated Biphenyls (Congeners) | PCB-045 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-045 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-045 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-045 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-046 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-046 | CB335 | 4/21/10 | 21.2%* | 12 | 9.7 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-046 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-046 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-047/048/075 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-047/048/075 | CB335 | 4/21/10 | 53.13%* | 81 | 47 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-047/048/075 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-047/048/075 | FB200 | 5/21/10 | NC | ND | 19 | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-050 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-050 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-050 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-050 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-051 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-051 | CB335 | 4/21/10 | 56.41%* | 25 | 14 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-051 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-051 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-052/073 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-052/073 | CB335 | 4/21/10 | 36.24% | 880 | 610 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-052/073 | CBA | 5/19/10 | 135.88%* | 110 | 21 | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-052/073 | FB200 | 5/21/10 | NC | ND | 13 | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-053 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-053 | CB335 | 4/21/10 | 49.06%* | 66 | 40 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-053 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-053 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-054 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-054 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-054 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-054 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-055 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-055 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-055 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-055 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-056/060 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-056/060 | CB335 | 4/21/10 | 48.96% | 150 | 91 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-056/060 | CBA | 5/19/10 | NC | 20 | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-056/060 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-057 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-057 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-057 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-057 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-058 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-058 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-058 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-058 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-059 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-059 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-059 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-059 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-061/074 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-061/074 | CB335 | 4/21/10 | 47.79% | 140 | 86 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-061/074 | CBA | 5/19/10 | NC | ND | 21 | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-061/074 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-062 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-062 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-062 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-062 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-063 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-063 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-063 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-063 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-065 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-065 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-065 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |

^a The * symbol on relative percent differences indicates one or both samples were within five times the reporting limit.

Table R-1. Calculated relative percent differences values from each duplicate sample by parameter.

| Parameter Class | Parameter | Site | Date | Relative Percent Difference ^a | Sample Concentration | Field Duplicate Concentration | Reporting Limit | Units |
|---------------------------------------|-------------------------------------|-------|---------|--|----------------------|-------------------------------|-----------------|-------|
| Polychlorinated Biphenyls (Congeners) | PCB-065 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-066/080 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-066/080 | CB335 | 4/21/10 | 58.06% | 200 | 110 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-066/080 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-066/080 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-067 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-067 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-067 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-067 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-069 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-069 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-069 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-069 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-070 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-070 | CB335 | 4/21/10 | 38.71% | 740 | 500 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-070 | CBA | 5/19/10 | NC | 61 | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-070 | FB200 | 5/21/10 | NC | ND | 17 | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-071 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-071 | CB335 | 4/21/10 | NC | 85 | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-071 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-071 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-072 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-072 | CB335 | 4/21/10 | NC | ND | 44 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-072 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-072 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-076 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-076 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-076 | CBA | 5/19/10 | NC | 50.5 | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-076 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-077 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-077 | CB335 | 4/21/10 | 41.76% | 110 | 72 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-077 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-077 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-078 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-078 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-078 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-078 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-079 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-079 | CB335 | 4/21/10 | NC | 15 | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-079 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-079 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-081 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-081 | CB335 | 4/21/10 | 69.77%* | 29 | 14 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-081 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-081 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-082 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-082 | CB335 | 4/21/10 | 24% | 280 | 220 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-082 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-082 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-083/108 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-083/108 | CB335 | 4/21/10 | 23.46% | 100 | 79 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-083/108 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-083/108 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-084 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-084 | CB335 | 4/21/10 | 27.45% | 580 | 440 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-084 | CBA | 5/19/10 | NC | 44 | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-084 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-085/120 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-085/120 | CB335 | 4/21/10 | 26.42% | 300 | 230 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-085/120 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-085/120 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-086/087/097/111/115/116/117/125 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-086/087/097/111/115/116/117/125 | CB335 | 4/21/10 | 26.67% | 1700 | 1300 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-086/087/097/111/115/116/117/125 | CBA | 5/19/10 | 69.57%* | 93 | 45 | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-086/087/097/111/115/116/117/125 | FB200 | 5/21/10 | NC | ND | 16 | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-088/121 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-088/121 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |

^a The * symbol on relative percent differences indicates one or both samples were within five times the reporting limit.

