



September 12, 2019

Pall Corp.  
600 S. Wagner  
Bldg. 4  
Ann Arbor, MI 48103  
Subject: Clean Water Act Analysis 40CFR122 Influent & Effluent  
PO#4503828117

Dear Ms. Peters :

Thank you for making Brighton Analytical, L.L.C. your laboratory of choice. Attached are the results for the samples submitted on 09/04/2019 for the above mentioned project. NELAP/TNI Accredited Analysis and MDEQ Drinking Water Certified Analysis will be identified in their respective reporting formats. Hard copies can be supplied at your request for a fee of \$20.00 per copy.

Enclosed is the invoice, summary, laboratory results of the samples, COC and 14 pages of quality control. Results only relate to samples submitted for the tests requested and should not be reproduced, except in full, unless authorized by the laboratory.

If you have any questions concerning the invoice or the data, please don't hesitate to contact our office. We welcome your comments and suggestions to improve our quality systems. Please reference Brighton Analytical, L.L.C. project ID **60842** when calling with any questions regarding this project.

Sincerely,

A handwritten signature in blue ink, appearing to read 'W. Topolski', is written over a horizontal line.

William Topolski  
Lab Manager  
Brighton Analytical, L.L.C.

**REPORT TO**

Pall Corp.  
 600 S. Wagner  
 Bldg. 4  
 Ann Arbor, MI 48103

Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl.  
 Project Number: PO#4503828117  
 Sample ID: Red Pond Ground Water  
 Report Date : 9/12/2019  
 BA Project # **60842**  
 Date/Time Sampled: 9/4/2019 09:07  
 Date/Time Submitted: 9/4/2019 15:50

| Analyte Name | Result | Units | RL | Method Reference | Analyst | Analysis Date | Analysis Time |
|--------------|--------|-------|----|------------------|---------|---------------|---------------|
|--------------|--------|-------|----|------------------|---------|---------------|---------------|

BA Sample ID **CK09478**

**Total Metal Analysis**

|                            |              |      |     |                  |    |            |       |
|----------------------------|--------------|------|-----|------------------|----|------------|-------|
| Total Aluminum             | Not detected | ug/L | 50  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:05 |
| Total Antimony             | 6            | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:05 |
| Total Arsenic              | 2            | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:05 |
| Total Barium               | 270          | ug/L | 5   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:05 |
| Total Beryllium            | Not detected | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:05 |
| Total Boron                | 20           | ug/L | 20  | EPA 200.7        | LT | 09/10/2019 | 12:55 |
| Total Cadmium              | Not detected | ug/L | 0.2 | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:05 |
| Total Chromium             | Not detected | ug/L | 5   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:05 |
| Total Cobalt               | Not detected | ug/L | 10  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:05 |
| Total Copper               | Not detected | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:05 |
| Total Iron                 | 3800         | ug/L | 20  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:05 |
| Total Lead                 | Not detected | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:05 |
| Total Magnesium            | 37000        | ug/L | 100 | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:05 |
| Total Manganese            | 90           | ug/L | 20  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:05 |
| Total Mercury              | Not detected | ug/L | 0.2 | EPA 245.1        | LS | 09/09/2019 | 12:56 |
| Total Nickel               | Not detected | ug/L | 5   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:05 |
| Total Selenium             | Not detected | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:05 |
| Total Silver               | Not detected | ug/L | 0.2 | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:05 |
| Total Thallium             | Not detected | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:05 |
| Total Zinc                 | 20           | ug/L | 10  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:05 |
| Mercury (digestion)        | Digested     |      |     | 7470/7471        | LS | 09/09/2019 | 07:30 |
| Metal Water Total (digest) | Digested     |      |     | 3015             | EB | 09/06/2019 | 11:00 |

**Inorganic Analysis**

|                   |              |      |   |          |    |            |       |
|-------------------|--------------|------|---|----------|----|------------|-------|
| Available Cyanide | Not detected | ug/L | 2 | OIA-1677 | RM | 09/10/2019 | 11:45 |
|-------------------|--------------|------|---|----------|----|------------|-------|

**Organic Analysis**

|                |              |      |    |           |    |            |       |
|----------------|--------------|------|----|-----------|----|------------|-------|
| Phenol (4-AAP) | Not detected | ug/L | 10 | EPA 420.1 | RM | 09/06/2019 | 15:51 |
|----------------|--------------|------|----|-----------|----|------------|-------|

**PCB/Pesticide Analysis**

|          |              |      |      |               |    |            |       |
|----------|--------------|------|------|---------------|----|------------|-------|
| a-BHC    | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| Aldrin   | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| ARO 1221 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| ARO 1016 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| ARO 1232 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| ARO 1242 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| ARO 1248 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| ARO 1254 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |

| REPORT TO           |        |       |    | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |         |               |               |
|---------------------|--------|-------|----|------------------------------------------------------------|---------|---------------|---------------|
| Pall Corp.          |        |       |    | Project Number: PO#4503828117                              |         |               |               |
| 600 S. Wagner       |        |       |    | Sample ID: Red Pond Ground Water                           |         |               |               |
| Bldg. 4             |        |       |    | Report Date : 9/12/2019                                    |         |               |               |
| Ann Arbor, MI 48103 |        |       |    | BA Project # 60842                                         |         |               |               |
|                     |        |       |    | Date/Time Sampled: 9/4/2019 09:07                          |         |               |               |
|                     |        |       |    | Date/Time Submitted: 9/4/2019 15:50                        |         |               |               |
| Analyte Name        | Result | Units | RL | Method Reference                                           | Analyst | Analysis Date | Analysis Time |

BA Sample ID **CK09478**

#### PCB/Pesticide Analysis

|                                   |              |      |      |               |    |            |       |
|-----------------------------------|--------------|------|------|---------------|----|------------|-------|
| ARO 1260                          | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| b-BHC                             | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| Chlordane(Technical)              | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| d-BHC                             | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| 4,4-DDD                           | Not detected | ug/L | 0.02 | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| 4,4-DDE                           | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| 4,4-DDT                           | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| Dieldrin                          | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| Endosulfan I                      | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| Endosulfan II                     | Not detected | ug/L | 0.03 | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| Endosulfan sulfate                | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| Endrin                            | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| Endrin aldehyde                   | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| g-BHC(Lindane)                    | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| Heptachlor                        | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| Heptachlor epoxide                | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| Total PCB                         | Not detected | ug/L | 0.2  | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| Toxaphene                         | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 23:20 |
| PCB/Pesticide liquid (extraction) | Extracted    |      |      | 3510C/3545    | MB | 09/05/2019 | 12:00 |

#### PCB/Pesticide Surrogate Recovery

|                         |     |   |  |           |    |            |       |
|-------------------------|-----|---|--|-----------|----|------------|-------|
| Decachlorobiphenyl(DCB) | 106 | % |  | 8081/8082 | BY | 09/09/2019 | 23:20 |
|-------------------------|-----|---|--|-----------|----|------------|-------|

#### Chlorinated Hydrocarbon Analysis

|                                    |              |      |      |            |    |            |       |
|------------------------------------|--------------|------|------|------------|----|------------|-------|
| Hexachlorobenzene                  | Not detected | ug/L | 0.01 | EPA 612    | BY | 09/06/2019 | 16:26 |
| Hexachlorobutadiene                | Not detected | ug/L | 0.01 | EPA 612    | BY | 09/06/2019 | 16:26 |
| Hexachlorocyclopentadiene          | Not detected | ug/L | 0.01 | EPA 612    | BY | 09/06/2019 | 16:26 |
| Chlorinated Hydrocarbons 612 (ext) | Extracted    |      |      | 3510C/3545 | MB | 09/05/2019 | 14:00 |

#### Chlorinated Hydrocarbon Surrogate Recovery

|                         |    |   |  |          |    |            |       |
|-------------------------|----|---|--|----------|----|------------|-------|
| Decachlorobiphenyl(DCB) | 70 | % |  | 612/8121 | BY | 09/06/2019 | 16:26 |
|-------------------------|----|---|--|----------|----|------------|-------|

#### Benzidines Analysis

|                         |              |      |     |            |    |            |       |
|-------------------------|--------------|------|-----|------------|----|------------|-------|
| Benzidine               | Not detected | ug/L | 0.1 | EPA 605    | BY | 09/12/2019 | 11:52 |
| 3,3-Dichlorobenzidine   | Not detected | ug/L | 1.5 | EPA 605    | BY | 09/12/2019 | 11:52 |
| 605 liquid (extraction) | Extracted    |      |     | 3510C/3545 | MB | 09/09/2019 | 15:00 |

#### Semi-Volatile Analysis

| REPORT TO                                                     |        |       |    | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |         |               |               |
|---------------------------------------------------------------|--------|-------|----|------------------------------------------------------------|---------|---------------|---------------|
| Pall Corp.<br>600 S. Wagner<br>Bldg. 4<br>Ann Arbor, MI 48103 |        |       |    | Project Number: PO#4503828117                              |         |               |               |
|                                                               |        |       |    | Sample ID: Red Pond Ground Water                           |         |               |               |
|                                                               |        |       |    | Report Date : 9/12/2019                                    |         |               |               |
|                                                               |        |       |    | BA Project # 60842                                         |         |               |               |
|                                                               |        |       |    | Date/Time Sampled: 9/4/2019 09:07                          |         |               |               |
|                                                               |        |       |    | Date/Time Submitted: 9/4/2019 15:50                        |         |               |               |
| Analyte Name                                                  | Result | Units | RL | Method Reference                                           | Analyst | Analysis Date | Analysis Time |

BA Sample ID **CK09478**

**Semi-Volatile Analysis**

|                                     |              |      |     |               |    |            |       |
|-------------------------------------|--------------|------|-----|---------------|----|------------|-------|
| Acenaphthene                        | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Acenaphthylene                      | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Anthracene                          | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Benzo(a)anthracene                  | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Benzo(a)pyrene                      | Not detected | ug/L | 0.2 | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Benzo(b)fluoranthene                | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Benzo(ghi)perylene                  | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Benzo(k)fluoranthene                | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Bis(2-chloroethoxy)methane          | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Bis(2-chloroethyl)ether             | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Bis(2-chloroisopropyl)ether         | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Bis(2-ethylhexyl)phthalate          | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| 4-Bromophenyl phenyl ether          | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Butyl benzyl phthalate              | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| 2-Chloronaphthalene                 | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| 2-Chlorophenol                      | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| 4-Chlorophenyl phenyl ether         | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Chrysene                            | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Dibenzo(a,h)anthracene              | Not detected | ug/L | 2   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| 1,3-Dichlorobenzene                 | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| 1,4-Dichlorobenzene                 | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| 1,2-Dichlorobenzene                 | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| 2,4-Dichlorophenol                  | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Diethyl phthalate                   | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Dimethylformamide                   | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| 2,4-Dimethylphenol                  | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Dimethylphthalate                   | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Di-n-butyl phthalate                | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| 4,6-dinitro-o-cresol(2-methyl-4,6-d | Not detected | ug/L | 20  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| 2,4-Dinitrophenol                   | Not detected | ug/L | 19  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| 2,4-Dinitrotoluene                  | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| 2,6-Dinitrotoluene                  | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Di-n-octyl phthalate                | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| 1,2-Diphenylhydrazine               | Not detected | ug/L | 3   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Fluoranthene                        | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Fluorene                            | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Hexachloroethane                    | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Indeno(1,2,3-cd) pyrene             | Not detected | ug/L | 2   | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |

| REPORT TO                                                     |        |       |    | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |         |               |               |
|---------------------------------------------------------------|--------|-------|----|------------------------------------------------------------|---------|---------------|---------------|
| Pall Corp.<br>600 S. Wagner<br>Bldg. 4<br>Ann Arbor, MI 48103 |        |       |    | Project Number: PO#4503828117                              |         |               |               |
|                                                               |        |       |    | Sample ID: Red Pond Ground Water                           |         |               |               |
|                                                               |        |       |    | Report Date : 9/12/2019                                    |         |               |               |
|                                                               |        |       |    | BA Project # 60842                                         |         |               |               |
|                                                               |        |       |    | Date/Time Sampled: 9/4/2019 09:07                          |         |               |               |
|                                                               |        |       |    | Date/Time Submitted: 9/4/2019 15:50                        |         |               |               |
| Analyte Name                                                  | Result | Units | RL | Method Reference                                           | Analyst | Analysis Date | Analysis Time |

BA Sample ID **CK09478**

**Semi-Volatile Analysis**

|                                     |              |      |    |               |    |            |       |
|-------------------------------------|--------------|------|----|---------------|----|------------|-------|
| Isophorone                          | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Naphthalene                         | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Nitrobenzene                        | Not detected | ug/L | 2  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| 4-Nitrophenol                       | Not detected | ug/L | 20 | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| 2-Nitrophenol                       | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| N-nitrosodimethylamine              | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| N-nitrosodi-n-propylamine           | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| N-nitrosodiphenylamine              | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Parachlorometa cresol(4-chloro-3met | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Phenanthrene                        | Not detected | ug/L | 1  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Phenol                              | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Pyrene                              | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| 1,2,4-Trichlorobenzene              | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| 2,4,6-Trichlorophenol               | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |

**TIC Semi-Volatile Analysis**

|                                      |         |  |  |               |    |            |       |
|--------------------------------------|---------|--|--|---------------|----|------------|-------|
| 2-Bromo-5-fluorophenol               | present |  |  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Dodecanoic acid                      | present |  |  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Ethane,(chloromethoxy)-              | present |  |  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| 1H-Indole, 1-methyl-                 | present |  |  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Mannosamine                          | present |  |  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Nonanal                              | present |  |  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| 2-Propanol, 1-butyoxy-               | present |  |  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| 2,4,7,9-Tetramethyl-5-decyn-4,7-diol | present |  |  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| Triquinacene                         | present |  |  | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |

**Pentachlorophenol - SIM**

|                         |              |      |     |               |    |            |       |
|-------------------------|--------------|------|-----|---------------|----|------------|-------|
| Pentachlorophenol - SIM | Not detected | ug/L | 1.8 | EPA 625/625.1 | RG | 09/10/2019 | 22:54 |
| BNA liquid (extraction) | Extracted    |      |     | 3510C/3545    | MB | 09/09/2019 | 10:00 |

**Semi-Volatile Surrogate Recovery**

|                      |     |   |  |          |    |            |       |
|----------------------|-----|---|--|----------|----|------------|-------|
| d5-Nitrobenzene      | 84  | % |  | 8270/625 | RG | 09/10/2019 | 22:54 |
| d5-Phenol            | 14* | % |  | 8270/625 | RG | 09/10/2019 | 22:54 |
| d14-Terphenyl        | 99  | % |  | 8270/625 | RG | 09/10/2019 | 22:54 |
| 2-Fluorobiphenyl     | 92  | % |  | 8270/625 | RG | 09/10/2019 | 22:54 |
| 2-Fluorophenol       | 19* | % |  | 8270/625 | RG | 09/10/2019 | 22:54 |
| 2,4,6-Tribromophenol | 78  | % |  | 8270/625 | RG | 09/10/2019 | 22:54 |

| REPORT TO                                                     |        |       |    | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |         |               |               |
|---------------------------------------------------------------|--------|-------|----|------------------------------------------------------------|---------|---------------|---------------|
| Pall Corp.<br>600 S. Wagner<br>Bldg. 4<br>Ann Arbor, MI 48103 |        |       |    | Project Number: PO#4503828117                              |         |               |               |
|                                                               |        |       |    | Sample ID: Red Pond Ground Water                           |         |               |               |
|                                                               |        |       |    | Report Date : 9/12/2019                                    |         |               |               |
|                                                               |        |       |    | BA Project # 60842                                         |         |               |               |
|                                                               |        |       |    | Date/Time Sampled: 9/4/2019 09:07                          |         |               |               |
|                                                               |        |       |    | Date/Time Submitted: 9/4/2019 15:50                        |         |               |               |
| Analyte Name                                                  | Result | Units | RL | Method Reference                                           | Analyst | Analysis Date | Analysis Time |

BA Sample ID **CK09478**

**Volatile Analysis**

|                                |              |      |    |               |    |            |       |
|--------------------------------|--------------|------|----|---------------|----|------------|-------|
| Acrolein                       | Not detected | ug/L | 5  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| Acrylonitrile                  | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| Benzene                        | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| Bromoform                      | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| Carbon tetrachloride           | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| Chlorobenzene                  | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| Chlorodibromomethane           | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| Chloroethane                   | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| 2-Chloroethyl vinyl ether      | Not detected | ug/L | 10 | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| Chloroform                     | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| Dichlorobromomethane           | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| 1,2-Dichloroethane             | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| 1,1-Dichloroethane             | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| 1,1-Dichloroethene             | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| 1,2-Dichloropropane            | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| 1,3-Dichloropropene            | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| Ethyl benzene                  | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| Methyl bromide(Bromomethane)   | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| Methyl chloride(Chloromethane) | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| Methylene chloride             | Not detected | ug/L | 5  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| 1,1,2,2-Tetrachloroethane      | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| Tetrachloroethene              | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| Toluene                        | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| trans-1,2-Dichloroethene       | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| 1,1,1-Trichloroethane          | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| 1,1,2-Trichloroethane          | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| Trichloroethene                | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
| Vinyl chloride                 | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |

**Volatile Surrogate Recovery**

|                       |     |   |  |          |    |            |       |
|-----------------------|-----|---|--|----------|----|------------|-------|
| 4-Bromofluorobenzene  | 110 | % |  | 8260/624 | CW | 09/10/2019 | 20:57 |
| d4-1,2 Dichloroethane | 101 | % |  | 8260/624 | CW | 09/10/2019 | 20:57 |
| d8-Toluene            | 100 | % |  | 8260/624 | CW | 09/10/2019 | 20:57 |

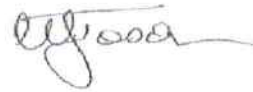
**TIC Volatile Analysis**

|             |         |      |  |               |    |            |       |
|-------------|---------|------|--|---------------|----|------------|-------|
| 1,4-Dioxane | present | ug/L |  | EPA 624/624.1 | CW | 09/10/2019 | 20:57 |
|-------------|---------|------|--|---------------|----|------------|-------|

| REPORT TO           |        | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |    |                  |         |               |               |  |
|---------------------|--------|------------------------------------------------------------|----|------------------|---------|---------------|---------------|--|
| Pall Corp.          |        | Project Number: PO#4503828117                              |    |                  |         |               |               |  |
| 600 S. Wagner       |        | Sample ID: Red Pond Ground Water                           |    |                  |         |               |               |  |
| Bldg. 4             |        | Report Date : 9/12/2019                                    |    |                  |         |               |               |  |
| Ann Arbor, MI 48103 |        | BA Project # 60842                                         |    |                  |         |               |               |  |
|                     |        | Date/Time Sampled: 9/4/2019 09:07                          |    |                  |         |               |               |  |
|                     |        | Date/Time Submitted: 9/4/2019 15:50                        |    |                  |         |               |               |  |
| Analyte Name        | Result | Units                                                      | RL | Method Reference | Analyst | Analysis Date | Analysis Time |  |

Not detected = Not found at a level above laboratory's reporting limit (RL).

