

Analytical Report

Serialized: 04/18/2017 03:20pm QC21

JOHN SWANSON
PEMBERTON TOWNSHIP PUBLIC SCHOOLS
PO BOX 228
ONE EGBERT STREET
PEMBERTON,NJ 08068

Regarding:

PEMBERTON TOWNSHIP PUBLIC SCHOOLS ONE EGBERT STREET PEMBERTON, NJ 08068

PROJECT ID:

AP0220

LABORATORY REPORT NUMBER:

L6753606

PO NUMBER:

700009



Authorized by: Raphael C. Fratti, Laboratory Director

QCL Accreditations: Southampton Div: EPA ID PA00018; NELAP ID's: PA 09-00131, NJ PA166, NY 11223
State ID's: CT PH-0768, DE PA-018, MD 206, SC 89021001; FDA Reg. # : 2515238
Delaware Division: State ID's: DE 00011, MD 138
Vineland Division: State ID: NJ 06005; Reading Div: State ID: PA 06-03543
Wind Gap Division: State ID's: PA 48-01334, NJ PA001
E. Rutherford Division: State ID: NJ 02015

Analytical Report Printed 04/18/17 15:20 QC21

PEMBERTON TOWNSHIP PUBLIC SCHOOLS AP0220

P.O. No: 700009 Inv. No: 1863227 PI PWSID:

JOHN SWANSON PEMBERTON TOWNSHIP PUBLIC SCHOOLS ONE EGBERT STREET PEMBERTON, NJ 08068

Regarding: JOHN SWANSON PEMBERTON TOWNSHIP PUBLIC SCHOOLS ONE EGBERT STREET PEMBERTON, NJ 08068

SAMPLE SUMMARY

| Lab ID | Collected | Received | Matrix | Client ID |
|------------|----------------|----------------|--------|--------------------------|
| | | | | |
| L6753606-1 | 04/04/17 14:14 | 04/05/17 14:00 | WATER | NEWCOMB |
| L6753606-2 | 04/04/17 14:24 | 04/05/17 14:00 | WATER | HELEN FORT MIDDLE SCHOOL |
| L6753606-3 | 04/04/17 14:35 | 04/05/17 14:00 | WATER | PEMBERTON EARLY CHILD |
| L6753606-4 | 04/04/17 14:44 | 04/05/17 14:00 | WATER | PTHS A-SIDE WELL |
| L6753606-5 | 04/04/17 14:54 | 04/05/17 14:00 | WATER | PHTS B-SIDE WELL |
| L6753606-6 | 04/04/17 | 04/05/17 14:00 | WATER | FIELD BLANK |

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Sample Description:

NEWCOMB

Sample Number: Matrix:

L6753606-1 WATER

Samp. Date/Time/Temp: Sampled by:

04/04/17 02:14pm NA C

Customer

Received Temp: 2.1 C Iced (Y/N):

SUBCONTRACT (EUROFINS LANCASTER)

| Parameter CAS Result MDL RL | |
|--|--|
| Perfluorobutanesulfonic Acid N/A ND 0.80 3 | |
| Perfluoroheptanoic Acid N/A ND 0.50 2 | |
| Perfluorohexanesulfonic Acid N/A ND 1 3 | |
| Perfluorononanoic Acid N/A ND 0.60 2 | |
| Perfluorooctane Sulfonic Acid N/A ND 2 6 | |
| Perfluorooctanoic Acid 335-67-1 ND 0.60 2 | |
| Surrogate CAS Recovery % Limits % | |
| 13C3-Perfluorobutanesulfonate N/A 90 70-130% | |
| 13C3-Perfluorohexanesulfonate N/A 81 70-130% | |
| 13C4-Perfluoroheptanoic Acid N/A 94 70-130% | |
| 13C8-Perfluorooctanesulfonate N/A 82 70-130% | |
| 13C8-Perfluorooctanoic Acid N/A 86 70-130% | |
| 13C9-Perfluorononanoic Acid N/A 87 70-130% | |

Sample Comments | Result Qualifiers:

*=This limit was used in the evaluation of the final result.

