

**- RETENTION TIME WINDOW STUDY -**

**Instrument ID:** ECD\_L **Analytical Method:** EPA SW-846 8081

**Analysis Date:** 4/26/2021 5:09:00 PM 4/27/2021 11:58:00 AM 4/28/2021 11:06:00 AM

**Datafile:** PL066470.D PL066498.D PL066520.D

| Parameter               | RT1   | RT2   | RT3   | AVG   | Stand Dev | Window (Low Limit) | Window (High Limit) |
|-------------------------|-------|-------|-------|-------|-----------|--------------------|---------------------|
| <b>RT Window Col.#1</b> |       |       |       |       |           |                    |                     |
| 4,4-DDD                 | 6.080 | 6.090 | 6.100 | 6.089 | 0.0055    | 6.059              | 6.119               |
| 4,4-DDE                 | 5.570 | 5.570 | 5.580 | 5.576 | 0.0049    | 5.546              | 5.606               |
| 4,4-DDT                 | 6.320 | 6.320 | 6.340 | 6.328 | 0.0058    | 6.298              | 6.358               |
| Aldrin                  | 4.680 | 4.680 | 4.690 | 4.686 | 0.0040    | 4.656              | 4.716               |
| alpha-BHC               | 3.860 | 3.860 | 3.870 | 3.864 | 0.0035    | 3.834              | 3.894               |
| alpha-Chlordane         | 5.410 | 5.410 | 5.410 | 5.409 | 0.0046    | 5.379              | 5.439               |
| beta-BHC                | 4.390 | 4.390 | 4.400 | 4.393 | 0.0029    | 4.363              | 4.423               |
| Decachlorobiphenyl      | 8.160 | 8.160 | 8.170 | 8.165 | 0.0072    | 8.135              | 8.195               |
| delta-BHC               | 4.590 | 4.590 | 4.600 | 4.593 | 0.0035    | 4.563              | 4.623               |
| Dieldrin                | 5.700 | 5.700 | 5.710 | 5.702 | 0.0046    | 5.672              | 5.732               |
| Endosulfan I            | 5.460 | 5.460 | 5.460 | 5.460 | 0.0046    | 5.430              | 5.490               |
| Endosulfan II           | 6.220 | 6.220 | 6.230 | 6.227 | 0.0052    | 6.197              | 6.257               |
| Endosulfan Sulfate      | 6.600 | 6.600 | 6.620 | 6.608 | 0.0058    | 6.578              | 6.638               |
| Endrin                  | 5.950 | 5.950 | 5.960 | 5.955 | 0.0052    | 5.925              | 5.985               |
| Endrin aldehyde         | 6.390 | 6.390 | 6.400 | 6.396 | 0.0055    | 6.366              | 6.426               |
| Endrin ketone           | 7.090 | 7.090 | 7.100 | 7.094 | 0.0058    | 7.064              | 7.124               |
| gamma-BHC (Lindane)     | 4.140 | 4.140 | 4.150 | 4.144 | 0.0035    | 4.114              | 4.174               |
| gamma-Chlordane         | 5.350 | 5.350 | 5.360 | 5.351 | 0.0040    | 5.321              | 5.381               |
| Heptachlor              | 4.440 | 4.440 | 4.450 | 4.442 | 0.0035    | 4.412              | 4.472               |
| Heptachlor epoxide      | 5.120 | 5.120 | 5.130 | 5.125 | 0.0040    | 5.095              | 5.155               |
| Methoxychlor            | 6.870 | 6.870 | 6.890 | 6.878 | 0.0072    | 6.848              | 6.908               |
| Mirex                   | 7.280 | 7.280 | 7.290 | 7.281 | 0.0058    | 7.251              | 7.311               |
| Tetrachloro-m-xylene    | 3.430 | 3.430 | 3.430 | 3.431 | 0.0029    | 3.401              | 3.461               |

**RT Window Col.#2**

|                    |       |       |       |       |        |       |       |
|--------------------|-------|-------|-------|-------|--------|-------|-------|
| 4,4-DDD            | 7.040 | 7.040 | 7.040 | 7.039 | 0.0010 | 7.009 | 7.069 |
| 4,4-DDE            | 6.540 | 6.540 | 6.540 | 6.540 | 0.0012 | 6.510 | 6.570 |
| 4,4-DDT            | 7.340 | 7.340 | 7.340 | 7.341 | 0.0012 | 7.311 | 7.371 |
| Aldrin             | 5.680 | 5.680 | 5.680 | 5.679 | 0.0000 | 5.649 | 5.709 |
| alpha-BHC          | 4.560 | 4.560 | 4.560 | 4.558 | 0.0006 | 4.528 | 4.588 |
| alpha-Chlordane    | 6.380 | 6.380 | 6.380 | 6.384 | 0.0010 | 6.354 | 6.414 |
| beta-BHC           | 5.030 | 5.030 | 5.030 | 5.028 | 0.0006 | 4.998 | 5.058 |
| Decachlorobiphenyl | 9.350 | 9.350 | 9.360 | 9.353 | 0.0015 | 9.323 | 9.383 |
| delta-BHC          | 5.250 | 5.250 | 5.250 | 5.251 | 0      | 5.221 | 5.281 |
| Dieldrin           | 6.700 | 6.700 | 6.700 | 6.700 | 0.0010 | 6.670 | 6.730 |
| Endosulfan I       | 6.440 | 6.440 | 6.440 | 6.439 | 0.0010 | 6.409 | 6.469 |
| Endosulfan II      | 7.140 | 7.140 | 7.140 | 7.136 | 0.0015 | 7.106 | 7.166 |
| Endosulfan Sulfate | 7.490 | 7.480 | 7.490 | 7.486 | 0.0015 | 7.456 | 7.516 |
| Endrin             | 6.920 | 6.920 | 6.920 | 6.923 | 0.0012 | 6.893 | 6.953 |
| Endrin aldehyde    | 7.260 | 7.260 | 7.260 | 7.262 | 0.0015 | 7.232 | 7.292 |
| Endrin ketone      | 7.970 | 7.970 | 7.970 | 7.967 | 0.0015 | 7.937 | 7.997 |

| Parameter            | RT1   | RT2   | RT3   | AVG   | Stand<br>Dev | Window<br>(Low Limit) | Window<br>(High Limit) |
|----------------------|-------|-------|-------|-------|--------------|-----------------------|------------------------|
| gamma-BHC (Lindane)  | 4.850 | 4.850 | 4.850 | 4.851 | 0.0006       | 4.821                 | 4.881                  |
| gamma-Chlordane      | 6.310 | 6.310 | 6.310 | 6.311 | 0.0010       | 6.281                 | 6.341                  |
| Heptachlor           | 5.370 | 5.370 | 5.370 | 5.368 | 0.0006       | 5.338                 | 5.398                  |
| Heptachlor epoxide   | 6.070 | 6.070 | 6.080 | 6.074 | 0.0015       | 6.044                 | 6.104                  |
| Methoxychlor         | 7.800 | 7.800 | 7.800 | 7.800 | 0.0015       | 7.770                 | 7.830                  |
| Mirex                | 8.420 | 8.420 | 8.420 | 8.423 | 0.0012       | 8.393                 | 8.453                  |
| Tetrachloro-m-xylene | 4.150 | 4.150 | 4.150 | 4.154 | 0            | 4.124                 | 4.184                  |