\*Out of range due to sample matrix.

Released by:   
Lab Manager  
Date: 9/12/19

| REPORT TO                                                     |        |       | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |                  |         |               |               |
|---------------------------------------------------------------|--------|-------|------------------------------------------------------------|------------------|---------|---------------|---------------|
| Pall Corp.<br>600 S. Wagner<br>Bldg. 4<br>Ann Arbor, MI 48103 |        |       | Project Number: PO#4503828117                              |                  |         |               |               |
|                                                               |        |       | Sample ID: Red Pond Ground Water                           |                  |         |               |               |
|                                                               |        |       | Report Date : 9/12/2019                                    |                  |         |               |               |
|                                                               |        |       | BA Project # 60842                                         |                  |         |               |               |
|                                                               |        |       | Date/Time Sampled: 9/4/2019 09:07                          |                  |         |               |               |
|                                                               |        |       | Date/Time Submitted: 9/4/2019 15:50                        |                  |         |               |               |
| Analyte Name                                                  | Result | Units | RL                                                         | Method Reference | Analyst | Analysis Date | Analysis Time |

BA Sample ID **CK09479**

#### Total Metal Analysis

|                            |              |      |     |                  |    |            |       |
|----------------------------|--------------|------|-----|------------------|----|------------|-------|
| Total Aluminum             | Not detected | ug/L | 50  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:10 |
| Total Antimony             | 4            | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:10 |
| Total Arsenic              | 1            | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:10 |
| Total Barium               | 280          | ug/L | 5   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:10 |
| Total Beryllium            | Not detected | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:10 |
| Total Boron                | Not detected | ug/L | 20  | EPA 200.7        | LT | 09/10/2019 | 12:58 |
| Total Cadmium              | Not detected | ug/L | 0.2 | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:10 |
| Total Chromium             | Not detected | ug/L | 5   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:10 |
| Total Cobalt               | Not detected | ug/L | 10  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:10 |
| Total Copper               | Not detected | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:10 |
| Total Iron                 | 2100         | ug/L | 20  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:10 |
| Total Lead                 | Not detected | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:10 |
| Total Magnesium            | 37000        | ug/L | 100 | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:10 |
| Total Manganese            | 80           | ug/L | 20  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:10 |
| Total Mercury              | Not detected | ug/L | 0.2 | EPA 245.1        | LS | 09/09/2019 | 12:59 |
| Total Nickel               | Not detected | ug/L | 5   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:10 |
| Total Selenium             | Not detected | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:10 |
| Total Silver               | Not detected | ug/L | 0.2 | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:10 |
| Total Thallium             | Not detected | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:10 |
| Total Zinc                 | Not detected | ug/L | 10  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:10 |
| Mercury (digestion)        | Digested     |      |     | 7470/7471        | LS | 09/09/2019 | 07:30 |
| Metal Water Total (digest) | Digested     |      |     | 3015             | EB | 09/06/2019 | 11:00 |

#### Inorganic Analysis

|                   |              |      |   |          |    |            |       |
|-------------------|--------------|------|---|----------|----|------------|-------|
| Available Cyanide | Not detected | ug/L | 2 | OIA-1677 | RM | 09/10/2019 | 11:45 |
|-------------------|--------------|------|---|----------|----|------------|-------|

#### Organic Analysis

|                |              |      |    |           |    |            |       |
|----------------|--------------|------|----|-----------|----|------------|-------|
| Phenol (4-AAP) | Not detected | ug/L | 10 | EPA 420.1 | RM | 09/06/2019 | 15:51 |
|----------------|--------------|------|----|-----------|----|------------|-------|

#### PCB/Pesticide Analysis

|          |              |      |      |               |    |            |       |
|----------|--------------|------|------|---------------|----|------------|-------|
| a-BHC    | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| Aldrin   | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| ARO 1016 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| ARO 1260 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| ARO 1221 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| ARO 1232 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| ARO 1242 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| ARO 1248 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |

| REPORT TO                                                     |        |       |    | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |         |               |               |
|---------------------------------------------------------------|--------|-------|----|------------------------------------------------------------|---------|---------------|---------------|
| Pall Corp.<br>600 S. Wagner<br>Bldg. 4<br>Ann Arbor, MI 48103 |        |       |    | Project Number: PO#4503828117                              |         |               |               |
|                                                               |        |       |    | Sample ID: Red Pond Ground Water                           |         |               |               |
|                                                               |        |       |    | Report Date : 9/12/2019                                    |         |               |               |
|                                                               |        |       |    | BA Project # 60842                                         |         |               |               |
|                                                               |        |       |    | Date/Time Sampled: 9/4/2019 09:07                          |         |               |               |
|                                                               |        |       |    | Date/Time Submitted: 9/4/2019 15:50                        |         |               |               |
| Analyte Name                                                  | Result | Units | RL | Method Reference                                           | Analyst | Analysis Date | Analysis Time |

BA Sample ID **CK09479**

**PCB/Pesticide Analysis**

|                                   |              |      |      |               |    |            |       |
|-----------------------------------|--------------|------|------|---------------|----|------------|-------|
| ARO 1254                          | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| b-BHC                             | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| Chlordane(Technical)              | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| d-BHC                             | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| 4,4-DDD                           | Not detected | ug/L | 0.02 | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| 4,4-DDE                           | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| 4,4-DDT                           | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| Dieldrin                          | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| Endosulfan I                      | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| Endosulfan II                     | Not detected | ug/L | 0.03 | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| Endosulfan sulfate                | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| Endrin                            | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| Endrin aldehyde                   | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| g-BHC(Lindane)                    | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| Heptachlor                        | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| Heptachlor epoxide                | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| Total PCB                         | Not detected | ug/L | 0.2  | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| Toxaphene                         | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 23:44 |
| PCB/Pesticide liquid (extraction) | Extracted    |      |      | 3510C/3545    | MB | 09/05/2019 | 12:00 |

**PCB/Pesticide Surrogate Recovery**

|                         |    |   |  |           |    |            |       |
|-------------------------|----|---|--|-----------|----|------------|-------|
| Decachlorobiphenyl(DCB) | 83 | % |  | 8081/8082 | BY | 09/09/2019 | 23:44 |
|-------------------------|----|---|--|-----------|----|------------|-------|

**Chlorinated Hydrocarbon Analysis**

|                                    |              |      |      |            |    |            |       |
|------------------------------------|--------------|------|------|------------|----|------------|-------|
| Hexachlorobenzene                  | Not detected | ug/L | 0.01 | EPA 612    | BY | 09/06/2019 | 16:50 |
| Hexachlorobutadiene                | Not detected | ug/L | 0.01 | EPA 612    | BY | 09/06/2019 | 16:50 |
| Hexachlorocyclopentadiene          | Not detected | ug/L | 0.01 | EPA 612    | BY | 09/06/2019 | 16:50 |
| Chlorinated Hydrocarbons 612 (ext) | Extracted    |      |      | 3510C/3545 | MB | 09/05/2019 | 14:00 |

**Chlorinated Hydrocarbon Surrogate Recovery**

|                         |    |   |  |          |    |            |       |
|-------------------------|----|---|--|----------|----|------------|-------|
| Decachlorobiphenyl(DCB) | 64 | % |  | 612/8121 | BY | 09/06/2019 | 16:50 |
|-------------------------|----|---|--|----------|----|------------|-------|

**Benzidines Analysis**

|                         |              |      |     |            |    |            |       |
|-------------------------|--------------|------|-----|------------|----|------------|-------|
| Benzidine               | Not detected | ug/L | 0.1 | EPA 605    | BY | 09/12/2019 | 12:10 |
| 3,3-Dichlorobenzidine   | Not detected | ug/L | 1.5 | EPA 605    | BY | 09/12/2019 | 12:10 |
| 605 liquid (extraction) | Extracted    |      |     | 3510C/3545 | MB | 09/09/2019 | 15:00 |

**Semi-Volatile Analysis**

| REPORT TO           |        |       | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |                  |         |               |               |
|---------------------|--------|-------|------------------------------------------------------------|------------------|---------|---------------|---------------|
| Pall Corp.          |        |       | Project Number: PO#4503828117                              |                  |         |               |               |
| 600 S. Wagner       |        |       | Sample ID: Red Pond Ground Water                           |                  |         |               |               |
| Bldg. 4             |        |       | Report Date : 9/12/2019                                    |                  |         |               |               |
| Ann Arbor, MI 48103 |        |       | BA Project # 60842                                         |                  |         |               |               |
|                     |        |       | Date/Time Sampled: 9/4/2019 09:07                          |                  |         |               |               |
|                     |        |       | Date/Time Submitted: 9/4/2019 15:50                        |                  |         |               |               |
| Analyte Name        | Result | Units | RL                                                         | Method Reference | Analyst | Analysis Date | Analysis Time |

BA Sample ID **CK09479**

**Semi-Volatile Analysis**

|                                     |              |      |     |               |    |            |       |
|-------------------------------------|--------------|------|-----|---------------|----|------------|-------|
| Acenaphthene                        | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Acenaphthylene                      | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Anthracene                          | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Benzo(a)anthracene                  | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Benzo(a)pyrene                      | Not detected | ug/L | 0.2 | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Benzo(b)fluoranthene                | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Benzo(ghi)perylene                  | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Benzo(k)fluoranthene                | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Bis(2-chloroethoxy)methane          | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Bis(2-chloroethyl)ether             | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Bis(2-chloroisopropyl)ether         | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Bis(2-ethylhexyl)phthalate          | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 4-Bromophenyl phenyl ether          | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Butyl benzyl phthalate              | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 2-Chloronaphthalene                 | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 2-Chlorophenol                      | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 4-Chlorophenyl phenyl ether         | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Chrysene                            | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Dibenzo(a,h)anthracene              | Not detected | ug/L | 2   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 1,4-Dichlorobenzene                 | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 1,3-Dichlorobenzene                 | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 1,2-Dichlorobenzene                 | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 2,4-Dichlorophenol                  | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Diethyl phthalate                   | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Dimethylformamide                   | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 2,4-Dimethylphenol                  | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Dimethylphthalate                   | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Di-n-butyl phthalate                | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 4,6-dinitro-o-cresol(2-methyl-4,6-d | Not detected | ug/L | 20  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 2,4-Dinitrophenol                   | Not detected | ug/L | 19  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 2,4-Dinitrotoluene                  | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 2,6-Dinitrotoluene                  | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Di-n-octyl phthalate                | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 1,2-Diphenylhydrazine               | Not detected | ug/L | 3   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Fluoranthene                        | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Fluorene                            | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Hexachloroethane                    | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Indeno(1,2,3-cd) pyrene             | Not detected | ug/L | 2   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |

|                     |        |       |                                                            |                  |         |               |               |
|---------------------|--------|-------|------------------------------------------------------------|------------------|---------|---------------|---------------|
| REPORT TO           |        |       | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |                  |         |               |               |
| Pall Corp.          |        |       | Project Number: PO#4503828117                              |                  |         |               |               |
| 600 S. Wagner       |        |       | Sample ID: Red Pond Ground Water                           |                  |         |               |               |
| Bldg. 4             |        |       | Report Date : 9/12/2019                                    |                  |         |               |               |
| Ann Arbor, MI 48103 |        |       | BA Project # 60842                                         |                  |         |               |               |
|                     |        |       | Date/Time Sampled: 9/4/2019 09:07                          |                  |         |               |               |
|                     |        |       | Date/Time Submitted: 9/4/2019 15:50                        |                  |         |               |               |
| Analyte Name        | Result | Units | RL                                                         | Method Reference | Analyst | Analysis Date | Analysis Time |

BA Sample ID **CK09479**

**Semi-Volatile Analysis**

|                                     |              |      |    |               |    |            |       |
|-------------------------------------|--------------|------|----|---------------|----|------------|-------|
| Isophorone                          | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Naphthalene                         | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Nitrobenzene                        | Not detected | ug/L | 2  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 2-Nitrophenol                       | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 4-Nitrophenol                       | Not detected | ug/L | 20 | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| N-nitrosodimethylamine              | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| N-nitrosodi-n-propylamine           | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| N-nitrosodiphenylamine              | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Parachlorometa cresol(4-chloro-3met | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Phenanthrene                        | Not detected | ug/L | 1  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Phenol                              | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Pyrene                              | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 1,2,4-Trichlorobenzene              | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 2,4,6-Trichlorophenol               | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |

**Pentachlorophenol - SIM**

|                         |              |      |     |               |    |            |       |
|-------------------------|--------------|------|-----|---------------|----|------------|-------|
| Pentachlorophenol - SIM | Not detected | ug/L | 1.8 | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| BNA liquid (extraction) | Extracted    |      |     | 3510C/3545    | MB | 09/09/2019 | 10:00 |

**Semi-Volatile Surrogate Recovery**

|                      |     |   |  |          |    |            |       |
|----------------------|-----|---|--|----------|----|------------|-------|
| d5-Nitrobenzene      | 100 | % |  | 8270/625 | RG | 09/10/2019 | 23:33 |
| d5-Phenol            | 18* | % |  | 8270/625 | RG | 09/10/2019 | 23:33 |
| d14-Terphenyl        | 123 | % |  | 8270/625 | RG | 09/10/2019 | 23:33 |
| 2-Fluorobiphenyl     | 110 | % |  | 8270/625 | RG | 09/10/2019 | 23:33 |
| 2-Fluorophenol       | 28* | % |  | 8270/625 | RG | 09/10/2019 | 23:33 |
| 2,4,6-Tribromophenol | 126 | % |  | 8270/625 | RG | 09/10/2019 | 23:33 |

**Volatile Analysis**

|                           |              |      |    |               |    |            |       |
|---------------------------|--------------|------|----|---------------|----|------------|-------|
| Acrolein                  | Not detected | ug/L | 5  | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| Acrylonitrile             | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| Benzene                   | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| Bromoform                 | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| Carbon tetrachloride      | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| Chlorobenzene             | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| Chlorodibromomethane      | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| Chloroethane              | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| 2-Chloroethyl vinyl ether | Not detected | ug/L | 10 | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| Chloroform                | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |

| REPORT TO                                                     |        |       |    | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |         |               |               |
|---------------------------------------------------------------|--------|-------|----|------------------------------------------------------------|---------|---------------|---------------|
| Pall Corp.<br>600 S. Wagner<br>Bldg. 4<br>Ann Arbor, MI 48103 |        |       |    | Project Number: PO#4503828117                              |         |               |               |
|                                                               |        |       |    | Sample ID: Red Pond Ground Water                           |         |               |               |
|                                                               |        |       |    | Report Date : 9/12/2019                                    |         |               |               |
|                                                               |        |       |    | BA Project # 60842                                         |         |               |               |
|                                                               |        |       |    | Date/Time Sampled: 9/4/2019 09:07                          |         |               |               |
|                                                               |        |       |    | Date/Time Submitted: 9/4/2019 15:50                        |         |               |               |
| Analyte Name                                                  | Result | Units | RL | Method Reference                                           | Analyst | Analysis Date | Analysis Time |

BA Sample ID **CK09479**

**Volatile Analysis**

|                                |              |      |   |               |    |            |       |
|--------------------------------|--------------|------|---|---------------|----|------------|-------|
| Dichlorobromomethane           | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| 1,1-Dichloroethane             | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| 1,2-Dichloroethane             | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| 1,1-Dichloroethene             | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| 1,2-Dichloropropane            | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| 1,3-Dichloropropene            | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| Ethyl benzene                  | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| Methyl bromide(Bromomethane)   | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| Methyl chloride(Chloromethane) | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| Methylene chloride             | Not detected | ug/L | 5 | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| 1,1,2,2-Tetrachloroethane      | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| Tetrachloroethene              | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| Toluene                        | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| trans-1,2-Dichloroethene       | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| 1,1,1-Trichloroethane          | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| 1,1,2-Trichloroethane          | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| Trichloroethene                | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |
| Vinyl chloride                 | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:16 |

**Volatile Surrogate Recovery**

|                       |     |   |  |          |    |            |       |
|-----------------------|-----|---|--|----------|----|------------|-------|
| 4-Bromofluorobenzene  | 110 | % |  | 8260/624 | CW | 09/10/2019 | 21:16 |
| d4-1,2 Dichloroethane | 98  | % |  | 8260/624 | CW | 09/10/2019 | 21:16 |
| d8-Toluene            | 98  | % |  | 8260/624 | CW | 09/10/2019 | 21:16 |

Not detected = Not found at a level above laboratory's reporting limit (RL).