Analytical Report Printed 04/18/17 15:20

HELEN FORT MIDDLE SCHOOL Sample Description:

Samp. Date/Time/Temp: 04/04/17 02:24pm NA C Sample Number: L6753606-2

WATER Sampled by: Matrix: Customer

Received Temp: Iced (Y/N): 2.1 C

SUBCONTRACT (EUROFINS LANCASTER)

| Analytical Method: Dilution: Units: | EPA 537 Rev. 1.1 mod 1 ng/l | Run Date: Analyst: Instrument: | 04/11/17 05:55 MCD | 5PM | Workgroup: File ID: Basis: | | 53606_1785908_v1.csv |
|--|---|--|--------------------------|-------------------------------------|--|------------------------|----------------------|
| | tanesulfonic Acid | | CAS N/A | Result ND | | MDL 0.80 | RL 3 |
| Perfluorohe Perfluorono | ptanoic Acid xanesulfonic Acid nanoic Acid tane Sulfonic Acid | | N/A N/A N/A N/A | ND ND ND ND | | 0.50 1 0.60 2 | 2 3 2 |
| Perfluorooc | | | 335-67-1 | ND ND | | 0.60 | 6 2 |
| 13C3-Perflu 13C4-Perflu 13C8-Perflu 13C8-Perflu | orobutanesulfonate orohexanesulfonate oroheptanoic Acid orooctanesulfonate orooctanoic Acid orononanoic Acid | CAS N/A N/A N/A N/A N/A | 3 | Recovery % 97 81 95 93 83 98 | Limits % 70-130% 70-130% 70-130% 70-130% 70-130% 70-130% | | |

Sample Comments | Result Qualifiers:

^{*=}This limit was used in the evaluation of the final result.

Analytical Report Printed 04/18/17 15:20

Sample Description: PEMBERTON EARLY CHILD

04/04/17 02:35pm NA C Sample Number: Samp. Date/Time/Temp: L6753606-3

Sampled by: lced (Y/N): Matrix: WATER Customer

Received Temp: 2.1 C

SUBCONTRACT (EUROFINS LANCASTER)

| Analytical Method: Dilution: Units: | EPA 537 Rev. 1.1 mod 1 ng/l | Run Date: Analyst: Instrument: | 04/11/17 06:1 MCD | 6PM | Workgroup: File ID: Basis: | | '53606_1785908_v1.csv |
|---|-----------------------------------|--------------------------------------|----------------------|------------|----------------------------------|------|-----------------------|
| Parameter | | | CAS | Result | | MDL | RL |
| | tanesulfonic Acid | | N/A | ND | | 0.80 | 3 |
| Perfluorohe | ptanoic Acid | | N/A | ND | | 0.50 | 2 |
| Perfluorohe | xanesulfonic Acid | | N/A | ND | | 1 | 3 |
| Perfluorono | nanoic Acid | | N/A | ND | | 0.60 | 2 |
| Perfluorooc | tane Sulfonic Acid | | N/A | ND | | 2 | 6 |
| Perfluorooc | tanoic Acid | | 335-67-1 | ND | | 0.60 | 2 |
| Surrogate | | CAS | 3 | Recovery % | Limits % | | |
| 13C3-Perflu | ıorobutanesulfonate | N/A | | 99 | 70-130% | | |
| 13C3-Perflu | ıorohexanesulfonate | N/A | | 82 | 70-130% | | |
| 13C4-Perflu | oroheptanoic Acid | N/A | | 93 | 70-130% | | |
| | ıorooctanesulfonate | N/A | | 85 | 70-130% | | |
| 13C8-Perflu | iorooctanoic Acid | N/A | | 82 | 70-130% | | |
| 13C9-Perflu | iorononanoic Acid | N/A | | 88 | 70-130% | | |

Sample Comments | Result Qualifiers:

^{*=}This limit was used in the evaluation of the final result.