Table R-1. Calculated relative percent differences values from each duplicate sample by parameter.

| Parameter Class | Parameter | Site | Date | Relative Percent Difference ^a | Sample Concentration | Field Duplicate Concentration | Reporting Limit | Units |
|---------------------------------------|-----------------|-------|---------|--|----------------------|-------------------------------|-----------------|-------|
| Polychlorinated Biphenyls (Congeners) | PCB-088/121 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-088/121 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-089/090/101 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-089/090/101 | CB335 | 4/21/10 | 26.67% | 1700 | 1300 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-089/090/101 | CBA | 5/19/10 | 94.12%* | 150 | 54 | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-089/090/101 | FB200 | 5/21/10 | NC | ND | 19 | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-091 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-091 | CB335 | 4/21/10 | 36.36% | 260 | 180 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-091 | CBA | 5/19/10 | NC | 20 | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-091 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-092 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-092 | CB335 | 4/21/10 | NC | 410 | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-092 | CBA | 5/19/10 | NC | 36 | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-092 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-093/095 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-093/095 | CB335 | 4/21/10 | 34.48% | 1700 | 1200 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-093/095 | CBA | 5/19/10 | 97.56%* | 21 | 61 | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-093/095 | FB200 | 5/21/10 | NC | ND | 22 | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-094 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-094 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-094 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-094 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-096 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-096 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-096 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-096 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-098/102 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-098/102 | CB335 | 4/21/10 | NC | ND | 31 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-098/102 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-098/102 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-099 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-099 | CB335 | 4/21/10 | 28.95% | 870 | 650 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-099 | CBA | 5/19/10 | 65%* | 53 | 27 | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-099 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-100 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-100 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-100 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-100 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-103 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-103 | CB335 | 4/21/10 | NC | 10 | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-103 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-103 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-104 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-104 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-104 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-104 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-105/127 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-105/127 | CB335 | 4/21/10 | 25.85% | 830 | 640 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-105/127 | CBA | 5/19/10 | NC | 24 | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-105/127 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-107/PCB-108 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-107/PCB-108 | CB335 | 4/21/10 | 30.77% | 150 | 110 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-107/PCB-108 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-107/PCB-108 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-110 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-110 | CB335 | 4/21/10 | 28.57% | 2800 | 2100 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-110 | CBA | 5/19/10 | 59.54%* | 170 | 92 | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-110 | FB200 | 5/21/10 | NC | ND | 23 | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-112 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-112 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-112 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-112 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-113 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-113 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-113 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-113 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-114 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |

^a The * symbol on relative percent differences indicates one or both samples were within five times the reporting limit.

Table R-1. Calculated relative percent differences values from each duplicate sample by parameter.

| Parameter Class | Parameter | Site | Date | Relative Percent Difference ^a | Sample Concentration | Field Duplicate Concentration | Reporting Limit | Units |
|---------------------------------------|-----------------|-------|---------|--|----------------------|-------------------------------|-----------------|-------|
| Polychlorinated Biphenyls (Congeners) | PCB-114 | CB335 | 4/21/10 | 38.1%* | 25 | 17 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-114 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-114 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-118/106 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-118/106 | CB335 | 4/21/10 | 35.29% | 2000 | 1400 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-118/106 | CBA | 5/19/10 | 59.02%* | 79 | 43 | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-118/106 | FB200 | 5/21/10 | NC | ND | 9.8 | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-119 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-119 | CB335 | 4/21/10 | 33.96%* | 31 | 22 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-119 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-119 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-122 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-122 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-122 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-122 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-123 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-123 | CB335 | 4/21/10 | 52.94%* | 43 | 25 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-123 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-123 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-124 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-124 | CB335 | 4/21/10 | 30.37% | 110 | 81 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-124 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-124 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-126 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-126 | CB335 | 4/21/10 | 29.63%* | 31 | 23 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-126 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-126 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-128 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-128 | CB335 | 4/21/10 | 15.38% | 420 | 360 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-128 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-128 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-129 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-129 | CB335 | 4/21/10 | 20.69% | 160 | 130 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-129 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-129 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-130 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-130 | CB335 | 4/21/10 | 18.18% | 180 | 150 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-130 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-130 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-131/142/165 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-131/142/165 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-131/142/165 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-131/142/165 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-132/168 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-132/168 | CB335 | 4/21/10 | 16.54% | 720 | 610 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-132/168 | CBA | 5/19/10 | 36.07%* | 36 | 25 | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-132/168 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-133 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-133 | CB335 | 4/21/10 | 13.33%* | 16 | 14 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-133 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-133 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-134 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-134 | CB335 | 4/21/10 | 24% | 140 | 110 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-134 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-134 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-135/144 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-135/144 | CB335 | 4/21/10 | 18.87% | 290 | 240 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-135/144 | CBA | 5/19/10 | NC | 24 | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-135/144 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-136 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-136 | CB335 | 4/21/10 | 28.57% | 200 | 150 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-136 | CBA | 5/19/10 | NC | 20 | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-136 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-137 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-137 | CB335 | 4/21/10 | 30.37% | 110 | 81 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-137 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-137 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |

^a The * symbol on relative percent differences indicates one or both samples were within five times the reporting limit.

Table R-1. Calculated relative percent differences values from each duplicate sample by parameter.

| Parameter Class | Parameter | Site | Date | Relative Percent Difference ^a | Sample Concentration | Field Duplicate Concentration | Reporting Limit | Units |
|---------------------------------------|-----------------|-------|---------|--|----------------------|-------------------------------|-----------------|-------|
| Polychlorinated Biphenyls (Congeners) | PCB-138/163/164 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-138/163/164 | CB335 | 4/21/10 | 28.57% | 2000 | 1500 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-138/163/164 | CBA | 5/19/10 | 23.26%* | 72 | 57 | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-138/163/164 | FB200 | 5/21/10 | NC | ND | 15 | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-139/149 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-139/149 | CB335 | 4/21/10 | 24% | 1400 | 1100 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-139/149 | CBA | 5/19/10 | 43.09%* | 110 | 71 | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-139/149 | FB200 | 5/21/10 | 74.29%* | 11 | 24 | 190 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-140 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-140 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-140 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-140 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-141 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-141 | CB335 | 4/21/10 | 22.86% | 390 | 310 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-141 | CBA | 5/19/10 | NC | 26 | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-141 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-143 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-143 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-143 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-143 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-145 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-145 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-145 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-145 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-146 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-146 | CB335 | 4/21/10 | 22.22% | 250 | 200 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-146 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-146 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-147 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-147 | CB335 | 4/21/10 | 23.26%* | 48 | 38 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-147 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-147 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-148 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-148 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-148 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-148 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-150 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-150 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-150 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-150 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-151 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-151 | CB335 | 4/21/10 | 23.26% | 240 | 190 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-151 | CBA | 5/19/10 | NC | 33 | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-151 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-152 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-152 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-152 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-152 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-153 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-153 | CB335 | 4/21/10 | 40% | 1200 | 800 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-153 | CBA | 5/19/10 | 29.09%* | 63 | 47 | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-153 | FB200 | 5/21/10 | NC | ND | 13 | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-154 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-154 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-154 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-154 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-155 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-155 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-155 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-155 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-156 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-156 | CB335 | 4/21/10 | 23.26% | 240 | 190 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-156 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-156 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-157 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-157 | CB335 | 4/21/10 | 27.45%* | 58 | 44 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-157 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |

^a The * symbol on relative percent differences indicates one or both samples were within five times the reporting limit.

Table R-1. Calculated relative percent differences values from each duplicate sample by parameter.