\*Out of range due to sample matrix.

Released by:

Lab Manager

Date:

9/12/19

| REPORT TO                                                     |        |       |    | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |         |               |               |
|---------------------------------------------------------------|--------|-------|----|------------------------------------------------------------|---------|---------------|---------------|
| Pall Corp.<br>600 S. Wagner<br>Bldg. 4<br>Ann Arbor, MI 48103 |        |       |    | Project Number: PO#4503828117                              |         |               |               |
|                                                               |        |       |    | Sample ID: Outfall 001 Treated                             |         |               |               |
|                                                               |        |       |    | Report Date : 9/12/2019                                    |         |               |               |
|                                                               |        |       |    | BA Project # 60842                                         |         |               |               |
|                                                               |        |       |    | Date/Time Sampled: 9/4/2019 10:00                          |         |               |               |
|                                                               |        |       |    | Date/Time Submitted: 9/4/2019 15:50                        |         |               |               |
| Analyte Name                                                  | Result | Units | RL | Method Reference                                           | Analyst | Analysis Date | Analysis Time |

BA Sample ID **CK09480**

**Total Metal Analysis**

|                            |              |      |     |                  |    |            |       |
|----------------------------|--------------|------|-----|------------------|----|------------|-------|
| Total Aluminum             | Not detected | ug/L | 50  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:14 |
| Total Antimony             | 3            | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:14 |
| Total Arsenic              | 1            | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:14 |
| Total Barium               | 300          | ug/L | 5   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:14 |
| Total Beryllium            | Not detected | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:14 |
| Total Boron                | Not detected | ug/L | 20  | EPA 200.7        | LT | 09/10/2019 | 13:00 |
| Total Cadmium              | Not detected | ug/L | 0.2 | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:14 |
| Total Chromium             | Not detected | ug/L | 5   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:14 |
| Total Cobalt               | Not detected | ug/L | 10  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:14 |
| Total Copper               | Not detected | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:14 |
| Total Iron                 | 2300         | ug/L | 20  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:14 |
| Total Lead                 | Not detected | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:14 |
| Total Magnesium            | 39000        | ug/L | 100 | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:14 |
| Total Manganese            | 80           | ug/L | 20  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:14 |
| Total Mercury              | Not detected | ug/L | 0.2 | EPA 245.1        | LS | 09/09/2019 | 13:02 |
| Total Nickel               | Not detected | ug/L | 5   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:14 |
| Total Selenium             | Not detected | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:14 |
| Total Silver               | Not detected | ug/L | 0.2 | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:14 |
| Total Thallium             | Not detected | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:14 |
| Total Zinc                 | Not detected | ug/L | 10  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:14 |
| Mercury (digestion)        | Digested     |      |     | 7470/7471        | LS | 09/09/2019 | 07:30 |
| Metal Water Total (digest) | Digested     |      |     | 3015             | EB | 09/06/2019 | 11:00 |

**Inorganic Analysis**

|                   |              |      |   |          |    |            |       |
|-------------------|--------------|------|---|----------|----|------------|-------|
| Available Cyanide | Not detected | ug/L | 2 | OIA-1677 | RM | 09/10/2019 | 11:45 |
|-------------------|--------------|------|---|----------|----|------------|-------|

**Organic Analysis**

|                |              |      |    |           |    |            |       |
|----------------|--------------|------|----|-----------|----|------------|-------|
| Phenol (4-AAP) | Not detected | ug/L | 10 | EPA 420.1 | RM | 09/06/2019 | 15:51 |
|----------------|--------------|------|----|-----------|----|------------|-------|

**PCB/Pesticide Analysis**

|          |              |      |      |               |    |            |       |
|----------|--------------|------|------|---------------|----|------------|-------|
| a-BHC    | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| Aldrin   | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| ARO 1221 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| ARO 1260 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| ARO 1254 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| ARO 1248 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| ARO 1232 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| ARO 1016 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |

| REPORT TO                                                     |        |       |    | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |         |               |               |
|---------------------------------------------------------------|--------|-------|----|------------------------------------------------------------|---------|---------------|---------------|
| Pall Corp.<br>600 S. Wagner<br>Bldg. 4<br>Ann Arbor, MI 48103 |        |       |    | Project Number: PO#4503828117                              |         |               |               |
|                                                               |        |       |    | Sample ID: Outfall 001 Treated                             |         |               |               |
|                                                               |        |       |    | Report Date : 9/12/2019                                    |         |               |               |
|                                                               |        |       |    | BA Project # 60842                                         |         |               |               |
|                                                               |        |       |    | Date/Time Sampled: 9/4/2019 10:00                          |         |               |               |
|                                                               |        |       |    | Date/Time Submitted: 9/4/2019 15:50                        |         |               |               |
| Analyte Name                                                  | Result | Units | RL | Method Reference                                           | Analyst | Analysis Date | Analysis Time |

BA Sample ID **CK09480**

**PCB/Pesticide Analysis**

|                                   |              |      |      |               |    |            |       |
|-----------------------------------|--------------|------|------|---------------|----|------------|-------|
| ARO 1242                          | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| b-BHC                             | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| Chlordane(Technical)              | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| d-BHC                             | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| 4,4-DDD                           | Not detected | ug/L | 0.02 | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| 4,4-DDE                           | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| 4,4-DDT                           | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| Dieldrin                          | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| Endosulfan I                      | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| Endosulfan II                     | Not detected | ug/L | 0.03 | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| Endosulfan sulfate                | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| Endrin                            | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| Endrin aldehyde                   | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| g-BHC(Lindane)                    | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| Heptachlor                        | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| Heptachlor epoxide                | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| Total PCB                         | Not detected | ug/L | 0.2  | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| Toxaphene                         | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 00:08 |
| PCB/Pesticide liquid (extraction) | Extracted    |      |      | 3510C/3545    | MB | 09/05/2019 | 12:00 |

**PCB/Pesticide Surrogate Recovery**

|                         |     |   |  |           |    |            |       |
|-------------------------|-----|---|--|-----------|----|------------|-------|
| Decachlorobiphenyl(DCB) | 114 | % |  | 8081/8082 | BY | 09/09/2019 | 00:08 |
|-------------------------|-----|---|--|-----------|----|------------|-------|

**Chlorinated Hydrocarbon Analysis**

|                                    |              |      |      |            |    |            |       |
|------------------------------------|--------------|------|------|------------|----|------------|-------|
| Hexachlorobenzene                  | Not detected | ug/L | 0.01 | EPA 612    | BY | 09/06/2019 | 17:14 |
| Hexachlorobutadiene                | Not detected | ug/L | 0.01 | EPA 612    | BY | 09/06/2019 | 17:14 |
| Hexachlorocyclopentadiene          | Not detected | ug/L | 0.01 | EPA 612    | BY | 09/06/2019 | 17:14 |
| Chlorinated Hydrocarbons 612 (ext) | Extracted    |      |      | 3510C/3545 | MB | 09/05/2019 | 14:00 |

**Chlorinated Hydrocarbon Surrogate Recovery**

|                         |    |   |  |          |    |            |       |
|-------------------------|----|---|--|----------|----|------------|-------|
| Decachlorobiphenyl(DCB) | 65 | % |  | 612/8121 | BY | 09/06/2019 | 17:14 |
|-------------------------|----|---|--|----------|----|------------|-------|

**Benzidines Analysis**

|                         |              |      |     |            |    |            |       |
|-------------------------|--------------|------|-----|------------|----|------------|-------|
| Benzidine               | Not detected | ug/L | 0.1 | EPA 605    | BY | 09/12/2019 | 12:27 |
| 3,3-Dichlorobenzidine   | Not detected | ug/L | 1.5 | EPA 605    | BY | 09/12/2019 | 12:27 |
| 605 liquid (extraction) | Extracted    |      |     | 3510C/3545 | MB | 09/09/2019 | 15:00 |

**Semi-Volatile Analysis**

| REPORT TO                                                     |        |       |    | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |         |               |               |
|---------------------------------------------------------------|--------|-------|----|------------------------------------------------------------|---------|---------------|---------------|
| Pall Corp.<br>600 S. Wagner<br>Bldg. 4<br>Ann Arbor, MI 48103 |        |       |    | Project Number: PO#4503828117                              |         |               |               |
|                                                               |        |       |    | Sample ID: Outfall 001 Treated                             |         |               |               |
|                                                               |        |       |    | Report Date : 9/12/2019                                    |         |               |               |
|                                                               |        |       |    | BA Project # 60842                                         |         |               |               |
|                                                               |        |       |    | Date/Time Sampled: 9/4/2019 10:00                          |         |               |               |
|                                                               |        |       |    | Date/Time Submitted: 9/4/2019 15:50                        |         |               |               |
| Analyte Name                                                  | Result | Units | RL | Method Reference                                           | Analyst | Analysis Date | Analysis Time |

BA Sample ID **CK09480**

**Semi-Volatile Analysis**

|                                     |              |      |     |               |    |            |       |
|-------------------------------------|--------------|------|-----|---------------|----|------------|-------|
| Acenaphthene                        | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Acenaphthylene                      | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Anthracene                          | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Benzo(a)anthracene                  | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Benzo(a)pyrene                      | Not detected | ug/L | 0.2 | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Benzo(b)fluoranthene                | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Benzo(ghi)perylene                  | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Benzo(k)fluoranthene                | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Bis(2-chloroethoxy)methane          | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Bis(2-chloroethyl)ether             | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Bis(2-chloroisopropyl)ether         | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Bis(2-ethylhexyl)phthalate          | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| 4-Bromophenyl phenyl ether          | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Butyl benzyl phthalate              | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| 2-Chloronaphthalene                 | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| 2-Chlorophenol                      | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| 4-Chlorophenyl phenyl ether         | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Chrysene                            | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Dibenzo(a,h)anthracene              | Not detected | ug/L | 2   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| 1,2-Dichlorobenzene                 | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| 1,3-Dichlorobenzene                 | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| 1,4-Dichlorobenzene                 | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| 2,4-Dichlorophenol                  | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Diethyl phthalate                   | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Dimethylformamide                   | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| 2,4-Dimethylphenol                  | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Dimethylphthalate                   | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Di-n-butyl phthalate                | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| 4,6-dinitro-o-cresol(2-methyl-4,6-d | Not detected | ug/L | 20  | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| 2,4-Dinitrophenol                   | Not detected | ug/L | 19  | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| 2,4-Dinitrotoluene                  | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| 2,6-Dinitrotoluene                  | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Di-n-octyl phthalate                | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| 1,2-Diphenylhydrazine               | Not detected | ug/L | 3   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Fluoranthene                        | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Fluorene                            | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Hexachloroethane                    | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Indeno(1,2,3-cd) pyrene             | Not detected | ug/L | 2   | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |

| REPORT TO           |        |       | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |                  |         |               |               |
|---------------------|--------|-------|------------------------------------------------------------|------------------|---------|---------------|---------------|
| Pall Corp.          |        |       | Project Number: PO#4503828117                              |                  |         |               |               |
| 600 S. Wagner       |        |       | Sample ID: Outfall 001 Treated                             |                  |         |               |               |
| Bldg. 4             |        |       | Report Date : 9/12/2019                                    |                  |         |               |               |
| Ann Arbor, MI 48103 |        |       | BA Project # 60842                                         |                  |         |               |               |
|                     |        |       | Date/Time Sampled: 9/4/2019 10:00                          |                  |         |               |               |
|                     |        |       | Date/Time Submitted: 9/4/2019 15:50                        |                  |         |               |               |
| Analyte Name        | Result | Units | RL                                                         | Method Reference | Analyst | Analysis Date | Analysis Time |

BA Sample ID **CK09480**

#### Semi-Volatile Analysis

|                                     |              |      |    |               |    |            |       |
|-------------------------------------|--------------|------|----|---------------|----|------------|-------|
| Isophorone                          | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Naphthalene                         | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Nitrobenzene                        | Not detected | ug/L | 2  | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| 4-Nitrophenol                       | Not detected | ug/L | 20 | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| 2-Nitrophenol                       | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| N-nitrosodimethylamine              | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| N-nitrosodi-n-propylamine           | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| N-nitrosodiphenylamine              | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Parachlorometa cresol(4-chloro-3met | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Phenanthrene                        | Not detected | ug/L | 1  | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Phenol                              | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Pyrene                              | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| 1,2,4-Trichlorobenzene              | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| 2,4,6-Trichlorophenol               | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |

#### TIC Semi-Volatile Analysis

|                                         |         |  |  |               |    |            |       |
|-----------------------------------------|---------|--|--|---------------|----|------------|-------|
| Cyclopentene,1,2,3,4,5-pentamethyl-     | present |  |  | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| 1-Dodecanol                             | present |  |  | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| 1,2-Ethandiol, diformate                | present |  |  | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Oxalicacid3,5difluorophenyltetradecyste | present |  |  | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| 2,4,7,9-Tetramethyl-5-decyn-4,7-diol    | present |  |  | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| Triquinacene                            | present |  |  | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |

#### Pentachlorophenol - SIM

|                         |              |      |     |               |    |            |       |
|-------------------------|--------------|------|-----|---------------|----|------------|-------|
| Pentachlorophenol - SIM | Not detected | ug/L | 1.8 | EPA 625/625.1 | RG | 09/10/2019 | 12:11 |
| BNA liquid (extraction) | Extracted    |      |     | 3510C/3545    | MB | 09/09/2019 | 10:00 |

#### Semi-Volatile Surrogate Recovery

|                      |     |   |  |          |    |            |       |
|----------------------|-----|---|--|----------|----|------------|-------|
| d5-Nitrobenzene      | 105 | % |  | 8270/625 | RG | 09/10/2019 | 12:11 |
| d5-Phenol            | 18* | % |  | 8270/625 | RG | 09/10/2019 | 12:11 |
| d14-Terphenyl        | 109 | % |  | 8270/625 | RG | 09/10/2019 | 12:11 |
| 2-Fluorobiphenyl     | 110 | % |  | 8270/625 | RG | 09/10/2019 | 12:11 |
| 2-Fluorophenol       | 22* | % |  | 8270/625 | RG | 09/10/2019 | 12:11 |
| 2,4,6-Tribromophenol | 103 | % |  | 8270/625 | RG | 09/10/2019 | 12:11 |

#### Volatile Analysis

|               |              |      |   |               |    |            |       |
|---------------|--------------|------|---|---------------|----|------------|-------|
| Acrolein      | Not detected | ug/L | 5 | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| Acrylonitrile | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |

| REPORT TO                                                     |        |       |    | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |         |               |               |
|---------------------------------------------------------------|--------|-------|----|------------------------------------------------------------|---------|---------------|---------------|
| Pall Corp.<br>600 S. Wagner<br>Bldg. 4<br>Ann Arbor, MI 48103 |        |       |    | Project Number: PO#4503828117                              |         |               |               |
|                                                               |        |       |    | Sample ID: Outfall 001 Treated                             |         |               |               |
|                                                               |        |       |    | Report Date : 9/12/2019                                    |         |               |               |
|                                                               |        |       |    | BA Project # 60842                                         |         |               |               |
|                                                               |        |       |    | Date/Time Sampled: 9/4/2019 10:00                          |         |               |               |
|                                                               |        |       |    | Date/Time Submitted: 9/4/2019 15:50                        |         |               |               |
| Analyte Name                                                  | Result | Units | RL | Method Reference                                           | Analyst | Analysis Date | Analysis Time |

BA Sample ID **CK09480**

**Volatile Analysis**

|                                |              |      |    |               |    |            |       |
|--------------------------------|--------------|------|----|---------------|----|------------|-------|
| Benzene                        | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| Bromoform                      | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| Carbon tetrachloride           | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| Chlorobenzene                  | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| Chlorodibromomethane           | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| Chloroethane                   | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| 2-Chloroethyl vinyl ether      | Not detected | ug/L | 10 | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| Chloroform                     | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| Dichlorobromomethane           | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| 1,1-Dichloroethane             | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| 1,2-Dichloroethane             | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| 1,1-Dichloroethene             | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| 1,2-Dichloropropane            | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| 1,3-Dichloropropene            | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| Ethyl benzene                  | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| Methyl bromide(Bromomethane)   | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| Methyl chloride(Chloromethane) | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| Methylene chloride             | Not detected | ug/L | 5  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| 1,1,2,2-Tetrachloroethane      | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| Tetrachloroethene              | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| Toluene                        | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| trans-1,2-Dichloroethene       | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| 1,1,1-Trichloroethane          | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| 1,1,2-Trichloroethane          | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| Trichloroethene                | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
| Vinyl chloride                 | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |

**Volatile Surrogate Recovery**

|                       |     |   |  |          |    |            |       |
|-----------------------|-----|---|--|----------|----|------------|-------|
| 4-Bromofluorobenzene  | 112 | % |  | 8260/624 | CW | 09/10/2019 | 21:36 |
| d4-1,2 Dichloroethane | 100 | % |  | 8260/624 | CW | 09/10/2019 | 21:36 |
| d8-Toluene            | 100 | % |  | 8260/624 | CW | 09/10/2019 | 21:36 |

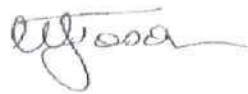
**TIC Volatile Analysis**

|                      |      |      |  |               |    |            |       |
|----------------------|------|------|--|---------------|----|------------|-------|
| No Significant Peaks | None | ug/L |  | EPA 624/624.1 | CW | 09/10/2019 | 21:36 |
|----------------------|------|------|--|---------------|----|------------|-------|

| <b>REPORT TO</b>    |        |       |    | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |         |               |               |
|---------------------|--------|-------|----|------------------------------------------------------------|---------|---------------|---------------|
| Pall Corp.          |        |       |    | Project Number: PO#4503828117                              |         |               |               |
| 600 S. Wagner       |        |       |    | Sample ID: Outfall 001 Treated                             |         |               |               |
| Bldg. 4             |        |       |    | Report Date : 9/12/2019                                    |         |               |               |
| Ann Arbor, MI 48103 |        |       |    | BA Project # 60842                                         |         |               |               |
|                     |        |       |    | Date/Time Sampled: 9/4/2019 10:00                          |         |               |               |
|                     |        |       |    | Date/Time Submitted: 9/4/2019 15:50                        |         |               |               |
| Analyte Name        | Result | Units | RL | Method Reference                                           | Analyst | Analysis Date | Analysis Time |

Not detected = Not found at a level above laboratory's reporting limit (RL).