Analytical Report Printed 04/18/17 15:20

Sample Description:

PTHS A-SIDE WELL

Sample Number: Matrix: **Received Temp:**

L6753606-4 WATER 2.1 C

Samp. Date/Time/Temp:

04/04/17 02:44pm NA C

Sampled by: lced (Y/N): Customer

SUBCONTRACT (EUROFINS LANCASTER)

| Analytical Method: Dilution: Units: | EPA 537 Rev. 1.1 mod 1 ng/l | | 04/11/17 06:3 MCD | 7PM | Workgroup: File ID: Basis: | | 753606_1785908_v1.csv |
|---|-----------------------------------|-----|----------------------|------------|----------------------------------|------|-----------------------|
| Paramete | er | | CAS | Result | | MDL | RL |
| Perfluorob | outanesulfonic Acid | | N/A | ND | | 0.80 | 3 |
| Perfluoroh | eptanoic Acid | | N/A | ND | | 0.50 | 2 |
| Perfluoroh | exanesulfonic Acid | | N/A | 1 J | | 1 | 3 |
| Perfluoron | ionanoic Acid | | N/A | ND | | 0.60 | 2 |
| Perfluoroo | ctane Sulfonic Acid | | N/A | 7 | | 2 | 6 |
| Perfluoroo | octanoic Acid | | 335-67-1 | ND | | 0.60 | 2 |
| Surrogat | e | CAS | | Recovery % | Limits % | | |
| 13C3-Perf | fluorobutanesulfonate | N/A | | 95 | 70-130% | | |
| 13C3-Perf | fluorohexanesulfonate | N/A | | 80 | 70-130% | | |
| 13C4-Perf | fluoroheptanoic Acid | N/A | | 82 | 70-130% | | |
| 13C8-Perf | fluorooctanesulfonate | N/A | | 96 | 70-130% | | |
| 13C8-Perf | fluorooctanoic Acid | N/A | | 78 | 70-130% | | |
| 13C9-Perf | fluorononanoic Acid | N/A | | 91 | 70-130% | | |

Sample Comments | Result Qualifiers:

^{*=}This limit was used in the evaluation of the final result.

Analytical Report Printed 04/18/17 15:20

Sample Description:

PHTS B-SIDE WELL

Sample Number: Matrix: **Received Temp:**

L6753606-5 WATER 2.1 C

Samp. Date/Time/Temp: Sampled by: lced (Y/N):

04/04/17 02:54pm NA C

Customer

SUBCONTRACT (EUROFINS LANCASTER)

| Analytical Method: Dilution: Units: | EPA 537 Rev. 1.1 mod 1 ng/l | Run Date: Analyst: Instrument: | 04/11/17 06:5 MCD | 7PM | Workgroup: File ID: Basis: | | 753606_1785908_v1.csv |
|---|-----------------------------------|--------------------------------------|----------------------|------------|----------------------------------|------|-----------------------|
| Parameter | | | CAS | Result | | MDL | RL |
| Perfluorobu | tanesulfonic Acid | | N/A | ND | | 0.80 | 3 |
| Perfluorohe | ptanoic Acid | | N/A | ND | | 0.50 | 2 |
| Perfluorohe | xanesulfonic Acid | | N/A | ND | | 1 | 3 |
| Perfluorono | nanoic Acid | | N/A | ND | | 0.60 | 2 |
| Perfluorooc | tane Sulfonic Acid | | N/A | ND | | 2 | 6 |
| Perfluorooc | tanoic Acid | | 335-67-1 | ND | | 0.60 | 2 |
| Surrogate | | CAS | 3 | Recovery % | Limits % | | |
| 13C3-Perflu | ıorobutanesulfonate | N/A | | 99 | 70-130% | | |
| 13C3-Perflu | ıorohexanesulfonate | N/A | | 88 | 70-130% | | |
| 13C4-Perflu | oroheptanoic Acid | N/A | | 96 | 70-130% | | |
| | ıorooctanesulfonate | N/A | | 99 | 70-130% | | |
| 13C8-Perflu | iorooctanoic Acid | N/A | | 92 | 70-130% | | |
| 13C9-Perflu | iorononanoic Acid | N/A | | 110 | 70-130% | | |

Sample Comments | Result Qualifiers:

^{*=}This limit was used in the evaluation of the final result.