| Parameter Class | Parameter | Site | Date | Relative Percent Difference ^a | Sample Concentration | Field Duplicate Concentration | Reporting Limit | Units |
|---------------------------------------|-------------|-------|---------|--|----------------------|-------------------------------|-----------------|-------|
| Polychlorinated Biphenyls (Congeners) | PCB-157 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-158/160 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-158/160 | CB335 | 4/21/10 | 20.69% | 320 | 260 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-158/160 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-158/160 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-159 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-159 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-159 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-159 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-161 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-161 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-161 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-161 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-162 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-162 | CB335 | 4/21/10 | NC | ND | 12 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-162 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-162 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-166 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-166 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-166 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-166 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-167 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-167 | CB335 | 4/21/10 | 53.16% | 100 | 58 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-167 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-167 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-169 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-169 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-169 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-169 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-170/190 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-170/190 | CB335 | 4/21/10 | 19.61% | 280 | 230 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-170/190 | CBA | 5/19/10 | 7.69%* | 27 | 25 | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-170/190 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-171 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-171 | CB335 | 4/21/10 | 15.6% | 76 | 65 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-171 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-171 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-172/192 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-172/192 | CB335 | 4/21/10 | 41.27%* | 38 | 25 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-172/192 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-172/192 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-173 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-173 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-173 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-173 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-174 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-174 | CB335 | 4/21/10 | 19.35% | 170 | 140 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-174 | CBA | 5/19/10 | 11.76%* | 27 | 24 | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-174 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-175 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-175 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-175 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-175 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-176 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-176 | CB335 | 4/21/10 | 15.38%* | 21 | 18 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-176 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-176 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-177 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-177 | CB335 | 4/21/10 | 12.56% | 110 | 97 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-177 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-177 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-178 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-178 | CB335 | 4/21/10 | 24%* | 28 | 22 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-178 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-178 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-179 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-179 | CB335 | 4/21/10 | 24.18%* | 51 | 40 | 10 | pg/L |

^a The * symbol on relative percent differences indicates one or both samples were within five times the reporting limit.

Table R-1. Calculated relative percent differences values from each duplicate sample by parameter.

| Parameter Class | Parameter | Site | Date | Relative Percent Difference ^a | Sample Concentration | Field Duplicate Concentration | Reporting Limit | Units |
|---------------------------------------|-------------|-------|---------|--|----------------------|-------------------------------|-----------------|-------|
| Polychlorinated Biphenyls (Congeners) | PCB-179 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-179 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-180 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-180 | CB335 | 4/21/10 | 19.72% | 390 | 320 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-180 | CBA | 5/19/10 | 9.09%* | 69 | 63 | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-180 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-181 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-181 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-181 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-181 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-182/187 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-182/187 | CB335 | 4/21/10 | 28.24% | 97 | 73 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-182/187 | CBA | 5/19/10 | 9.52%* | 22 | 20 | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-182/187 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-183 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-183 | CB335 | 4/21/10 | 18.58% | 100 | 83 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-183 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-183 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-184 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-184 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-184 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-184 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-185 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-185 | CB335 | 4/21/10 | NC | ND | 15 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-185 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-185 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-186 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-186 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-186 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-186 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-188 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-188 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-188 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-188 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-189 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-189 | CB335 | 4/21/10 | NC | 16 | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-189 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-189 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-191 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-191 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-191 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-191 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-193 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-193 | CB335 | 4/21/10 | 22.22%* | 20 | 16 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-193 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-193 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-194 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-194 | CB335 | 4/21/10 | 25.81%* | 35 | 27 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-194 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-194 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-195 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-195 | CB335 | 4/21/10 | 18.18%* | 12 | 10 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-195 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-195 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-196/203 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-196/203 | CB335 | 4/21/10 | 5.88%* | 35 | 33 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-196/203 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-196/203 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-197 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-197 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-197 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-197 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-198 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-198 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-198 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-198 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-199 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |

^a The * symbol on relative percent differences indicates one or both samples were within five times the reporting limit.

Table R-1. Calculated relative percent differences values from each duplicate sample by parameter.