\*Out of range due to sample matrix.

Released by:   
Lab Manager  
Date: 9/12/19

| REPORT TO                                                     |        |       |    | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |         |               |               |
|---------------------------------------------------------------|--------|-------|----|------------------------------------------------------------|---------|---------------|---------------|
| Pall Corp.<br>600 S. Wagner<br>Bldg. 4<br>Ann Arbor, MI 48103 |        |       |    | Project Number: PO#4503828117                              |         |               |               |
|                                                               |        |       |    | Sample ID: Outfall 001 Treated                             |         |               |               |
|                                                               |        |       |    | Report Date : 9/12/2019                                    |         |               |               |
|                                                               |        |       |    | BA Project # 60842                                         |         |               |               |
|                                                               |        |       |    | Date/Time Sampled: 9/4/2019 10:00                          |         |               |               |
|                                                               |        |       |    | Date/Time Submitted: 9/4/2019 15:50                        |         |               |               |
| Analyte Name                                                  | Result | Units | RL | Method Reference                                           | Analyst | Analysis Date | Analysis Time |

BA Sample ID **CK09481**

**Total Metal Analysis**

|                            |              |      |     |                  |    |            |       |
|----------------------------|--------------|------|-----|------------------|----|------------|-------|
| Total Aluminum             | Not detected | ug/L | 50  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:19 |
| Total Antimony             | 2            | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:19 |
| Total Arsenic              | 1            | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:19 |
| Total Barium               | 250          | ug/L | 5   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:19 |
| Total Beryllium            | Not detected | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:19 |
| Total Boron                | Not detected | ug/L | 20  | EPA 200.7        | LT | 09/10/2019 | 13:03 |
| Total Cadmium              | Not detected | ug/L | 0.2 | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:19 |
| Total Chromium             | Not detected | ug/L | 5   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:19 |
| Total Cobalt               | Not detected | ug/L | 10  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:19 |
| Total Copper               | Not detected | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:19 |
| Total Iron                 | 2000         | ug/L | 20  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:19 |
| Total Lead                 | Not detected | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:19 |
| Total Magnesium            | 32000        | ug/L | 100 | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:19 |
| Total Manganese            | 70           | ug/L | 20  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:19 |
| Total Mercury              | Not detected | ug/L | 0.2 | EPA 245.1        | LS | 09/09/2019 | 13:06 |
| Total Nickel               | Not detected | ug/L | 5   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:19 |
| Total Selenium             | Not detected | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:19 |
| Total Silver               | Not detected | ug/L | 0.2 | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:19 |
| Total Thallium             | Not detected | ug/L | 1   | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:19 |
| Total Zinc                 | Not detected | ug/L | 10  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:19 |
| Mercury (digestion)        | Digested     |      |     | 7470/7471        | LS | 09/09/2019 | 07:30 |
| Metal Water Total (digest) | Digested     |      |     | 3015             | EB | 09/06/2019 | 11:00 |

**Inorganic Analysis**

|                   |              |      |   |          |    |            |       |
|-------------------|--------------|------|---|----------|----|------------|-------|
| Available Cyanide | Not detected | ug/L | 2 | OIA-1677 | RM | 09/10/2019 | 11:45 |
|-------------------|--------------|------|---|----------|----|------------|-------|

**Organic Analysis**

|                |              |      |    |           |    |            |       |
|----------------|--------------|------|----|-----------|----|------------|-------|
| Phenol (4-AAP) | Not detected | ug/L | 10 | EPA 420.1 | RM | 09/06/2019 | 15:51 |
|----------------|--------------|------|----|-----------|----|------------|-------|

**PCB/Pesticide Analysis**

|          |              |      |      |               |    |            |       |
|----------|--------------|------|------|---------------|----|------------|-------|
| a-BHC    | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| Aldrin   | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| ARO 1232 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| ARO 1221 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| ARO 1242 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| ARO 1248 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| ARO 1254 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| ARO 1260 | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |

| REPORT TO                                                     |        |       |    | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |         |               |               |
|---------------------------------------------------------------|--------|-------|----|------------------------------------------------------------|---------|---------------|---------------|
| Pall Corp.<br>600 S. Wagner<br>Bldg. 4<br>Ann Arbor, MI 48103 |        |       |    | Project Number: PO#4503828117                              |         |               |               |
|                                                               |        |       |    | Sample ID: Outfall 001 Treated                             |         |               |               |
|                                                               |        |       |    | Report Date : 9/12/2019                                    |         |               |               |
|                                                               |        |       |    | BA Project # 60842                                         |         |               |               |
|                                                               |        |       |    | Date/Time Sampled: 9/4/2019 10:00                          |         |               |               |
|                                                               |        |       |    | Date/Time Submitted: 9/4/2019 15:50                        |         |               |               |
| Analyte Name                                                  | Result | Units | RL | Method Reference                                           | Analyst | Analysis Date | Analysis Time |

BA Sample ID **CK09481**

**PCB/Pesticide Analysis**

|                                   |              |      |      |               |    |            |       |
|-----------------------------------|--------------|------|------|---------------|----|------------|-------|
| ARO 1016                          | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| b-BHC                             | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| Chlordane(Technical)              | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| d-BHC                             | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| 4,4-DDD                           | Not detected | ug/L | 0.02 | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| 4,4-DDE                           | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| 4,4-DDT                           | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| Dieldrin                          | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| Endosulfan I                      | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| Endosulfan II                     | Not detected | ug/L | 0.03 | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| Endosulfan sulfate                | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| Endrin                            | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| Endrin aldehyde                   | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| g-BHC(Lindane)                    | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| Heptachlor                        | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| Heptachlor epoxide                | Not detected | ug/L | 0.01 | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| Total PCB                         | Not detected | ug/L | 0.2  | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| Toxaphene                         | Not detected | ug/L | 0.1  | EPA 608/608.3 | BY | 09/09/2019 | 00:32 |
| PCB/Pesticide liquid (extraction) | Extracted    |      |      | 3510C/3545    | MB | 09/05/2019 | 12:00 |

**PCB/Pesticide Surrogate Recovery**

|                         |    |   |  |           |    |            |       |
|-------------------------|----|---|--|-----------|----|------------|-------|
| Decachlorobiphenyl(DCB) | 59 | % |  | 8081/8082 | BY | 09/09/2019 | 00:32 |
|-------------------------|----|---|--|-----------|----|------------|-------|

**Chlorinated Hydrocarbon Analysis**

|                                    |              |      |      |            |    |            |       |
|------------------------------------|--------------|------|------|------------|----|------------|-------|
| Hexachlorobenzene                  | Not detected | ug/L | 0.01 | EPA 612    | BY | 09/06/2019 | 17:38 |
| Hexachlorobutadiene                | Not detected | ug/L | 0.01 | EPA 612    | BY | 09/06/2019 | 17:38 |
| Hexachlorocyclopentadiene          | Not detected | ug/L | 0.01 | EPA 612    | BY | 09/06/2019 | 17:38 |
| Chlorinated Hydrocarbons 612 (ext) | Extracted    |      |      | 3510C/3545 | MB | 09/05/2019 | 14:00 |

**Chlorinated Hydrocarbon Surrogate Recovery**

|                         |    |   |  |          |    |            |       |
|-------------------------|----|---|--|----------|----|------------|-------|
| Decachlorobiphenyl(DCB) | 77 | % |  | 612/8121 | BY | 09/06/2019 | 17:38 |
|-------------------------|----|---|--|----------|----|------------|-------|

**Benzidines Analysis**

|                         |              |      |     |            |    |            |       |
|-------------------------|--------------|------|-----|------------|----|------------|-------|
| Benzidine               | Not detected | ug/L | 0.1 | EPA 605    | BY | 09/12/2019 | 12:45 |
| 3,3-Dichlorobenzidine   | Not detected | ug/L | 1.5 | EPA 605    | BY | 09/12/2019 | 12:45 |
| 605 liquid (extraction) | Extracted    |      |     | 3510C/3545 | MB | 09/09/2019 | 15:00 |

**Semi-Volatile Analysis**

| REPORT TO                                                     |        |       |    | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |         |               |               |
|---------------------------------------------------------------|--------|-------|----|------------------------------------------------------------|---------|---------------|---------------|
| Pall Corp.<br>600 S. Wagner<br>Bldg. 4<br>Ann Arbor, MI 48103 |        |       |    | Project Number: PO#4503828117                              |         |               |               |
|                                                               |        |       |    | Sample ID: Outfall 001 Treated                             |         |               |               |
|                                                               |        |       |    | Report Date : 9/12/2019                                    |         |               |               |
|                                                               |        |       |    | BA Project # 60842                                         |         |               |               |
|                                                               |        |       |    | Date/Time Sampled: 9/4/2019 10:00                          |         |               |               |
|                                                               |        |       |    | Date/Time Submitted: 9/4/2019 15:50                        |         |               |               |
| Analyte Name                                                  | Result | Units | RL | Method Reference                                           | Analyst | Analysis Date | Analysis Time |

BA Sample ID **CK09481**

**Semi-Volatile Analysis**

|                                     |              |      |     |               |    |            |       |
|-------------------------------------|--------------|------|-----|---------------|----|------------|-------|
| Acenaphthene                        | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Acenaphthylene                      | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Anthracene                          | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Benzo(a)anthracene                  | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Benzo(a)pyrene                      | Not detected | ug/L | 0.2 | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Benzo(b)fluoranthene                | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Benzo(ghi)perylene                  | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Benzo(k)fluoranthene                | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Bis(2-chloroethoxy)methane          | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Bis(2-chloroethyl)ether             | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Bis(2-chloroisopropyl)ether         | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Bis(2-ethylhexyl)phthalate          | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 4-Bromophenyl phenyl ether          | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Butyl benzyl phthalate              | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 2-Chloronaphthalene                 | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 2-Chlorophenol                      | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 4-Chlorophenyl phenyl ether         | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Chrysene                            | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Dibenzo(a,h)anthracene              | Not detected | ug/L | 2   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 1,4-Dichlorobenzene                 | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 1,2-Dichlorobenzene                 | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 1,3-Dichlorobenzene                 | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 2,4-Dichlorophenol                  | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Diethyl phthalate                   | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Dimethylformamide                   | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 2,4-Dimethylphenol                  | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Dimethylphthalate                   | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Di-n-butyl phthalate                | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 4,6-dinitro-o-cresol(2-methyl-4,6-d | Not detected | ug/L | 20  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 2,4-Dinitrophenol                   | Not detected | ug/L | 19  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 2,4-Dinitrotoluene                  | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 2,6-Dinitrotoluene                  | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Di-n-octyl phthalate                | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 1,2-Diphenylhydrazine               | Not detected | ug/L | 3   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Fluoranthene                        | Not detected | ug/L | 1   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Fluorene                            | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Hexachloroethane                    | Not detected | ug/L | 5   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Indeno(1,2,3-cd) pyrene             | Not detected | ug/L | 2   | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |

| REPORT TO           |        |       | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |                  |         |               |               |
|---------------------|--------|-------|------------------------------------------------------------|------------------|---------|---------------|---------------|
| Pall Corp.          |        |       | Project Number: PO#4503828117                              |                  |         |               |               |
| 600 S. Wagner       |        |       | Sample ID: Outfall 001 Treated                             |                  |         |               |               |
| Bldg. 4             |        |       | Report Date : 9/12/2019                                    |                  |         |               |               |
| Ann Arbor, MI 48103 |        |       | BA Project # 60842                                         |                  |         |               |               |
|                     |        |       | Date/Time Sampled: 9/4/2019 10:00                          |                  |         |               |               |
|                     |        |       | Date/Time Submitted: 9/4/2019 15:50                        |                  |         |               |               |
| Analyte Name        | Result | Units | RL                                                         | Method Reference | Analyst | Analysis Date | Analysis Time |

BA Sample ID **CK09481**

**Semi-Volatile Analysis**

|                                     |              |      |    |               |    |            |       |
|-------------------------------------|--------------|------|----|---------------|----|------------|-------|
| Isophorone                          | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Naphthalene                         | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Nitrobenzene                        | Not detected | ug/L | 2  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 2-Nitrophenol                       | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 4-Nitrophenol                       | Not detected | ug/L | 20 | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| N-nitrosodimethylamine              | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| N-nitrosodi-n-propylamine           | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| N-nitrosodiphenylamine              | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Parachlorometa cresol(4-chloro-3met | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Phenanthrene                        | Not detected | ug/L | 1  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Phenol                              | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| Pyrene                              | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 1,2,4-Trichlorobenzene              | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |
| 2,4,6-Trichlorophenol               | Not detected | ug/L | 5  | EPA 625/625.1 | RG | 09/10/2019 | 23:33 |

**Pentachlorophenol - SIM**

|                         |              |      |     |               |    |            |       |
|-------------------------|--------------|------|-----|---------------|----|------------|-------|
| Pentachlorophenol - SIM | Not detected | ug/L | 1.8 | EPA 625/625.1 | RG | 09/10/2019 | 12:50 |
| BNA liquid (extraction) | Extracted    |      |     | 3510C/3545    | MB | 09/09/2019 | 10:00 |

**Semi-Volatile Surrogate Recovery**

|                      |     |   |  |          |    |            |       |
|----------------------|-----|---|--|----------|----|------------|-------|
| d5-Nitrobenzene      | 105 | % |  | 8270/625 | RG | 09/10/2019 | 12:50 |
| d5-Phenol            | 18* | % |  | 8270/625 | RG | 09/10/2019 | 12:50 |
| d14-Terphenyl        | 114 | % |  | 8270/625 | RG | 09/10/2019 | 12:50 |
| 2-Fluorobiphenyl     | 104 | % |  | 8270/625 | RG | 09/10/2019 | 12:50 |
| 2-Fluorophenol       | 26* | % |  | 8270/625 | RG | 09/10/2019 | 12:50 |
| 2,4,6-Tribromophenol | 92  | % |  | 8270/625 | RG | 09/10/2019 | 12:50 |

**Volatile Analysis**

|                           |              |      |    |               |    |            |       |
|---------------------------|--------------|------|----|---------------|----|------------|-------|
| Acrolein                  | Not detected | ug/L | 5  | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| Acrylonitrile             | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| Benzene                   | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| Bromoform                 | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| Carbon tetrachloride      | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| Chlorobenzene             | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| Chlorodibromomethane      | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| Chloroethane              | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| 2-Chloroethyl vinyl ether | Not detected | ug/L | 10 | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| Chloroform                | Not detected | ug/L | 1  | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |

| REPORT TO                                                     |        |       |    | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |         |               |               |
|---------------------------------------------------------------|--------|-------|----|------------------------------------------------------------|---------|---------------|---------------|
| Pall Corp.<br>600 S. Wagner<br>Bldg. 4<br>Ann Arbor, MI 48103 |        |       |    | Project Number: PO#4503828117                              |         |               |               |
|                                                               |        |       |    | Sample ID: Outfall 001 Treated                             |         |               |               |
|                                                               |        |       |    | Report Date : 9/12/2019                                    |         |               |               |
|                                                               |        |       |    | BA Project # 60842                                         |         |               |               |
|                                                               |        |       |    | Date/Time Sampled: 9/4/2019 10:00                          |         |               |               |
|                                                               |        |       |    | Date/Time Submitted: 9/4/2019 15:50                        |         |               |               |
| Analyte Name                                                  | Result | Units | RL | Method Reference                                           | Analyst | Analysis Date | Analysis Time |

BA Sample ID **CK09481**

**Volatile Analysis**

|                                |              |      |   |               |    |            |       |
|--------------------------------|--------------|------|---|---------------|----|------------|-------|
| Dichlorobromomethane           | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| 1,2-Dichloroethane             | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| 1,1-Dichloroethane             | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| 1,1-Dichloroethene             | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| 1,2-Dichloropropane            | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| 1,3-Dichloropropene            | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| Ethyl benzene                  | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| Methyl bromide(Bromomethane)   | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| Methyl chloride(Chloromethane) | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| Methylene chloride             | Not detected | ug/L | 5 | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| 1,1,2,2-Tetrachloroethane      | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| Tetrachloroethene              | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| Toluene                        | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| trans-1,2-Dichloroethene       | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| 1,1,2-Trichloroethane          | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| 1,1,1-Trichloroethane          | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| Trichloroethene                | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| Vinyl chloride                 | Not detected | ug/L | 1 | EPA 624/624.1 | CW | 09/10/2019 | 21:55 |
| Volatile MS/MSD (8260/624)     | PENDING      | ug/L |   | 8260B/624     |    | 12/30/1899 | 00:00 |

**Volatile Surrogate Recovery**

|                       |     |   |  |          |    |            |       |
|-----------------------|-----|---|--|----------|----|------------|-------|
| 4-Bromofluorobenzene  | 110 | % |  | 8260/624 | CW | 09/10/2019 | 21:55 |
| d4-1,2 Dichloroethane | 97  | % |  | 8260/624 | CW | 09/10/2019 | 21:55 |
| d8-Toluene            | 100 | % |  | 8260/624 | CW | 09/10/2019 | 21:55 |

Not detected = Not found at a level above laboratory's reporting limit (RL).