Analytical Report Printed 04/18/17 15:20

Sample Description:

FIELD BLANK

Sample Number: Matrix:

Received Temp:

L6753606-6 WATER 2.1 C

Samp. Date/Time/Temp: Sampled by: lced (Y/N):

04/04/17 00:00am NA C

Customer

SUBCONTRACT (EUROFINS LANCASTER)

| Analytical Method: Dilution: Units: | EPA 537 Rev. 1.1 mod 1 ng/l | Run Date: Analyst: Instrument | 04/11/17 07:1 MCD | 8PM | Workgroup: File ID: Basis: | | 53606_1785908_v1.csv |
|---|-----------------------------------|-------------------------------------|----------------------|------------|----------------------------------|------|----------------------|
| Parameter | • | | CAS | Result | | MDL | RL |
| Perfluorobu | tanesulfonic Acid | | N/A | ND | | 0.80 | 3 |
| Perfluorohe | ptanoic Acid | | N/A | ND | | 0.50 | 2 |
| Perfluorohe | exanesulfonic Acid | | N/A | ND | | 1 | 3 |
| Perfluorono | nanoic Acid | | N/A | ND | | 0.60 | 2 |
| Perfluorood | tane Sulfonic Acid | | N/A | ND | | 2 | 6 |
| Perfluorood | tanoic Acid | | 335-67-1 | ND | | 0.60 | 2 |
| Surrogate | | CAS | S | Recovery % | Limits % | | |
| • | uorobutanesulfonate | N/A | | 96 | 70-130% | | |
| 13C3-Perflu | uorohexanesulfonate | N/A | | 99 | 70-130% | | |
| 13C4-Perflu | uoroheptanoic Acid | N/A | | 103 | 70-130% | | |
| 13C8-Perflu | uorooctanesulfonate | N/A | | 89 | 70-130% | | |
| 13C8-Perflu | uorooctanoic Acid | N/A | | 96 | 70-130% | | |
| 13C9-Perflu | uorononanoic Acid | N/A | | 91 | 70-130% | | |

Sample Comments | Result Qualifiers:

cc: JOHN SWANSON, PEMBERTON TOWNSHIP PUBLIC SCHOOLS CHARLES VESTER



^{*=}This limit was used in the evaluation of the final result.

DEFINITIONS

Eurofins OC, Inc. (EQC)

The following terms or abbreviations are used in this report:

| MPN | Most probable number | PL | Customer-specific limit |
|------|--|------|--|
| CFU | Colony forming unit | DF | Dilution Factor (For Microbiology, DF = volume of sample tested) |
| POS | Positive / Present | QUAL | Qualifier (Q) |
| NEG | Negative / Absent | NTU | Nephelometric turbidity units |
| PRES | Presumptive | RL | Laboratory reporting limit or Limit of Quantitation (LOQ) |
| MF | Membrane Filtration | MCL | EPA recommended "Maximum Contaminant Level" |
| TNTC | Too numerous to count | MDL | Method Detection Limit |
| DRY | The result was reported on a dry weight basis. | ND | Analyte concentration not detected greater than the RL / MDL |

TIC Tentatively Identified Compounds (Library Search Compounds); concentrations are estimated values only.

ppm (mg/l) Parts per million: equivalent to 1 milligram per kilogram (mg/Kg) for solids or one milligram per liter (mg/L) for aqueous

samples.

ppb (ug/L) Parts per billion: equivalent to 1 microgram per kilogram (ug/Kg) for solids or one microgram per liter (ug/L) for aqueous

samples.

Less than: In conjunction with a numerical value, indicates a concentration less than RL / MDL.

Greater than: In conjunction with a numerical value, indicates a concentration greater than RL / MDL.

Data Qualifiers (EPA CLP Convention)

| ***** | 21 11 CEI CONVENIION) | | |
|-------|---|---|---|
| J | Estimated value \geq MDL but \leq RL. | Е | Metals: Estimated value due to presence of |
| | | | interference |
| В | Analyte was detected in the method blank | E | Organics: Concentration exceeds calibration range. |
| | | | |
| U | Analyte not detected above RL or MDL, when MDL reported. | E | Microbiology: estimated CFU count |
| | | | |
| N | Presumptive evidence of compound in library search | M | Metals: Duplicate precision for an element outside |
| | | | control limit |
| P1 or | Column precision criteria not met, report lower value | N | Metals: Spike recovery for an element outside |
| P | | | control limits |
| P2 | Column precision criteria not met, report higher value | С | Result confirmed by reanalysis |
| W | Dissolved Oxygen uptake in the unseeded blank is greater than | Q | Defined in report or case narrative or data package |
| | 0.20 mg/L. | | |
| T | Temperature receipt exceedance, refer to Sample Comments/ | V | Analyte concentration >100% between columns; |
| | Results Qualifiers section. | | reporting limit elevated |