| Parameter Class | Parameter | Site | Date | Relative Percent Difference ^a | Sample Concentration | Field Duplicate Concentration | Reporting Limit | Units |
|---------------------------------------|------------|-------|---------|--|----------------------|-------------------------------|-----------------|-------|
| Polychlorinated Biphenyls (Congeners) | PCB-199 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-199 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-199 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-200 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-200 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-200 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-200 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-201 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-201 | CB335 | 4/21/10 | 22.95%* | 34 | 27 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-201 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-201 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-202 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-202 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-202 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-202 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-204 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-204 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-204 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-204 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-205 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-205 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-205 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-205 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-206 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-206 | CB335 | 4/21/10 | 66.67%* | 24 | 12 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-206 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-206 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-207 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-207 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-207 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-207 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-208 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-208 | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-208 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-208 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-209 | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-209 | CB335 | 4/21/10 | NC | 16 | ND | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-209 | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | PCB-209 | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls (Congeners) | Total PCB | AG62 | 7/28/10 | NC | ND | ND | 800 | pg/L |
| Polychlorinated Biphenyls (Congeners) | Total PCB | CB335 | 4/21/10 | 33.33% | 28000 | 20000 | 10 | pg/L |
| Polychlorinated Biphenyls (Congeners) | Total PCB | CBA | 5/19/10 | 5.22% | 5600 | 5900 | 21 | pg/L |
| Polychlorinated Biphenyls (Congeners) | Total PCB | FB200 | 5/21/10 | 189.55%* | 11 | 410 | 190 | pg/L |
| Polychlorinated Biphenyls Homologs | Total DiCB | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls Homologs | Total DiCB | CB335 | 4/21/10 | NC | 420 | ND | 10 | pg/L |
| Polychlorinated Biphenyls Homologs | Total DiCB | CBA | 5/19/10 | 4.17% | 490 | 470 | 21 | pg/L |
| Polychlorinated Biphenyls Homologs | Total DiCB | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls Homologs | Total HpCB | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls Homologs | Total HpCB | CB335 | 4/21/10 | 24% | 1400 | 1100 | 10 | pg/L |
| Polychlorinated Biphenyls Homologs | Total HpCB | CBA | 5/19/10 | 2.6% | 780 | 760 | 21 | pg/L |
| Polychlorinated Biphenyls Homologs | Total HpCB | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls Homologs | Total HxCB | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls Homologs | Total HxCB | CB335 | 4/21/10 | 26.67% | 8500 | 6500 | 10 | pg/L |
| Polychlorinated Biphenyls Homologs | Total HxCB | CBA | 5/19/10 | 18.18% | 1000 | 1200 | 21 | pg/L |
| Polychlorinated Biphenyls Homologs | Total HxCB | FB200 | 5/21/10 | 130.16%* | 11 | 52 | 190 | pg/L |
| Polychlorinated Biphenyls Homologs | Total MoCB | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls Homologs | Total MoCB | CB335 | 4/21/10 | NC | ND | ND | 10 | pg/L |
| Polychlorinated Biphenyls Homologs | Total MoCB | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls Homologs | Total MoCB | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls Homologs | Total NoCB | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls Homologs | Total NoCB | CB335 | 4/21/10 | 66.67%* | 24 | 12 | 10 | pg/L |
| Polychlorinated Biphenyls Homologs | Total NoCB | CBA | 5/19/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls Homologs | Total NoCB | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |
| Polychlorinated Biphenyls Homologs | Total OcCB | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls Homologs | Total OcCB | CB335 | 4/21/10 | NC | ND | 97 | 10 | pg/L |
| Polychlorinated Biphenyls Homologs | Total OcCB | CBA | 5/19/10 | 0% | 630 | 630 | 21 | pg/L |
| Polychlorinated Biphenyls Homologs | Total OcCB | FB200 | 5/21/10 | NC | ND | ND | 19 | pg/L |

^a The * symbol on relative percent differences indicates one or both samples were within five times the reporting limit.

Table R-1. Calculated relative percent differences values from each duplicate sample by parameter.

| Parameter Class | Parameter | Site | Date | Relative Percent Difference ^a | Sample Concentration | Field Duplicate Concentration | Reporting Limit | Units |
|------------------------------------|------------|-------|---------|--|----------------------|-------------------------------|-----------------|-------|
| Polychlorinated Biphenyls Homologs | Total PeCB | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls Homologs | Total PeCB | CB335 | 4/21/10 | 33.33% | 14000 | 10000 | 10 | pg/L |
| Polychlorinated Biphenyls Homologs | Total PeCB | CBA | 5/19/10 | 52.43% | 1300 | 760 | 21 | pg/L |
| Polychlorinated Biphenyls Homologs | Total PeCB | FB200 | 5/21/10 | NC | ND | 90 | 19 | pg/L |
| Polychlorinated Biphenyls Homologs | Total TeCB | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls Homologs | Total TeCB | CB335 | 4/21/10 | 42.86% | 3400 | 2200 | 10 | pg/L |
| Polychlorinated Biphenyls Homologs | Total TeCB | CBA | 5/19/10 | 40.44% | 730 | 1100 | 21 | pg/L |
| Polychlorinated Biphenyls Homologs | Total TeCB | FB200 | 5/21/10 | NC | ND | 60 | 19 | pg/L |
| Polychlorinated Biphenyls Homologs | Total TrCB | AG62 | 7/28/10 | NC | ND | ND | 21 | pg/L |
| Polychlorinated Biphenyls Homologs | Total TrCB | CB335 | 4/21/10 | 133.33% | 400 | 80 | 10 | pg/L |
| Polychlorinated Biphenyls Homologs | Total TrCB | CBA | 5/19/10 | 32.68% | 640 | 890 | 21 | pg/L |
| Polychlorinated Biphenyls Homologs | Total TrCB | FB200 | 5/21/10 | NC | ND | 39 | 19 | pg/L |