\*Out of range due to sample matrix.

Released by:

Lab Manager

Date:

9/12/19

| REPORT TO                                                     |        |       | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |                  |         |               |               |
|---------------------------------------------------------------|--------|-------|------------------------------------------------------------|------------------|---------|---------------|---------------|
| Pall Corp.<br>600 S. Wagner<br>Bldg. 4<br>Ann Arbor, MI 48103 |        |       | Project Number: PO#4503828117                              |                  |         |               |               |
|                                                               |        |       | Sample ID: Outfall 001 Treated MS                          |                  |         |               |               |
|                                                               |        |       | Report Date : 9/12/2019                                    |                  |         |               |               |
|                                                               |        |       | BA Project # 60842                                         |                  |         |               |               |
|                                                               |        |       | Date/Time Sampled: 9/4/2019 10:00                          |                  |         |               |               |
|                                                               |        |       | Date/Time Submitted: 9/4/2019 15:50                        |                  |         |               |               |
| Analyte Name                                                  | Result | Units | RL                                                         | Method Reference | Analyst | Analysis Date | Analysis Time |

BA Sample ID **CK09482**

**Total Metal Analysis**

|                            |          |      |  |                  |    |            |       |
|----------------------------|----------|------|--|------------------|----|------------|-------|
| Total Aluminum             | 94%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:24 |
| Total Antimony             | 102%     | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:24 |
| Total Arsenic              | 98%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:24 |
| Total Barium               | 92%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:24 |
| Total Beryllium            | 96%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:24 |
| Total Boron                | 79%      | ug/L |  | EPA 200.7        | LT | 09/10/2019 | 13:05 |
| Total Cadmium              | 95%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:24 |
| Total Chromium             | 98%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:24 |
| Total Cobalt               | 99%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:24 |
| Total Copper               | 99%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:24 |
| Total Iron                 | 98%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:24 |
| Total Lead                 | 95%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:24 |
| Total Magnesium            | 113%     | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:24 |
| Total Manganese            | 96%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:24 |
| Total Mercury              | 105%     | ug/L |  | EPA 245.1        | LS | 09/09/2019 | 13:06 |
| Total Nickel               | 98%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:24 |
| Total Selenium             | 92%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:24 |
| Total Silver               | 95%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:24 |
| Total Thallium             | 97%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:24 |
| Total Zinc                 | 94%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:24 |
| Mercury (digestion)        | Digested |      |  | 7470/7471        | LS | 09/09/2019 | 07:30 |
| Metal Water Total (digest) | Digested |      |  | 3015             | EB | 09/06/2019 | 11:00 |

**Inorganic Analysis**

|                   |      |      |  |          |    |            |       |
|-------------------|------|------|--|----------|----|------------|-------|
| Available Cyanide | 35%* | ug/L |  | OIA-1677 | RM | 09/10/2019 | 11:45 |
|-------------------|------|------|--|----------|----|------------|-------|

**Organic Analysis**

|                |      |      |  |           |    |            |       |
|----------------|------|------|--|-----------|----|------------|-------|
| Phenol (4-AAP) | 33%* | ug/L |  | EPA 420.1 | RM | 09/06/2019 | 15:51 |
|----------------|------|------|--|-----------|----|------------|-------|

**PCB/Pesticide Analysis**

|                                   |           |   |  |                 |    |            |       |
|-----------------------------------|-----------|---|--|-----------------|----|------------|-------|
| Aldrin                            | 87        | % |  | SW846 8081B/82A | BY | 09/09/2019 | 00:56 |
| ARO 1260                          | 98        | % |  | SW846 8081B/82A | BY | 09/09/2019 | 00:56 |
| 4,4-DDT                           | 118       | % |  | SW846 8081B/82A | BY | 09/09/2019 | 00:56 |
| Dieldrin                          | 92        | % |  | SW846 8081B/82A | BY | 09/09/2019 | 00:56 |
| Endrin                            | 105       | % |  | SW846 8081B/82A | BY | 09/09/2019 | 00:56 |
| Heptachlor                        | 91        | % |  | SW846 8081B/82A | BY | 09/09/2019 | 00:56 |
| Lindane                           | 94        | % |  | SW846 8081B/82A | BY | 09/09/2019 | 00:56 |
| PCB/Pesticide liquid (extraction) | Extracted |   |  | 3510C/3545      | MB | 09/05/2019 | 12:00 |

| REPORT TO           |        |       | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |                  |         |               |               |
|---------------------|--------|-------|------------------------------------------------------------|------------------|---------|---------------|---------------|
| Pali Corp.          |        |       | Project Number: PO#4503828117                              |                  |         |               |               |
| 600 S. Wagner       |        |       | Sample ID: Outfall 001 Treated MS                          |                  |         |               |               |
| Bldg. 4             |        |       | Report Date : 9/12/2019                                    |                  |         |               |               |
| Ann Arbor, MI 48103 |        |       | BA Project # 60842                                         |                  |         |               |               |
|                     |        |       | Date/Time Sampled: 9/4/2019 10:00                          |                  |         |               |               |
|                     |        |       | Date/Time Submitted: 9/4/2019 15:50                        |                  |         |               |               |
| Analyte Name        | Result | Units | RL                                                         | Method Reference | Analyst | Analysis Date | Analysis Time |

BA Sample ID **CK09482**

**PCB/Pesticide Surrogate Recovery**

|                         |     |   |           |    |            |       |
|-------------------------|-----|---|-----------|----|------------|-------|
| Decachlorobiphenyl(DCB) | 100 | % | 8081/8082 | BY | 09/09/2019 | 00:56 |
|-------------------------|-----|---|-----------|----|------------|-------|

**Chlorinated Hydrocarbon Analysis**

|                                    |           |   |            |    |            |       |
|------------------------------------|-----------|---|------------|----|------------|-------|
| Hexachlorobenzene                  | 83        | % | EPA 612    | BY | 09/06/2019 | 18:02 |
| Hexachlorobutadiene                | 86        | % | EPA 612    | BY | 09/06/2019 | 18:02 |
| Hexachlorocyclopentadiene          | 105       | % | EPA 612    | BY | 09/06/2019 | 18:02 |
| Chlorinated Hydrocarbons 612 (ext) | Extracted |   | 3510C/3545 | MB | 09/05/2019 | 14:00 |

**Chlorinated Hydrocarbon Surrogate Recovery**

|                         |    |   |          |    |            |       |
|-------------------------|----|---|----------|----|------------|-------|
| Decachlorobiphenyl(DCB) | 75 | % | 612/8121 | BY | 09/06/2019 | 18:02 |
|-------------------------|----|---|----------|----|------------|-------|

**Benzidines Analysis**

|                         |           |   |            |    |            |       |
|-------------------------|-----------|---|------------|----|------------|-------|
| Benzidine               | 43        | % | EPA 605    | BY | 09/12/2019 | 13:03 |
| 3,3-Dichlorobenzidine   | 68        | % | EPA 605    | BY | 09/12/2019 | 13:03 |
| 605 liquid (extraction) | Extracted |   | 3510C/3545 | MB | 09/09/2019 | 15:00 |

**Semi-Volatile Analysis**

|                           |     |   |          |    |            |       |
|---------------------------|-----|---|----------|----|------------|-------|
| Acenaphthene              | 104 | % | 8270/625 | RG | 09/10/2019 | 20:00 |
| 4-Chloro-3-methylphenol   | 94  | % | 8270/625 | RG | 09/10/2019 | 20:00 |
| 2-Chlorophenol            | 83  | % | 8270/625 | RG | 09/10/2019 | 20:00 |
| Dibenzofuran              | 102 | % | 8270/625 | RG | 09/10/2019 | 20:00 |
| 1,4-Dichlorobenzene       | 68  | % | 8270/625 | RG | 09/10/2019 | 20:00 |
| Dimethylformamide         | 57  | % | 8270/625 | RG | 09/10/2019 | 20:00 |
| Di-n-butylphthalate       | 116 | % | 8270/625 | RG | 09/10/2019 | 20:00 |
| 2,4-Dinitrotoluene        | 107 | % | 8270/625 | RG | 09/10/2019 | 20:00 |
| 2-Methylnaphthalene       | 98  | % | 8270/625 | RG | 09/10/2019 | 20:00 |
| 2-Methylphenol            | 60  | % | 8270/625 | RG | 09/10/2019 | 20:00 |
| 3-Nitroaniline            | 112 | % | 8270/625 | RG | 09/10/2019 | 20:00 |
| 4-Nitrophenol             | 56  | % | 8270/625 | RG | 09/10/2019 | 20:00 |
| N-Nitrosodi-n-propylamine | 110 | % | 8270/625 | RG | 09/10/2019 | 20:00 |
| Pentachlorophenol         | 129 | % | 8270/625 | RG | 09/10/2019 | 20:00 |
| Phenol                    | 29  | % | 8270/625 | RG | 09/10/2019 | 20:00 |
| Pyrene                    | 99  | % | 8270/625 | RG | 09/10/2019 | 20:00 |
| 1,2,4-Trichlorobenzene    | 89  | % | 8270/625 | RG | 09/10/2019 | 20:00 |
| 2,4,5-Trichlorophenol     | 111 | % | 8270/625 | RG | 09/10/2019 | 20:00 |

**Pentachlorophenol - SIM**

|                         |      |      |               |    |            |       |
|-------------------------|------|------|---------------|----|------------|-------|
| Pentachlorophenol - SIM | 129% | ug/L | EPA 625/625.1 | RG | 09/10/2019 | 20:00 |
|-------------------------|------|------|---------------|----|------------|-------|

| REPORT TO           |        |       | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |                  |         |               |               |
|---------------------|--------|-------|------------------------------------------------------------|------------------|---------|---------------|---------------|
| Pall Corp.          |        |       | Project Number: PO#4503828117                              |                  |         |               |               |
| 600 S. Wagner       |        |       | Sample ID: Outfall 001 Treated MS                          |                  |         |               |               |
| Bldg. 4             |        |       | Report Date : 9/12/2019                                    |                  |         |               |               |
| Ann Arbor, MI 48103 |        |       | BA Project # 60842                                         |                  |         |               |               |
|                     |        |       | Date/Time Sampled: 9/4/2019 10:00                          |                  |         |               |               |
|                     |        |       | Date/Time Submitted: 9/4/2019 15:50                        |                  |         |               |               |
| Analyte Name        | Result | Units | RL                                                         | Method Reference | Analyst | Analysis Date | Analysis Time |

BA Sample ID **CK09482**

BNA liquid (extraction)      Extracted      3510C/3545      MB      09/09/2019      10:00

**Semi-Volatile Surrogate Recovery**

|                      |     |   |          |    |            |       |
|----------------------|-----|---|----------|----|------------|-------|
| d5-Nitrobenzene      | 108 | % | 8270/625 | RG | 09/10/2019 | 20:00 |
| d5-Phenol            | 30  | % | 8270/625 | RG | 09/10/2019 | 20:00 |
| d14-Terphenyl        | 110 | % | 8270/625 | RG | 09/10/2019 | 20:00 |
| 2-Fluorobiphenyl     | 113 | % | 8270/625 | RG | 09/10/2019 | 20:00 |
| 2-Fluorophenol       | 44  | % | 8270/625 | RG | 09/10/2019 | 20:00 |
| 2,4,6-Tribromophenol | 121 | % | 8270/625 | RG | 09/10/2019 | 20:00 |

**Volatile Analysis**

|                           |     |   |           |    |            |       |
|---------------------------|-----|---|-----------|----|------------|-------|
| Carbon tetrachloride      | 91  | % | 8260B/624 | CW | 09/10/2019 | 19:40 |
| Chlorobenzene             | 86  | % | 8260B/624 | CW | 09/10/2019 | 19:40 |
| Chloroform                | 85  | % | 8260B/624 | CW | 09/10/2019 | 19:40 |
| cis-1,3-Dichloropropene   | 86  | % | 8260B/624 | CW | 09/10/2019 | 19:40 |
| Dibromochloromethane      | 97  | % | 8260B/624 | CW | 09/10/2019 | 19:40 |
| 1,3-Dichlorobenzene       | 85  | % | 8260B/624 | CW | 09/10/2019 | 19:40 |
| 1,4-Dichlorobenzene       | 83  | % | 8260B/624 | CW | 09/10/2019 | 19:40 |
| 1,2-Dichlorobenzene       | 86  | % | 8260B/624 | CW | 09/10/2019 | 19:40 |
| 1,1-Dichloroethane        | 85  | % | 8260B/624 | CW | 09/10/2019 | 19:40 |
| 1,2-Dichloroethane        | 91  | % | 8260B/624 | CW | 09/10/2019 | 19:40 |
| 1,1-Dichloroethene        | 81  | % | 8260B/624 | CW | 09/10/2019 | 19:40 |
| 1,2-Dichloropropane       | 114 | % | 8260B/624 | CW | 09/10/2019 | 19:40 |
| 1,1,2,2-Tetrachloroethane | 90  | % | 8260B/624 | CW | 09/10/2019 | 19:40 |
| Tetrachloroethane         | 82  | % | 8260B/624 | CW | 09/10/2019 | 19:40 |
| 1,1,2-Trichloroethane     | 87  | % | 8260B/624 | CW | 09/10/2019 | 19:40 |
| Trichloroethene           | 95  | % | 8260B/624 | CW | 09/10/2019 | 19:40 |

**Volatile Surrogate Recovery**

|                       |     |   |          |    |            |       |
|-----------------------|-----|---|----------|----|------------|-------|
| 4-Bromofluorobenzene  | 97  | % | 8260/624 | CW | 09/10/2019 | 19:40 |
| d4-1,2 Dichloroethane | 102 | % | 8260/624 | CW | 09/10/2019 | 19:40 |
| d8-Toluene            | 100 | % | 8260/624 | CW | 09/10/2019 | 19:40 |

| REPORT TO                                                     |        |       |    | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |         |               |               |  |
|---------------------------------------------------------------|--------|-------|----|------------------------------------------------------------|---------|---------------|---------------|--|
| Pall Corp.<br>600 S. Wagner<br>Bldg. 4<br>Ann Arbor, MI 48103 |        |       |    | Project Number: PO#4503828117                              |         |               |               |  |
|                                                               |        |       |    | Sample ID: Outfall 001 Treated MS                          |         |               |               |  |
|                                                               |        |       |    | Report Date : 9/12/2019                                    |         |               |               |  |
|                                                               |        |       |    | BA Project # 60842                                         |         |               |               |  |
|                                                               |        |       |    | Date/Time Sampled: 9/4/2019 10:00                          |         |               |               |  |
|                                                               |        |       |    | Date/Time Submitted: 9/4/2019 15:50                        |         |               |               |  |
| Analyte Name                                                  | Result | Units | RL | Method Reference                                           | Analyst | Analysis Date | Analysis Time |  |

Not detected = Not found at a level above laboratory's reporting limit (RL).

\*Spike recovery is out of range due to sample matrix.