Warranties, Terms, and Conditions

- Unless otherwise specified in the Parameter field, analyses (excluding "Field Parameters") were performed at the EQC Southampton facility (1205 Industrial Boulevard, Southampton, PA 18966). Pharmaceutical testing is performed the EQC facility in Horsham (702 Electronic Drive, Horsham, PA 19044).
- The test results meet all TNI or other applicable regulatory agency requirements, including holding times and preservation, unless otherwise
 indicated.
- The report shall not be reproduced, except in full, without the written consent of the laboratory.
- All samples are collected as "grab" samples unless otherwise identified.
- The reported results relate only to the sample as tested. EQC is not responsible for sample integrity unless sampling has been performed by a member of our staff.
- EQC is not responsible for sampling and/or testing omissions. Note that regulatory authorities may assess substantial fines for testing omissions. Please track your sample collection schedules and results on a regular basis (e.g. weekly, monthly, or quarterly) to ensure compliance. EQC's internet program "LIVE ACCESS" will provide you with real-time access to collection dates and testing results. Please contact Customer Service for further information.
- The following personnel or their deputies have approved the results of the tests performed by EQC: Nicki Smith (Environmental Chemistry), Amanda Berd (Pharmaceutical), Sue Abbott (EQC Delaware).

EQC Accreditations

| Southampton | EPA ID: NELAP IDs: State IDs: FDA Reg #: | PA00018 PA 09-00131; NJ PA166; NY 11223 CT PH-0768; DE PA-018; MD 206 2515238 | Eurofins, Lan | caster: Lab IDs: | NJ: PA011 NY: 10670 MD: 100 | |
|---|---|--|---------------------|------------------------|-----------------------------------|--|
| Delaware Wind Gap East Rutherford | State IDs: State IDs: State ID: | DE 00011; MD 138 PA 48-01334; NJ PA001 NJ 02015 | Reading Vineland | State ID: State ID: | PA 06-03543 NJ 06005 | |

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ANALYTICAL RESULTS

Prepared by:

Prepared for:

Eurofins Lancaster Laboratories Environmental 2425 New Holland Pike Lancaster, PA 17601 Eurofins QC Laboratories 1205 Industrial Blvd. P.O. Box 514 Southampton, PA 18966-0514

Report Date: April 16, 2017

Project: L6753606

Submittal Date: 04/05/2017 Group Number: 1785908 PO Number: L6753606 State of Sample Origin: NJ

| | Lancaster Labs |
|---------------------------|----------------|
| Client Sample Description | <u>(LL) #</u> |
| L6753606-1 Potable Water | 8924874 |
| L6753606-2 Potable Water | 8924875 |
| L6753606-3 Potable Water | 8924876 |
| L6753606-4 Potable Water | 8924877 |
| L6753606-5 Potable Water | 8924878 |
| L6753606-6 Potable Water | 8924879 |

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To

Eurofins QC Laboratories

Attn: Nicki Smith

Respectfully Submitted,

Wendy A. Kozma

Principal Specialist Group Leader

Wendy a. Kenga



Lançaster Laboratories Environmental

Case Narrative

Project Name: L6753606 LL Group #: 1785908

General Comments:

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below. Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are not included in this data set

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Analysis Specific Comments:

EPA 537 Rev. 1.1 modified, Misc. Organics

Sample #s: 8924874, 8924875, 8924876, 8924877, 8924878, 8924879

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.