^a Relative percent difference values are flagged with a * symbol when the sample or field duplicate concentration are less than five times the method reporting limit.

^a The * symbol on relative percent differences indicates one or both samples were within five times the reporting limit.

Table R-2. Mean relative percent difference values from field duplicate samples by parameter.

| Conventional | Mean RPD^a |
|---|-----------------------------|
| Ammonia | 44.75% |
| Dissolved Organic Carbon | 5.15% |
| Hardness as CaCO ₃ | 2.56% |
| Nitrate-Nitrite as N | 5.12% |
| Ortho-Phosphate | 8.94% |
| Total Organic Carbon | 2.29% |
| Total Persulfate Nitrogen | 6.47% |
| Total Phosphorus | 7.95% |
| Total Suspended Solids | 25.86% |
| Herbicides | |
| 2,4-D | 19.48% |
| Dicamba | 0.00% |
| MCPA | 19.51% |
| MCP (Mecoprop) | 7.54% |
| Triclopyr | 11.70% |
| HPAHs | |
| Benzo(a)pyrene | 24.30% |
| Benzo(b)fluoranthene | 19.05% |
| Benzo(ghi)perylene | 4.65% |
| Chrysene | 41.86% |
| Fluoranthene | 23.38% |
| Indeno(1,2,3-cd)pyrene | 5.41% |
| Pyrene | 12.12% |
| LPAHs | |
| Phenanthrene | 33.33% |
| Metals | |
| Arsenic (Dissolved) | 2.88% |
| Arsenic (Total) | 4.10% |
| Cadmium (Dissolved) | 12.72% |
| Cadmium (Total) | 7.41% |
| Copper (Dissolved) | 4.70% |
| Copper (Total) | 4.85% |
| Lead (Dissolved) | 14.65% |
| Lead (Total) | 3.20% |
| Mercury (Dissolved) | 2.50% |
| Mercury (Total) | 3.86% |
| Zinc (Dissolved) | 16.96% |
| Zinc (Total) | 10.89% |
| Other Base/Neutral/Acid Extractables | |
| 4-Nitrophenol | 27.96% |
| Carbazole | 0.00% |
| Pentachlorophenol | 9.52% |

Table R-2. Mean relative percent difference values from field duplicate samples by parameter.

| | |
|---|--------|
| Pesticides | |
| 2,4'-DDE | 22.22% |
| 4,4'-DDT | 13.04% |
| Beta-BHC | 14.29% |
| Chlorpyrifos | 39.53% |
| Cis-Nonachlor | 22.22% |
| Dieldrin | 24.00% |
| Endosulfan I | 20.90% |
| Endosulfan Sulfate | 4.65% |
| Endrin Aldehyde | 13.13% |
| Gamma-BHC (Lindane) | 23.52% |
| Methoxychlor | 20.69% |
| Toxaphene | 26.09% |
| trans-Chlordane | 20.80% |
| Petroleum and Oil | |
| Lube Oil (TPHD) | 4.65% |
| Lube Oil (TPH-Dog) | 18.87% |
| Polybrominated Diphenyl Ethers (Congeners) | |
| PBDE017 | 60.41% |
| PBDE028 | 66.19% |
| PBDE047 | 30.23% |
| PBDE049 | 50.89% |
| PBDE066 | 28.84% |
| PBDE085 | 77.85% |
| PBDE099 | 9.41% |
| PBDE100 | 30.41% |
| PBDE139 | 37.06% |
| PBDE140 | 10.07% |
| PBDE153 | 43.22% |
| PBDE154 | 54.36% |
| PBDE171 | 20.48% |
| PBDE180 | 54.03% |
| PBDE183 | 24.82% |
| PBDE191 | 6.90% |
| PBDE196 | 6.52% |
| PBDE197/204 | 8.05% |
| PBDE201 | 12.23% |
| PBDE203 | 7.61% |
| PBDE206 | 10.53% |
| PBDE207 | 4.41% |
| PBDE208 | 0.82% |
| PBDE209 | 45.44% |