Released by: 

Lab Manager

Date: 9/12/19

| REPORT TO                                                     |        |       |    | Project Name: CleanWaterActAnalysis.40CFR122 Infl. & Effl. |         |               |               |  |
|---------------------------------------------------------------|--------|-------|----|------------------------------------------------------------|---------|---------------|---------------|--|
| Pall Corp.<br>600 S. Wagner<br>Bldg. 4<br>Ann Arbor, MI 48103 |        |       |    | Project Number: PO#4503828117                              |         |               |               |  |
|                                                               |        |       |    | Sample ID: Outfall 001 Treated MSD                         |         |               |               |  |
|                                                               |        |       |    | Report Date : 9/12/2019                                    |         |               |               |  |
|                                                               |        |       |    | BA Project # 60842                                         |         |               |               |  |
|                                                               |        |       |    | Date/Time Sampled: 9/4/2019 10:00                          |         |               |               |  |
|                                                               |        |       |    | Date/Time Submitted: 9/4/2019 15:50                        |         |               |               |  |
| Analyte Name                                                  | Result | Units | RL | Method Reference                                           | Analyst | Analysis Date | Analysis Time |  |

BA Sample ID **CK09483**

**Total Metal Analysis**

|                            |          |      |  |                  |    |            |       |
|----------------------------|----------|------|--|------------------|----|------------|-------|
| Total Aluminum             | 95%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:28 |
| Total Antimony             | 102%     | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:28 |
| Total Arsenic              | 98%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:28 |
| Total Barium               | 94%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:28 |
| Total Beryllium            | 96%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:28 |
| Total Boron                | 78%      | ug/L |  | EPA 200.7        | LT | 09/10/2019 | 13:07 |
| Total Cadmium              | 96%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:28 |
| Total Chromium             | 98%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:28 |
| Total Cobalt               | 99%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:28 |
| Total Copper               | 99%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:28 |
| Total Iron                 | 99%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:28 |
| Total Lead                 | 96%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:28 |
| Total Magnesium            | 116%     | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:28 |
| Total Manganese            | 97%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:28 |
| Total Mercury              | 106%     | ug/L |  | EPA 245.1        | LS | 09/09/2019 | 13:06 |
| Total Nickel               | 99%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:28 |
| Total Selenium             | 95%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:28 |
| Total Silver               | 94%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:28 |
| Total Thallium             | 97%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:28 |
| Total Zinc                 | 94%      | ug/L |  | EPA 200.8 rev5.4 | LT | 09/06/2019 | 19:28 |
| Mercury (digestion)        | Digested |      |  | 7470/7471        | LS | 09/09/2019 | 07:30 |
| Metal Water Total (digest) | Digested |      |  | 3015             | EB | 09/06/2019 | 11:00 |

**Inorganic Analysis**

|                   |      |      |  |          |    |            |       |
|-------------------|------|------|--|----------|----|------------|-------|
| Available Cyanide | 36%* | ug/L |  | OIA-1677 | RM | 09/10/2019 | 11:45 |
|-------------------|------|------|--|----------|----|------------|-------|

**Organic Analysis**

|                |      |      |  |           |    |            |       |
|----------------|------|------|--|-----------|----|------------|-------|
| Phenol (4-AAP) | 32%* | ug/L |  | EPA 420.1 | RM | 09/06/2019 | 15:51 |
|----------------|------|------|--|-----------|----|------------|-------|

**PCB/Pesticide Analysis**

|                                   |           |   |  |                 |    |            |       |
|-----------------------------------|-----------|---|--|-----------------|----|------------|-------|
| Aldrin                            | 90        | % |  | SW846 8081B/82A | BY | 09/09/2019 | 01:20 |
| ARO 1260                          | 104       | % |  | SW846 8081B/82A | BY | 09/09/2019 | 01:20 |
| 4,4-DDT                           | 115       | % |  | SW846 8081B/82A | BY | 09/09/2019 | 01:20 |
| Dieldrin                          | 76        | % |  | SW846 8081B/82A | BY | 09/09/2019 | 01:20 |
| Endrin                            | 107       | % |  | SW846 8081B/82A | BY | 09/09/2019 | 01:20 |
| Heptachlor                        | 96        | % |  | SW846 8081B/82A | BY | 09/09/2019 | 01:20 |
| Lindane                           | 96        | % |  | SW846 8081B/82A | BY | 09/09/2019 | 01:20 |
| PCB/Pesticide liquid (extraction) | Extracted |   |  | 3510C/3545      | MB | 09/05/2019 | 12:00 |

| REPORT TO           | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |
|---------------------|------------------------------------------------------------|
| Pall Corp.          | Project Number: PO#4503828117                              |
| 600 S. Wagner       | Sample ID: Outfall 001 Treated MSD                         |
| Bldg. 4             | Report Date : 9/12/2019                                    |
| Ann Arbor, MI 48103 | BA Project # 60842                                         |
|                     | Date/Time Sampled: 9/4/2019 10:00                          |
|                     | Date/Time Submitted: 9/4/2019 15:50                        |

| Analyte Name | Result | Units | RL | Method Reference | Analyst | Analysis Date | Analysis Time |
|--------------|--------|-------|----|------------------|---------|---------------|---------------|
|--------------|--------|-------|----|------------------|---------|---------------|---------------|

BA Sample ID **CK09483**

**PCB/Pesticide Surrogate Recovery**

|                         |     |   |  |           |    |            |       |
|-------------------------|-----|---|--|-----------|----|------------|-------|
| Decachlorobiphenyl(DCB) | 100 | % |  | 8081/8082 | BY | 09/09/2019 | 01:20 |
|-------------------------|-----|---|--|-----------|----|------------|-------|

**Chlorinated Hydrocarbon Analysis**

|                                    |           |   |  |            |    |            |       |
|------------------------------------|-----------|---|--|------------|----|------------|-------|
| Hexachlorobenzene                  | 88        | % |  | EPA 612    | BY | 09/06/2019 | 18:26 |
| Hexachlorobutadiene                | 88        | % |  | EPA 612    | BY | 09/06/2019 | 18:26 |
| Hexachlorocyclopentadiene          | 109       | % |  | EPA 612    | BY | 09/06/2019 | 18:26 |
| Chlorinated Hydrocarbons 612 (ext) | Extracted |   |  | 3510C/3545 | MB | 09/05/2019 | 14:00 |

**Chlorinated Hydrocarbon Surrogate Recovery**

|                         |    |   |  |          |    |            |       |
|-------------------------|----|---|--|----------|----|------------|-------|
| Decachlorobiphenyl(DCB) | 86 | % |  | 612/8121 | BY | 09/06/2019 | 18:26 |
|-------------------------|----|---|--|----------|----|------------|-------|

**Benzidines Analysis**

|                         |           |   |  |            |    |            |       |
|-------------------------|-----------|---|--|------------|----|------------|-------|
| Benzidine               | 40        | % |  | EPA 605    | BY | 09/12/2019 | 13:21 |
| 3,3-Dichlorobenzidine   | 79        | % |  | EPA 605    | BY | 09/12/2019 | 13:21 |
| 605 liquid (extraction) | Extracted |   |  | 3510C/3545 | MB | 09/09/2019 | 15:00 |

**Semi-Volatile Analysis**

|                           |     |   |  |          |    |            |       |
|---------------------------|-----|---|--|----------|----|------------|-------|
| Acenaphthene              | 104 | % |  | 8270/625 | RG | 09/10/2019 | 20:39 |
| 4-Chloro-3-methylphenol   | 90  | % |  | 8270/625 | RG | 09/10/2019 | 20:39 |
| 2-Chlorophenol            | 82  | % |  | 8270/625 | RG | 09/10/2019 | 20:39 |
| Dibenzofuran              | 101 | % |  | 8270/625 | RG | 09/10/2019 | 20:39 |
| 1,4-Dichlorobenzene       | 68  | % |  | 8270/625 | RG | 09/10/2019 | 20:39 |
| Dimethylformamide         | 59  | % |  | 8270/625 | RG | 09/10/2019 | 20:39 |
| Di-n-butylphthalate       | 119 | % |  | 8270/625 | RG | 09/10/2019 | 20:39 |
| 2,4-Dinitrotoluene        | 105 | % |  | 8270/625 | RG | 09/10/2019 | 20:39 |
| 2-Methylnaphthalene       | 96  | % |  | 8270/625 | RG | 09/10/2019 | 20:39 |
| 2-Methylphenol            | 57  | % |  | 8270/625 | RG | 09/10/2019 | 20:39 |
| 3-Nitroaniline            | 110 | % |  | 8270/625 | RG | 09/10/2019 | 20:39 |
| 4-Nitrophenol             | 57  | % |  | 8270/625 | RG | 09/10/2019 | 20:39 |
| N-Nitrosodi-n-propylamine | 107 | % |  | 8270/625 | RG | 09/10/2019 | 20:39 |
| Pentachlorophenol         | 131 | % |  | 8270/625 | RG | 09/10/2019 | 20:39 |
| Phenol                    | 29  | % |  | 8270/625 | RG | 09/10/2019 | 20:39 |
| Pyrene                    | 97  | % |  | 8270/625 | RG | 09/10/2019 | 20:39 |
| 1,2,4-Trichlorobenzene    | 89  | % |  | 8270/625 | RG | 09/10/2019 | 20:39 |
| 2,4,5-Trichlorophenol     | 110 | % |  | 8270/625 | RG | 09/10/2019 | 20:39 |

**Pentachlorophenol - SIM**

|                         |      |      |  |               |    |            |       |
|-------------------------|------|------|--|---------------|----|------------|-------|
| Pentachlorophenol - SIM | 131% | ug/L |  | EPA 625/625.1 | RG | 09/10/2019 | 20:39 |
|-------------------------|------|------|--|---------------|----|------------|-------|

| REPORT TO           |        |       | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |                  |         |               |               |
|---------------------|--------|-------|------------------------------------------------------------|------------------|---------|---------------|---------------|
| Pall Corp.          |        |       | Project Number: PO#4503828117                              |                  |         |               |               |
| 600 S. Wagner       |        |       | Sample ID: Outfall 001 Treated MSD                         |                  |         |               |               |
| Bldg. 4             |        |       | Report Date : 9/12/2019                                    |                  |         |               |               |
| Ann Arbor, MI 48103 |        |       | BA Project # 60842                                         |                  |         |               |               |
|                     |        |       | Date/Time Sampled: 9/4/2019 10:00                          |                  |         |               |               |
|                     |        |       | Date/Time Submitted: 9/4/2019 15:50                        |                  |         |               |               |
| Analyte Name        | Result | Units | RL                                                         | Method Reference | Analyst | Analysis Date | Analysis Time |

### BA Sample ID CK09483

|                         |           |  |            |    |            |       |
|-------------------------|-----------|--|------------|----|------------|-------|
| BNA liquid (extraction) | Extracted |  | 3510C/3545 | MB | 09/09/2019 | 10:00 |
|-------------------------|-----------|--|------------|----|------------|-------|

### Semi-Volatile Surrogate Recovery

|                      |     |   |          |    |            |       |
|----------------------|-----|---|----------|----|------------|-------|
| d5-Nitrobenzene      | 108 | % | 8270/625 | RG | 09/10/2019 | 20:39 |
| d5-Phenol            | 29  | % | 8270/625 | RG | 09/10/2019 | 20:39 |
| d14-Terphenyl        | 111 | % | 8270/625 | RG | 09/10/2019 | 20:39 |
| 2-Fluorobiphenyl     | 113 | % | 8270/625 | RG | 09/10/2019 | 20:39 |
| 2-Fluorophenol       | 44  | % | 8270/625 | RG | 09/10/2019 | 20:39 |
| 2,4,6-Tribromophenol | 123 | % | 8270/625 | RG | 09/10/2019 | 20:39 |

### Volatile Analysis

|                           |     |   |           |    |            |       |
|---------------------------|-----|---|-----------|----|------------|-------|
| Carbon tetrachloride      | 94  | % | 8260B/624 | CW | 09/10/2019 | 19:59 |
| Chlorobenzene             | 89  | % | 8260B/624 | CW | 09/10/2019 | 19:59 |
| Chloroform                | 87  | % | 8260B/624 | CW | 09/10/2019 | 19:59 |
| cis-1,3-Dichloropropene   | 91  | % | 8260B/624 | CW | 09/10/2019 | 19:59 |
| Dibromochloromethane      | 102 | % | 8260B/624 | CW | 09/10/2019 | 19:59 |
| 1,2-Dichlorobenzene       | 85  | % | 8260B/624 | CW | 09/10/2019 | 19:59 |
| 1,4-Dichlorobenzene       | 84  | % | 8260B/624 | CW | 09/10/2019 | 19:59 |
| 1,3-Dichlorobenzene       | 84  | % | 8260B/624 | CW | 09/10/2019 | 19:59 |
| 1,2-Dichloroethane        | 92  | % | 8260B/624 | CW | 09/10/2019 | 19:59 |
| 1,1-Dichloroethane        | 85  | % | 8260B/624 | CW | 09/10/2019 | 19:59 |
| 1,1-Dichloroethene        | 81  | % | 8260B/624 | CW | 09/10/2019 | 19:59 |
| 1,2-Dichloropropane       | 95  | % | 8260B/624 | CW | 09/10/2019 | 19:59 |
| Tetrachloroethane         | 85  | % | 8260B/624 | CW | 09/10/2019 | 19:59 |
| 1,1,2,2-Tetrachloroethane | 94  | % | 8260B/624 | CW | 09/10/2019 | 19:59 |
| 1,1,2-Trichloroethane     | 90  | % | 8260B/624 | CW | 09/10/2019 | 19:59 |
| Trichloroethene           | 98  | % | 8260B/624 | CW | 09/10/2019 | 19:59 |

### Volatile Surrogate Recovery

|                       |     |   |          |    |            |       |
|-----------------------|-----|---|----------|----|------------|-------|
| 4-Bromofluorobenzene  | 98  | % | 8260/624 | CW | 09/10/2019 | 19:59 |
| d4-1,2 Dichloroethane | 100 | % | 8260/624 | CW | 09/10/2019 | 19:59 |
| d8-Toluene            | 100 | % | 8260/624 | CW | 09/10/2019 | 19:59 |

| REPORT TO                                                     |        |       |    | Project Name: CleanWaterActAnalysis 40CFR122 Infl. & Effl. |         |               |               |  |
|---------------------------------------------------------------|--------|-------|----|------------------------------------------------------------|---------|---------------|---------------|--|
| Pall Corp.<br>600 S. Wagner<br>Bldg. 4<br>Ann Arbor, MI 48103 |        |       |    | Project Number: PO#4503828117                              |         |               |               |  |
|                                                               |        |       |    | Sample ID: Outfall 001 Treated MSD                         |         |               |               |  |
|                                                               |        |       |    | Report Date : 9/12/2019                                    |         |               |               |  |
|                                                               |        |       |    | BA Project # 60842                                         |         |               |               |  |
|                                                               |        |       |    | Date/Time Sampled: 9/4/2019 10:00                          |         |               |               |  |
|                                                               |        |       |    | Date/Time Submitted: 9/4/2019 15:50                        |         |               |               |  |
| Analyte Name                                                  | Result | Units | RL | Method Reference                                           | Analyst | Analysis Date | Analysis Time |  |

Not detected = Not found at a level above laboratory's reporting limit (RL).

\*Spike recovery is out of range due to sample matrix.