Lancaster Laboratories Environmental

Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Quality Control Summary

Client Name: Eurofins QC Laboratories

Group Number: 1785908

Reported: 04/16/2017 15:53

Matrix QC may not, be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

| Analysia Name | Result | MDL * * | LOQ |
|---------------------------|-------------|------------|--------------|
| | ng/l | ng/l | ng/l |
| Batch number: 17097009 | Sample numb | er(s): 892 | 4874-8924879 |
| Perfluorooctanoic acid | N.D. | 0.6 | 2 |
| Perfluorononanoic acid | N.D. | 0.6 | 2 |
| Perfluoroheptanoic acid | N.D. | 0.5 | 2 |
| Perfluorobutanesulfonate | N.D. | 0.8 | 3 |
| Perfluorohexanesulfonate | N.D. | 1 | 3 |
| Perfluoro-octanesulfonate | N.D. | 2 | 6 |

LCS/LCSD

| Analysis Name | LCS Spike Added ng/l | LCS Conc ng/l | LCSD Spike Added ng/l | LCSD Conc ng/l | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---------------------------|----------------------------|---------------------|-----------------------------|----------------------|-------------|--------------|--------------------|-----|------------|
| Batch number: 17097009 | Sample numbe | r(s): 89248 | 74-8924879 | | | | | | |
| Perfluorooctanoic acid | 200 | 160.63 | 200 | 165.4 | 80 | 83 | 70-130 | 3 | 30 |
| Perfluorononanoic acid | 200 | 168.86 | 200 | 173.05 | 84 | 87 | 70-130 | 2 | 30 |
| Perfluoroheptanoic acid | 200 | 156.95 | 200 | 163.8 | 78 | 82 | 70-130 | 4 | 30 |
| Perfluorobutanesulfonate | 176.8 | 159.3 | 176.8 | 141.25 | 90 | 80 | 70-130 | 12 | 30 |
| Perfluorohexanesulfonate | 189.2 | 155.93 | 189.2 | 166.39 | 82 | 88 | 70-130 | 6 | 30 |
| Perfluoro-octanesulfonate | 191.2 | 149.02 | 191.2 | 152.2 | 78 | 80 | 70-130 | 2 | 30 |

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

| Analysis Name | Unapiked Conc ng/l | MS Spike Added ng/l | MS Conc ng/l | MSD Spike Added ng/l | MSD Conc ng/l | MS %Rec | MSD %Rec | MS/MSD Limits | RPD | RPD Max |
|--------------------------|--------------------------|---------------------------|--------------------|----------------------------|---------------------|------------|-------------|------------------|-----|------------|
| Batch number: 17097009 | Sample numb | er(s): 8924 | 874-8924 | 879 UNSPK: 8 | 3924874 | | | | | |
| Perfluoroctanoic acid | N.D. | 200.92 | 151.52 | | | 75 | | 70-130 | | |
| Perfluorononanoic acid | N.D. | 200.92 | 159.56 | | | 79 | | 70-130 | | |
| Perfluoroheptanoic acid | N.D. | 200.92 | 170.2 | | | 85 | | 70-130 | | |
| Perfluorobutanesulfonate | N.D. | 177.62 | 141.74 | | | 80 | | 70-130 | | |
| Perfluorohexanesulfonate | N.D. | 190.07 | 171.32 | | | 90 | | 70-130 | | |

^{*-} Outside of specification

P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

^{**-}This limit was used in the evaluation of the final result for the blank

⁽¹⁾ The result for one or both determinations was less than five times the LOQ.

⁽²⁾ The unspiked result was more than four times the spike added.



Lancaster Laboratories Environmental

Analysis Report

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Quality Control Summary

Client Name: Eurofins QC Laboratories

Reported: 04/16/2017 15:53

Group Number: 1785908

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

| Analysis Name | Unspiked Conc ng/l | MS Spike Added ng/l | MS Conc ng/l | MSD Spike Added ng/l | MSD Cone ng/l | MS %Rec | MSD %Rec | M9/MSD Limits | RPD | RPD Max | |
|---------------------------|--------------------------|---------------------------|--------------------|----------------------------|---------------------|------------|-------------|------------------|-----|------------|--|
| Perfluoro-octanesulfonate | N.D. | 192.08 | 155 | | | 81 | | 70-130 | | | |