Table R-2. Mean relative percent difference values from field duplicate samples by parameter.

| Polychlorinated Biphenyls (Congeners) | |
|--|---------|
| PCB-016/032 | 113.51% |
| PCB-018 | 131.03% |
| PCB-028 | 111.11% |
| PCB-031 | 124.44% |
| PCB-037 | 124.14% |
| PCB-040 | 37.04% |
| PCB-041/064/068 | 40.74% |
| PCB-042 | 49.28% |
| PCB-043/049 | 44.90% |
| PCB-044 | 34.92% |
| PCB-046 | 21.20% |
| PCB-047/048/075 | 53.13% |
| PCB-051 | 56.41% |
| PCB-052/073 | 86.06% |
| PCB-053 | 49.06% |
| PCB-056/060 | 48.96% |
| PCB-061/074 | 47.79% |
| PCB-066/080 | 58.06% |
| PCB-070 | 38.71% |
| PCB-077 | 41.76% |
| PCB-081 | 69.77% |
| PCB-082 | 24.00% |
| PCB-083/108 | 23.46% |
| PCB-084 | 27.45% |
| PCB-085/120 | 26.42% |
| PCB-086/087/097/111/115/116/117/125 | 48.12% |
| PCB-089/090/101 | 60.39% |
| PCB-091 | 36.36% |
| PCB-093/095 | 66.02% |
| PCB-099 | 46.97% |
| PCB-105/127 | 25.85% |
| PCB-107/PCB-108 | 30.77% |
| PCB-110 | 44.06% |
| PCB-114 | 38.10% |
| PCB-118/106 | 47.16% |
| PCB-119 | 33.96% |
| PCB-123 | 52.94% |
| PCB-124 | 30.37% |
| PCB-126 | 29.63% |
| PCB-128 | 15.38% |
| PCB-129 | 20.69% |
| PCB-130 | 18.18% |
| PCB-132/168 | 26.30% |

Table R-2. Mean relative percent difference values from field duplicate samples by parameter.

| Polychlorinated Biphenyls (Congeners) | |
|--|--------|
| PCB-133 | 13.33% |
| PCB-134 | 24.00% |
| PCB-135/144 | 18.87% |
| PCB-136 | 28.57% |
| PCB-137 | 30.37% |
| PCB-138/163/164 | 25.91% |
| PCB-139/149 | 47.13% |
| PCB-141 | 22.86% |
| PCB-146 | 22.22% |
| PCB-147 | 23.26% |
| PCB-151 | 23.26% |
| PCB-153 | 34.55% |
| PCB-156 | 23.26% |
| PCB-157 | 27.45% |
| PCB-158/160 | 20.69% |
| PCB-167 | 53.16% |
| PCB-170/190 | 13.65% |
| PCB-171 | 15.60% |
| PCB-172/192 | 41.27% |
| PCB-174 | 15.56% |
| PCB-176 | 15.38% |
| PCB-177 | 12.56% |
| PCB-178 | 24.00% |
| PCB-179 | 24.18% |
| PCB-180 | 14.40% |
| PCB-182/187 | 18.88% |
| PCB-183 | 18.58% |
| PCB-193 | 22.22% |
| PCB-194 | 25.81% |
| PCB-195 | 18.18% |
| PCB-196/203 | 5.88% |
| PCB-201 | 22.95% |
| PCB-206 | 66.67% |
| Total PCB | 76.03% |
| Polychlorinated Biphenyls Homologs | |
| Total DiCB | 4.17% |
| Total HpCB | 13.30% |
| Total HxCB | 58.34% |
| Total NoCB | 66.67% |
| Total OcCB | 0.00% |
| Total PeCB | 42.88% |
| Total TeCB | 41.65% |
| Total TrCB | 83.01% |

RPD: relative percent difference

^a Excludes RPDs that were not calculable because of non-detect values.

This page is purposely left blank