Released by:   
Lab Manager  
Date: 9/12/19

|                                                                                                                                                                                                                                                        |  |                                                                                                                                                                                           |  |                                                                                                                                                          |  |                                       |  |                                                                                                                                                                                                                                               |  |          |  |                  |  |                                                                                                                                                                             |  |             |  |                                                                                                                               |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------|--|------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------|--|-------------------------------------------------------------------------------------------------------------------------------|--|
|  <b>Brighton Analytical, L.L.C.</b> <sup>TM</sup><br>Email: bai-brighton@sbcglobal.net<br>2105 Pless Drive Phone: 810-229-7575<br>Brighton, MI 48114 Fax: 810-229-8650 |  | BA PROJECT #:<br>05842                                                                                                                                                                    |  | Analysis Requested/Method                                                                                                                                |  |                                       |  |                                                                                                                                                                                                                                               |  |          |  |                  |  | PAGE 1 OF 1                                                                                                                                                                 |  |             |  |                                                                                                                               |  |
|                                                                                                                                                                                                                                                        |  | ABBREVIATIONS FOR MATRIX<br>S = Solid<br>L = Liquid<br>DW = Drinking H <sub>2</sub> O<br>O = Oil<br>P = Wipe<br>A = Air (Tedlar Bag)<br>F = Filter<br>T = Tube<br>M = Misc.               |  | Treated Groundwater<br>Groundwater - metals<br>Treated Groundwater<br>Available Cyanide<br>Total Phenols<br>Pesticides<br>PCB's<br>N,N-dimethylformamide |  |                                       |  |                                                                                                                                                                                                                                               |  |          |  |                  |  | COMPANY/MAILING ADDRESS:<br>642 S. Wagner Rd<br>Ann Arbor, MI 48103<br>- Ball Corporation -<br>ATTN: See Peters<br>PHONE: 734-552-9358<br>FAX OR EMAIL: gwc_peters@ball.com |  |             |  |                                                                                                                               |  |
| PROJECT NAME: Clean Water Act Analysis, 40CFR122<br>App. D Influent and Effluent                                                                                                                                                                       |  | PROJECT #:<br>4503828117                                                                                                                                                                  |  | PO #: (PLEASE NOTE IF DIFFERENT BILLING ADDRESS)<br>4503828117                                                                                           |  |                                       |  |                                                                                                                                                                                                                                               |  |          |  |                  |  | Samples received within hold time? yes <input checked="" type="checkbox"/> no <input type="checkbox"/>                                                                      |  |             |  |                                                                                                                               |  |
| Sample collected by:<br>zac                                                                                                                                                                                                                            |  | REQUESTED TURNAROUND: (circle one)<br>Rush: 1-3 business days (verify with lab & specify date needed)<br>1 Day = 2.5X Cost 2 Day = 2X Cost 3 Day = 1.5X Cost<br>Standard: 5 business days |  | If RUSH, approved by:                                                                                                                                    |  | Sample Coll.                          |  | Container Type & Quantity<br>VOA'S (PRES) Y N N/A<br>HDPE UNPRESERVED<br>HDPE HNO <sub>3</sub><br>HDPE H <sub>2</sub> SO <sub>4</sub><br>HDPE NaOH<br>AMBER PRESERVED?<br>GLASS, NO PRESERVATIVE<br>STERILIZED BACTERIA<br>MEOH Preserved Y N |  |          |  |                  |  |                                                                                                                                                                             |  |             |  | Temperature of samples °C: 01°C / 4.3                                                                                         |  |
| Brighton ID #                                                                                                                                                                                                                                          |  | Sample Description                                                                                                                                                                        |  | Date                                                                                                                                                     |  | Time                                  |  | pHs verified in login? yes <input checked="" type="checkbox"/> no <input type="checkbox"/>                                                                                                                                                    |  |          |  |                  |  |                                                                                                                                                                             |  |             |  | Headpace/bubbles in 'VOA's'? yes <input type="checkbox"/> no <input checked="" type="checkbox"/> n/a <input type="checkbox"/> |  |
| 0478                                                                                                                                                                                                                                                   |  | Red Pond                                                                                                                                                                                  |  | 9-4-19                                                                                                                                                   |  | 09:01                                 |  | Sample                                                                                                                                                                                                                                        |  |          |  |                  |  |                                                                                                                                                                             |  |             |  | Sample containers and COC match? yes <input checked="" type="checkbox"/> no <input type="checkbox"/>                          |  |
| 0479                                                                                                                                                                                                                                                   |  | Red Pond                                                                                                                                                                                  |  | 9-4-19                                                                                                                                                   |  | 09:07                                 |  | Vials Sent By Brighton                                                                                                                                                                                                                        |  |          |  |                  |  |                                                                                                                                                                             |  |             |  | BILLING ADDRESS (IF REQUIRED):                                                                                                |  |
| 0480                                                                                                                                                                                                                                                   |  | Outfall 1001                                                                                                                                                                              |  | 9-4-19                                                                                                                                                   |  | 10:00                                 |  | Used =                                                                                                                                                                                                                                        |  |          |  |                  |  |                                                                                                                                                                             |  |             |  | same as above                                                                                                                 |  |
| 0481, 0482, 0483                                                                                                                                                                                                                                       |  | Outfall 1001 (at QC)                                                                                                                                                                      |  | 9-4-19                                                                                                                                                   |  | 10:00                                 |  | Used =                                                                                                                                                                                                                                        |  |          |  |                  |  |                                                                                                                                                                             |  |             |  | Drinking H <sub>2</sub> O:                                                                                                    |  |
| 5)                                                                                                                                                                                                                                                     |  | 6)                                                                                                                                                                                        |  | 7)                                                                                                                                                       |  | 8)                                    |  | Fax to LCHD? yes <input type="checkbox"/> no <input checked="" type="checkbox"/>                                                                                                                                                              |  |          |  |                  |  |                                                                                                                                                                             |  |             |  | Chlorinated Water Supply? yes <input type="checkbox"/> no <input checked="" type="checkbox"/>                                 |  |
| 9)                                                                                                                                                                                                                                                     |  | 10)                                                                                                                                                                                       |  | MCL Failure: yes <input type="checkbox"/> no <input type="checkbox"/>                                                                                    |  | Client Notified (date/time/initials): |  | AMT.:                                                                                                                                                                                                                                         |  |          |  |                  |  |                                                                                                                                                                             |  |             |  |                                                                                                                               |  |
| Special Instructions: Please see 40CFR 122 Appendix D Table II, Table III and part of Table IV                                                                                                                                                         |  |                                                                                                                                                                                           |  |                                                                                                                                                          |  |                                       |  |                                                                                                                                                                                                                                               |  |          |  |                  |  |                                                                                                                                                                             |  |             |  |                                                                                                                               |  |
| Please fill out the Chain of Custody completely and review. Incorrect or incomplete information will result in a "hold" on all analyses.                                                                                                               |  |                                                                                                                                                                                           |  |                                                                                                                                                          |  |                                       |  |                                                                                                                                                                                                                                               |  |          |  |                  |  |                                                                                                                                                                             |  |             |  |                                                                                                                               |  |
| Trans. #                                                                                                                                                                                                                                               |  | RELINQUISHED BY:                                                                                                                                                                          |  | RECEIVED BY:                                                                                                                                             |  | DATE:                                 |  | TIME:                                                                                                                                                                                                                                         |  | Trans. # |  | RELINQUISHED BY: |  | RECEIVED BY:                                                                                                                                                                |  | DATE:       |  | TIME:                                                                                                                         |  |
| 1                                                                                                                                                                                                                                                      |  | [Signature]                                                                                                                                                                               |  | [Signature]                                                                                                                                              |  | 9-4-2019                              |  | 1:53                                                                                                                                                                                                                                          |  | 3        |  | [Signature]      |  | [Signature]                                                                                                                                                                 |  | [Signature] |  | [Signature]                                                                                                                   |  |
| 2                                                                                                                                                                                                                                                      |  | [Signature]                                                                                                                                                                               |  | [Signature]                                                                                                                                              |  | 9-4-2019                              |  | 3:50                                                                                                                                                                                                                                          |  | 4        |  | [Signature]      |  | [Signature]                                                                                                                                                                 |  | [Signature] |  | [Signature]                                                                                                                   |  |

QUALITY CONTROL (CASE) NARRATIVE  
FOR  
**Pall Corp.**

Client Reference: Clean Water Act Analysis 40CFR122 Infl. & Effl.  
Brighton Analytical Project No.: 60842

**Sample Information/Problems:**

There were no problems encountered with sample receipt. All samples were received in correct bottles with correct preservation.

**Analytical Information/Problems:**

There were no problems encountered with the analytical data.

**Quality Control:**

The quality control data is summarized in the Quality Assurance Data Package, which follows the analytical report.

- MS/MSD: A matrix spike and matrix spike duplicate were analyzed where applicable and all results were acceptable.

Available Cyanide & Pheol (4AAP): The Matrix spike/Matrix Spike Duplicate were out of control range due to sample matrix.

- LCS: A laboratory control sample (LCS-method standard) was analyzed where applicable and all results were acceptable.
- Surrogate recoveries: All surrogate recoveries were acceptable where applicable.

All tests performed in accordance with NELAC and all requirements met.  
NELAP Accreditation: Louisiana EPA #176507

Michelle Meisel  
Quality Assurance Manager





BRIGHTON ANALYTICAL, LLC

QUALITY ASSURANCE/QUALITY  
CONTROL

# GC/MS

## VOLATILE METHOD 8260/624

### REPRESENTATIVE BATCH PRECISION AND ACCURACY QUALITY CONTROL SUMMARY

Analysis Date: September 10, 2019 Spike Std. ID: 4037.2 Inst./Detec: HP7890/5975 Vol6  
 Laboratory ID: CK09482-83 Matrix: Water Analyst: CW

|                            | Matrix Spike - Precision |              |                                     | Matrix spike - Accuracy |            |            |           | Sample background ug/L | LCS +/- 20% | Method Blank |
|----------------------------|--------------------------|--------------|-------------------------------------|-------------------------|------------|------------|-----------|------------------------|-------------|--------------|
|                            | Spike 1 ug/L             | Spike 1 ug/L | Relative Percent Difference +/- 20% | Spk Conc ug/L           | % Recovery | % Recovery | Range (%) |                        |             |              |
| d4-1,2-Dichloroethane      | 51.1                     | 50.2         | 1.8                                 | 50                      | 102        | 100        | 70-130    | 97%                    | 101%        | 101%         |
| d8-Toluene                 | 50.2                     | 50.0         | 0.3                                 | 50                      | 100        | 100        | 70-130    | 100%                   | 101%        | 99%          |
| 4-Bromofluorobenzene       | 48.3                     | 49.0         | 1.4                                 | 50                      | 97         | 98         | 70-130    | 110%                   | 98%         | 110%         |
| COMPOUNDS                  |                          |              |                                     |                         |            |            |           |                        |             |              |
| 1,1 Dichloroethene         | 40.3                     | 40.7         | 1.1                                 | 50                      | 81%        | 81%        | 70-130    | <1                     | 98%         | <1           |
| 1,1 Dichloroethane         | 42.5                     | 42.5         | 0.0                                 | 50                      | 85%        | 85%        | 70-130    | <1                     | 91%         | <1           |
| Chloroform                 | 42.5                     | 43.6         | 2.4                                 | 50                      | 85%        | 87%        | 70-130    | <1                     | 93%         | <1           |
| 1,2- Dichloroethane        | 45.5                     | 46.2         | 1.5                                 | 50                      | 91%        | 92%        | 70-130    | <1                     | 94%         | <1           |
| Carbon tetrachloride       | 45.4                     | 47.2         | 3.9                                 | 50                      | 91%        | 94%        | 70-130    | <1                     | 100%        | <1           |
| 1,2- Dichloropropane       | 56.9                     | 47.7         | 17.6                                | 50                      | 114%       | 95%        | 70-130    | <1                     | 104%        | <1           |
| cis- 1,3 -dichloropropene  | 43.2                     | 45.4         | 4.8                                 | 50                      | 86%        | 91%        | 70-130    | <1                     | 98%         | <1           |
| Trichloroethene            | 47.4                     | 49.2         | 3.8                                 | 50                      | 95%        | 98%        | 70-130    | <1                     | 97%         | <1           |
| Dibromochloromethane       | 48.7                     | 50.9         | 4.4                                 | 50                      | 97%        | 102%       | 70-130    | <1                     | 104%        | <1           |
| 1,1,2- Trichloroethane     | 43.4                     | 44.9         | 3.5                                 | 50                      | 87%        | 90%        | 70-130    | <1                     | 93%         | <1           |
| Tetrachloroethane          | 41.1                     | 42.6         | 3.7                                 | 50                      | 82%        | 85%        | 70-130    | <1                     | 92%         | <1           |
| 1,1,2,2 -Tetrachloroethane | 45.0                     | 47.1         | 4.6                                 | 50                      | 90%        | 94%        | 70-130    | <1                     | 93%         | <1           |
| Chlorobenzene              | 43.0                     | 44.5         | 3.4                                 | 50                      | 86%        | 89%        | 70-130    | <1                     | 86%         | <1           |
| 1,3- Dichlorobenzene       | 42.6                     | 42.2         | 0.8                                 | 50                      | 85%        | 84%        | 70-130    | <1                     | 88%         | <1           |
| 1,4- Dichlorobenzene       | 41.5                     | 42.2         | 1.8                                 | 50                      | 83%        | 84%        | 70-130    | <1                     | 85%         | <1           |
| 1,2-Dichlorobenzene        | 42.8                     | 42.6         | 0.5                                 | 50                      | 86%        | 85%        | 70-130    | <1                     | 86%         | <1           |

ug/L is equivalent to ppb

Comments: \_\_\_\_\_

# GC/MS

## SEMI-VOLATILE METHOD 8270/625

### REPRESENTATIVE BATCH PRECISION AND ACCURACY QUALITY CONTROL SUMMARY

Analysis Date: 9/10/2019 Std ID: #3139/#3141 Inst./Detec: HP5973/GC-MS  
 Laboratory ID#: CK09481 Matrix: WATER Analyst: RG Ext. date: 09/09/2019

| SURROGATES              | Matrix Spike-Precision* |         |     | Matrix Spike-Acuracy |             |           |                       | LCS-%recovery |              |
|-------------------------|-------------------------|---------|-----|----------------------|-------------|-----------|-----------------------|---------------|--------------|
|                         | Spike 1                 | Spike 2 | RPD | Spike Conc. ug/L     | Recovery(%) | Range (%) | Sample(%) surr.recov. | LCS-MStd      | Method Blank |
| 2-Fluorophenol          | 44                      | 44      | 0.0 | 100                  | 44          | 34-101    | 26**                  | 78            | 78           |
| D5-Phenol               | 30                      | 29      | 2.0 | 100                  | 30          | 30-102    | 18**                  | 71            | 67           |
| D5-Nitrobenzene         | 108                     | 108     | 0.0 | 100                  | 108         | 44-123    | 92                    | 99            | 102          |
| 2-Fluorobiphenyl        | 113                     | 113     | 0.0 | 100                  | 113         | 47-130    | 102                   | 102           | 108          |
| 2,4,6-Tribromophenol    | 121                     | 123     | 1.6 | 100                  | 122         | 54-159    | 78                    | 112           | 110          |
| D14-Terphenyl           | 110                     | 111     | 0.9 | 100                  | 111         | 47-132    | 110                   | 109           | 105          |
| COMPOUNDS               |                         |         |     |                      |             |           |                       |               |              |
| Phenol                  | 29                      | 29      | 0.0 | 100                  | 29          | 27-119    | ND                    | 67            | <5           |
| 2-Chlorophenol          | 83                      | 82      | 1.2 | 100                  | 83          | 44-133    | ND                    | 93            | <5           |
| 1,4-Dichlorobenzene     | 67                      | 68      | 1.5 | 100                  | 68          | 37-119    | ND                    | 83            | <5           |
| 2-Methylphenol          | 60                      | 57      | 5.1 | 100                  | 59          | 44-123    | ND                    | 78            | <5           |
| N-nitrosodipropylamine  | 110                     | 107     | 2.8 | 100                  | 109         | 48-138    | ND                    | 103           | <5           |
| 1,2,4-Trichlorobenzene  | 89                      | 89      | 0.0 | 100                  | 89          | 47-139    | ND                    | 90            | <5           |
| 4-Chloro-3-methylphenol | 94                      | 90      | 4.3 | 100                  | 92          | 48-189    | ND                    | 106           | <5           |
| 2-Methylnapthalene      | 98                      | 96      | 2.1 | 100                  | 97          | 25-173    | ND                    | 93            | <5           |
| 2,4,5-Trichlorophenol   | 111                     | 110     | 0.9 | 100                  | 111         | 60-162    | ND                    | 107           | <5           |
| Acenaphthene            | 104                     | 104     | 0.0 | 100                  | 104         | 58-145    | ND                    | 99            | <5           |
| 3-Nitroaniline          | 112                     | 110     | 1.8 | 100                  | 111         | 66-164    | ND                    | 107           | <5           |
| Dibenzofuran            | 102                     | 101     | 1.0 | 100                  | 102         | 60-148    | ND                    | 97            | <5           |
| 2,4-Dinitrotoluene      | 107                     | 105     | 1.9 | 100                  | 106         | 61-159    | ND                    | 105           | <5           |
| 4-Nitrophenol           | 56                      | 56      | 0.0 | 100                  | 56          | 5-218     | ND                    | 101           | <5           |
| Pentachlorophenol       | 129                     | 131     | 1.5 | 100                  | 130         | 43-207    | ND                    | 121           | <5           |
| Di-n-butylphthalate     | 116                     | 119     | 2.6 | 100                  | 118         | 46-168    | ND                    | 112           | <5           |
| Pyrene                  | 99                      | 97      | 2.0 | 100                  | 98          | 47-141    | ND                    | 97            | <5           |

\* Matrix Spike Precision +/-20 RPD

Comments: \*\*Out of range due to sample matrix.