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: PFAS in Water by LC/MS/MS

Batch number: 17097009

| | 13C3-PFBS | 13C3-PFHxS | 13C4-PFHpA | 13C8-PFOA | 13C8-PFOS | 13C9-PFNA |
|---------|-----------|------------|------------|-----------|-----------|-----------|
| 8924874 | 90 | 81 | 94 | 86 | 82 | 87 |
| 8924875 | 97 | 81 | 95 | 83 | -93 | 98 |
| 8924876 | 99 | 82 | 93 | 82 | 85 | 88 |
| 8924877 | 95 | 80 | 82 | 78 | 96 | 91 |
| 8924878 | 99 | 88 | 96 | 92 | 99 | 110 |
| 8924879 | 96 | 99 | 103 | 96 | 89 | 91 ´ |
| Blank | 93 | 89 | 92 | 91 | 93 | 92 |
| LCS | 84 | 80 | 87 | 87 . | 83 | 85 |
| LCSD | 97 | 78 | 90 | 85 | 89 | 92 |
| MS | 103 | 91 | 96 | 100 | 93 | 95 |
| Limits: | 70-130 | 70-130 | 70-130 | 70-130 | 70~130 | 70-130 |

^{*-} Outside of specification

^{**-}This limit was used in the evaluation of the final result for the blank

⁽¹⁾ The result for one or both determinations was less than five times the LOQ.

⁽²⁾ The unspiked result was more than four times the spike added.

P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

| CHAIN OF CUSTODY Page of Lab LIMS No: 475366 Bill torreport to (if different) Pomber to Two P. School District Lab LIMS No: 4753666 DW: DRINKING WATER DW: DRINKING WATER DW: GROUND WATER Southampton, PA 18966-0514 Fax: 215-355-3201 Sampling Site Address (II dillerent) Include State # NaSCO: WW: WASTEWATER Client/Acct. No. Apondo Pemberan School Address One 66 Bent St. School Fax: 215-355-3201 Ball torreport to (if different) DW: DRINKING WATER GW: GROUND WATER WW: WASTEWATER SO: SOIL # NaSCO: # HisO.ph SI: School One 64 Bent St. Universarred Total St. PROJECT Collection G C Matrix R O Matrix |
|--|
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| City/State/Zip Phone/Fax G04-943-5141 Quote # Client Contact: J6 NN SW N |
| Clity/State/Zlp Phone/Fax G09-893-6141 Quote # Client Contact: John Swadd e-mail: Collection Date Military A M Code B P O. No. PWSID #: # NaOH pH Unpreserved TRI 2mit 2mit 2mit 2mit 2mit 2mit 2mit 2mit |
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| Tobal Control of the |
| Or DUE DATE |
| Temberton Joursh: as the Please call for pricing and availability for rush (<10 day) turnaround and for all but standard reporting format. SAMPLE CUSTODY EXCHANGES MUST BE DOCUMENTED BELOW. USE FULL LEGAL SIGNATURE, DATE AND MILITARY TIME (24 HOUR CLOCK, I.E. 8AM IS 0800, 4 PM IS 1600) |
| |
| 1. John Savanson 4/4/17/5:01.1) 4/4 4/5/1/ 740 DUPS OFFEDEX DOTHER |
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Lancaster Laboratories Environmental

Sample Administration Receipt Documentation Log

Doc Log ID:

180046

Group Number(s):

Client: EQCL

Delivery and Receipt Information

Delivery Method:

EQCL Drop Off

Arrival Timestamp:

04/05/2017 19:40

Number of Packages:

1

Number of Projects:

2

Arrival Condition Summary

Shipping Container Sealed:

Yes

Sample IDs on COC match Containers:

Yes

Custody Seal Present:

Yes

Sample Date/Times match COC:

Yes

Custody Seal Intact:

Yes Yes VOA Vial Headspace ≥ 6mm:

N/A

Samples Chilled: Paperwork Enclosed:

Yes

Total Trip Blank Qty: Air Quality Samples Present: 0 No

Samples Intact:

Yes

Missing Samples:

No

Extra Samples:

No

No

Unpacked by Simon Nies (25112) at 22:01 on 04/05/2017

Samples Chilled Details

Thermometer Types:

DT = Digital (Temp. Bottle)

IR = Infrared (Surface Temp)

All Temperatures in °C.

Cooler # Thermometer ID DT121

Corrected Temp 2.5

Discrepancy in Container Qty on COC:

Therm. Type DΤ

ce Type Wet

ice Present? Y

ice Container Bagged

Elevated Temp? N

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