# GC/MS

## SEMI-VOLATILE METHOD 8270-SIM

### REPRESENTATIVE BATCH PRECISION AND ACCURACY QUALITY CONTROL SUMMARY

|                                 |                            |                                  |
|---------------------------------|----------------------------|----------------------------------|
| Analysis Date: <u>9/10/2019</u> | Std ID: <u>#3139/#3141</u> | Inst./Detec: <u>HP5973/GC-MS</u> |
| Laboratory ID#: <u>CK09481</u>  | Matrix: <u>Water</u>       | Analyst: <u>RG</u>               |

| SURROGATES             | Matrix Spike-Precision* |         |     | Matrix Spike-Acuracy |            |           |                      | LCS-%recovery |                 |
|------------------------|-------------------------|---------|-----|----------------------|------------|-----------|----------------------|---------------|-----------------|
|                        | Spike 1                 | Spike 2 | RPD | Spike Conc<br>ug/L   | % Recovery | Range (%) | Sample<br>Background | LCS-<br>MStd  | Method<br>Blank |
| Terphenyl-d14          | 123.0                   | 127.0   | 3.2 | 100                  | 125        | 50-150    | ND                   | 120           | ND              |
| COMPOUNDS              |                         |         |     |                      |            |           |                      |               |                 |
| Pentachlorophenol(SIM) | 129                     | 131     | 1.5 | 100                  | 130        | 50-150    | ND                   | 121           | <1.8            |

\* Matrix Spike Precision +/-20 RPD

Comments: \_\_\_\_\_

# GC/MS

## SEMI-VOLATILE METHOD 8270-SIM

### REPRESENTATIVE BATCH PRECISION AND ACCURACY QUALITY CONTROL SUMMARY

|                          |                     |                           |
|--------------------------|---------------------|---------------------------|
| Analysis Date: 9/10/2019 | Std ID: #3139/#3141 | Inst./Detec: HP5973/GC-MS |
| Laboratory ID#: CK09481  | Matrix: Water       | Analyst: RG               |

| SURROGATES            | Matrix Spike-Precision* |         |     | Matrix Spike-Acuracy |            |           |                      | LCS-%recovery |                 |
|-----------------------|-------------------------|---------|-----|----------------------|------------|-----------|----------------------|---------------|-----------------|
|                       | Spike 1                 | Spike 2 | RPD | Spike Conc.<br>ug/L  | % Recovery | Range (%) | Sample<br>Background | LCS-<br>MStd  | Method<br>Blank |
| Terphenyl-d14         | 111.0                   | 113.0   | 1.8 | 100                  | 112        | 50-150    | ND                   | 110           | ND              |
| <b>COMPOUNDS</b>      |                         |         |     |                      |            |           |                      |               |                 |
| N,N-Dimethylformamide | 57                      | 59      | 3.4 | 10                   | 58         | 40-160    | ND                   | 45            | <1.8            |

\* Matrix Spike Precision +/-20 RPD

Comments: \_\_\_\_\_

## Accuracy & Precision

**Batch:** 09/09/19MB

COMMENTS: \_\_\_\_\_

## REPRESENTATIVE BATCH QUALITY CONTROL

### Accuracy & Precision

**Analyst:** BY
**Parameter:** Chlorinated Hydrocarbons  
**Analysis Date:** 9/6/2019
**Method Reference:** EPA 612  
**Matrix:** Water
**Batch:** 09/05/19MB

| SPIKE - ACCURACY          |                        |                       |               |                         |                               |
|---------------------------|------------------------|-----------------------|---------------|-------------------------|-------------------------------|
| Laboratory ID             | Spike Conc.<br>(µg/mL) | Background<br>(µg/mL) | %<br>Recovery | Acceptable<br>Range (%) | Method Blank<br>Concentration |
| CK09481                   |                        |                       |               |                         |                               |
| DCB (Surrogate)           | 0.50                   | ND                    | 75 / 86       | 60 - 130                | 79%                           |
| Hexachlorobutadiene       | 0.10                   | ND                    | 86 / 88       | 60 - 130                | <0.01                         |
| Hexachlorocyclopentadiene | 0.10                   | ND                    | 105 / 109     | 60 - 130                | <0.01                         |
| Hexachlorobenzene         | 0.10                   | ND                    | 83 / 88       | 60 - 130                | <0.01                         |
| SPIKE - PRECISION         |                        |                       |               |                         |                               |
| Laboratory ID             | Observed A<br>(µg/mL)  | Observed B<br>(µg/mL) | RPD           | Acceptable<br>Range     | LCS<br>% Recovery             |
| CK09481                   |                        |                       |               |                         |                               |
| DCB (Surrogate)           | 0.38                   | 0.43                  | 13.4          | ≤ 20%                   | 95%                           |
| Hexachlorobutadiene       | 0.086                  | 0.088                 | 1.8           | ≤ 20%                   | 80%                           |
| Hexachlorocyclopentadiene | 0.105                  | 0.109                 | 3.0           | ≤ 20%                   | 119%                          |
| Hexachlorobenzene         | 0.083                  | 0.088                 | 5.0           | ≤ 20%                   | 81%                           |
| MISCELLANEOUS             |                        |                       |               |                         |                               |
|                           | Standard ID #          |                       |               |                         |                               |
| DCB (Surrogate)           | #2939.3                |                       |               |                         |                               |
| Chlorinated Hydrocarbons  | #4056                  |                       |               |                         |                               |

**COMMENTS:** \_\_\_\_\_

## REPRESENTATIVE BATCH QUALITY CONTROL

### Accuracy & Precision

**Analyst:** BY **Parameter:** Pesticides  
**Analysis Date:** 9/9/2019 **Method Reference:** EPA 608  
**Matrix:** Water **Batch:** 09/05/19MB

| SPIKE - ACCURACY  |                        |                       |               |                         |                               |
|-------------------|------------------------|-----------------------|---------------|-------------------------|-------------------------------|
| Laboratory ID     | Spike Conc.<br>(µg/mL) | Background<br>(µg/mL) | %<br>Recovery | Acceptable<br>Range (%) | Method Blank<br>Concentration |
| CK09481           |                        |                       |               |                         |                               |
| DCB (Surrogate)   | 0.50                   | ND                    | 64 / 67       | 18 - 138                | 81%                           |
| Lindane           | 0.05                   | ND                    | 94 / 96       | 68 - 125                | <0.01                         |
| Heptachlor        | 0.05                   | ND                    | 91 / 96       | 62 - 123                | <0.01                         |
| Aldrin            | 0.05                   | ND                    | 87 / 90       | 53 - 130                | <0.01                         |
| Dieldrin          | 0.05                   | ND                    | 92 / 76       | 48 - 123                | <0.02                         |
| Endrin            | 0.05                   | ND                    | 105 / 107     | 50 - 125                | <0.02                         |
| DDT               | 0.05                   | ND                    | 118 / 115     | 49 - 133                | <0.02                         |
| SPIKE - PRECISION |                        |                       |               |                         |                               |
| Laboratory ID     | Observed A<br>(µg/mL)  | Observed B<br>(µg/mL) | RPD           | Acceptable<br>Range     | LCS<br>% Recovery             |
| CK09481           |                        |                       |               |                         |                               |
| DCB (Surrogate)   | 0.32                   | 0.33                  | 3.7           | ≤ 20%                   | 70%                           |
| Lindane           | 0.047                  | 0.048                 | 1.9           | ≤ 20%                   | 94%                           |
| Heptachlor        | 0.046                  | 0.048                 | 5.1           | ≤ 20%                   | 98%                           |
| Aldrin            | 0.044                  | 0.045                 | 2.7           | ≤ 20%                   | 98%                           |
| Dieldrin          | 0.046                  | 0.038                 | 19.5          | ≤ 20%                   | 71%                           |
| Endrin            | 0.052                  | 0.053                 | 2.1           | ≤ 20%                   | 109%                          |
| DDT               | 0.059                  | 0.057                 | 2.8           | ≤ 20%                   | 120%                          |
| MISCELLANEOUS     |                        |                       |               |                         |                               |
|                   | Standard ID #          |                       |               |                         |                               |
| DCB (Surrogate)   | #2939.3                |                       |               |                         |                               |
| Pesticides        | #4049                  |                       |               |                         |                               |

**COMMENTS:** \_\_\_\_\_

## REPRESENTATIVE BATCH QUALITY CONTROL

### Accuracy & Precision

Analyst: BY

Parameter: PCB

Analysis Date: 9/9/2019

Method Reference: EPA 608

Matrix: Water

Batch: 09/05/19MB

#### SPIKE - ACCURACY

| Laboratory ID   | Spike Conc.<br>(µg/mL) | Background<br>(µg/mL) | %<br>Recovery | Acceptable<br>Range (%) | Method Blank<br>Concentration |
|-----------------|------------------------|-----------------------|---------------|-------------------------|-------------------------------|
| CK09481         |                        |                       |               |                         |                               |
| DCB (Surrogate) | 0.5                    | ND                    | 76 / 83       | 32 - 142                | 81%                           |
| Arochlor 1260   | 2.00                   | ND                    | 49 / 52       | 13 - 163                | < 0.2 µg/L                    |

#### SPIKE - PRECISION

| Laboratory ID   | Observed A<br>(µg/mL) | Observed B<br>(µg/mL) | RPD | Acceptable<br>Range | LCS<br>% Recover |
|-----------------|-----------------------|-----------------------|-----|---------------------|------------------|
| CK09481         |                       |                       |     |                     |                  |
| DCB (Surrogate) | 0.36                  | 0.39                  | 8.8 | ≤ 20%               | 70%              |
| Arochlor 1260   | 0.98                  | 1.04                  | 5.9 | ≤ 20%               | 109%             |

#### MISCELLANEOUS

|                 | Standard ID # |  |
|-----------------|---------------|--|
| DCB (Surrogate) | #2939.3       |  |
| Arochlor 1260   | #2779.3       |  |

COMMENTS: \_\_\_\_\_

# REPRESENTATIVE BATCH QUALITY CONTROL

## Accuracy & Precision

Analyst: RM

Parameter: Phenols

Analysis Date: 9/6/19

Method Reference: 420.1

### SPIKE - ACCURACY

| Laboratory ID | Spike Concentration | Background | % Recoveries | Acceptable Range (%) | Method Blank Concentration |
|---------------|---------------------|------------|--------------|----------------------|----------------------------|
| 9481 MS/MSD   | 500 ppb             | ND         | 33/32        | 80 - 120             | < 10                       |

### SPIKE - PRECISION

| Laboratory ID | Observed A | Observed B | RPD   | Acceptable Range |  |
|---------------|------------|------------|-------|------------------|--|
| 9481 MS/MSD   | 167        | 162        | 3.03% | ≤ 20%            |  |

### MISCELLANEOUS

|                                             | Standard ID # | % Recovery |  |
|---------------------------------------------|---------------|------------|--|
| Independent Secondary Reference Material:   | ERA P255      | 102%       |  |
| Method Standard (Laboratory Control Spike): |               | 94%        |  |

**COMMENTS:** Spike recovery is out of control due to sample matrix.

# **REPRESENTATIVE BATCH QUALITY CONTROL**

## **Accuracy & Precision**

Analyst: RM

Parameter: Available Cyanide

Analysis Date: 9/10/19

Method Reference: OIA-1677

### **SPIKE - ACCURACY**

| Laboratory ID | Spike Concentration | Background | % Recoveries | Acceptable Range (%) | Method Blank Concentration |
|---------------|---------------------|------------|--------------|----------------------|----------------------------|
| 9481 MS/MSD   | 50 ppb              | ND         | 35/36        | 80 - 120             | <2 ppb                     |

| Laboratory ID | Observed A | Observed B | RPD   | Acceptable Range |  |
|---------------|------------|------------|-------|------------------|--|
| 9481 MS/MSD   | 17.417     | 18.186     | 4.32% | ≤ 20%            |  |

### **MISCELLANEOUS**

|                                             | Standard ID # | %Recovery |  |
|---------------------------------------------|---------------|-----------|--|
| Independent Secondary Reference Material:   |               |           |  |
| Method Standard (Laboratory Control Spike): |               | 99%       |  |

**COMMENTS:** \_\_\_\_\_

# ICP-OES

## METHOD 200.7/6010

### REPRESENTATIVE BATCH PRECISION AND ACCURACY QUALITY CONTROL SUMMARY

Analysis Date: 09/10/2019      Standard ID: 071219 ICP      Batch: 09/06/2019 W2

Matrix Spike Lab ID: CK09481      Matrix: Total      Analyst: LT

| Metals    | Matrix Spike - Precision * |                       |         | Matrix Spike - Accuracy** |                 |                  |                 | Miscellaneous*** |                    |                         |
|-----------|----------------------------|-----------------------|---------|---------------------------|-----------------|------------------|-----------------|------------------|--------------------|-------------------------|
|           | Matrix Spike (ug)          | Matrix Spike Dup (ug) | RPD (%) | Spk Conc (ug)             | MS Recovery (%) | MSD Recovery (%) | Blank Conc (ug) | Method Blk (ug)  | LCS-Method STD (%) | Secondary Source ID (%) |
| Boron     | 335                        | 331                   | 1.2     | 400                       | 79.0            | 78.1             | 18.7            | <20              | 95.1               | 98.7                    |
| Lithium   | 338                        | 325                   | 4.1     | 400                       | 83.3            | 79.9             | 4.8             | <20              | 97.6               | 91.6                    |
| Strontium | 581                        | 571                   | 1.7     | 400                       | 77.4            | 74.9             | 271.4           | <10              | 97.9               | 97.9                    |
| Titanium  | 335                        | 330                   | 1.6     | 400                       | 83.8            | 82.4             | 0               | <10              | 92.8               | 97.5                    |

\* Matrix spike precision range +/- 20% RPD

\*\* Matrix spike accuracy range +/- 30% recovery

\*\*\* LCS accuracy range +/- 15% recovery / Ind std accuracy range +/- 10% recovery

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# ICP-MS

## EPA METHOD 200.8/6020

### REPRESENTATIVE BATCH PRECISION AND ACCURACY QUALITY CONTROL SUMMARY

Analysis Date: 09/06/2019

Standard ID: 081419 H2O

Batch: 9/6/2019 W2

Matrix Spike Lab ID: CK09481

Matrix: Total

Analyst: LT/MH

| Metals     | Matrix Spike - Precision * |                         |         | Matrix Spike - Accuracy** |                 |                  |                    | Miscellaneous***  |                    |                       |
|------------|----------------------------|-------------------------|---------|---------------------------|-----------------|------------------|--------------------|-------------------|--------------------|-----------------------|
|            | Matrix Spike (ug/L)        | Matrix Spike Dup (ug/L) | RPD (%) | Spk Conc (ug/L)           | MS Recovery (%) | MSD Recovery (%) | Sample Conc (ug/L) | Method Blk (ug/L) | LCS-Method STD (%) | Ind. Std SPEX 1&3 (%) |
| Beryllium  | 1924                       | 1910                    | 0.7     | 2000                      | 96.2            | 95.5             | 0                  | <1                | 95.5               | 95.9                  |
| Sodium     | 101832                     | 100418                  | 1.4     | 20000                     | 116.2           | 109.2            | 78586              | <1000             | 105.3              | 100.8                 |
| Magnesium  | 54276                      | 54981                   | 1.3     | 20000                     | 112.7           | 116.2            | 31743              | <100              | 98.2               | 94.7                  |
| Aluminium  | 1882                       | 1908                    | 1.4     | 2000                      | 94.1            | 95.4             | 0                  | <50               | 96.6               | 98.3                  |
| Calcium    | 139136                     | 138889                  | 0.2     | 20000                     | 185.0           | 183.8            | 102137             | <100              | 96.3               | 92.9                  |
| Chromium   | 1960                       | 1963                    | 0.2     | 2000                      | 98.0            | 98.2             | 0                  | <1                | 97.7               | 98.1                  |
| Manganese  | 1998                       | 1010                    | 65.7    | 2000                      | 96.4            | 47.0             | 71                 | <5                | 96.7               | 97.6                  |
| Iron       | 21620                      | 21714                   | 0.4     | 20000                     | 98.3            | 98.8             | 1951               | <20               | 97.1               | 97.3                  |
| Cobalt     | 1972                       | 1987                    | 0.8     | 2000                      | 98.6            | 99.4             | 0                  | <10               | 99.5               | 98.6                  |
| Nickel     | 1960                       | 1985                    | 1.3     | 2000                      | 98.0            | 99.3             | 0                  | <1                | 99.4               | 99.9                  |
| Copper     | 1980                       | 1986                    | 0.3     | 2000                      | 99.0            | 99.3             | 0                  | <1                | 100.5              | 102.6                 |
| Zinc       | 1889                       | 1885                    | 0.2     | 2000                      | 94.5            | 94.3             | 0                  | <10               | 97.0               | 96.3                  |
| Arsenic    | 1902                       | 1938                    | 1.9     | 2000                      | 95.0            | 96.8             | 2                  | <1                | 95.4               | 97.4                  |
| Selenium   | 1848                       | 1893                    | 2.4     | 2000                      | 92.4            | 94.7             | 0                  | <1                | 93.4               | 94.8                  |
| Molybdenum | 1900                       | 1920                    | 1.0     | 2000                      | 94.7            | 95.7             | 7                  | <10               | 94.4               | 95.5                  |
| Silver     | 18.92                      | 18.91                   | 0.1     | 20                        | 94.6            | 94.6             | 0                  | <0.2              | 95.0               | 97.1                  |
| Cadmium    | 1903                       | 1914                    | 0.6     | 2000                      | 95.2            | 95.7             | 0                  | <0.2              | 95.8               | 97.6                  |
| Antimony   | 2048                       | 2039                    | 0.4     | 2000                      | 102.3           | 101.9            | 2                  | <1                | 96.7               | 103.7                 |
| Barium     | 2091                       | 2137                    | 2.2     | 2000                      | 92.0            | 94.3             | 252                | <5                | 94.9               | 98.3                  |
| Thallium   | 1933                       | 1938                    | 0.3     | 2000                      | 96.7            | 96.9             | 0                  | <0.5              | 96.0               | 100.3                 |
| Lead       | 1900                       | 1919                    | 1.0     | 2000                      | 95.0            | 96.0             | 0                  | <1                | 95.4               | 97.3                  |

\* Matrix spike precision range +/- 20% RPD

\*\* Matrix spike accuracy range +/- 30% recovery

\*\*\* LCS accuracy range +/- 15% recovery / Ind std accuracy range +/- 10% recovery

Comments: Ca out of range due to sample matrix

## REPRESENTATIVE BATCH QUALITY CONTROL

### Accuracy & Precision

Analyst: LS Parameter: Mercury  
 Analysis Date: 09/09/19 Method Reference: 245.1/7470/7471  
 Matrix: Total/Dissolved Batch: W1

| SPIKE - ACCURACY                            |                            |                   |                |                      |                                   |
|---------------------------------------------|----------------------------|-------------------|----------------|----------------------|-----------------------------------|
| Laboratory ID                               | Spike Concentration (ug/L) | Background (ug/L) | Recoveries (%) | Acceptable Range (%) | Method Blank Concentration (ug/L) |
| CK09481                                     | 2.00                       | 0.019             | 105 / 106      | 70 - 130             | <0.2                              |
|                                             |                            |                   |                |                      |                                   |
| Laboratory ID                               | Observed A (ug/L)          | Observed B (ug/L) | RPD (%)        | Acceptable Range (%) |                                   |
| CK09481                                     | 2.11                       | 2.14              | 0.32           | 0 - 20               |                                   |
| MISCELLANEOUS                               |                            |                   |                |                      |                                   |
|                                             |                            | Standard ID #     | Recovery (%)   | Acceptable Range (%) |                                   |
| Independent Secondary Reference Material:   |                            | SPEX 090919       | 100            | 90 - 110             |                                   |
| Method Standard (Laboratory Control Spike): |                            | Hg 090919         | 103            | 80 - 120             |                                   |

COMMENTS: \_\_\_\_\_