TETRA TECH

February 25, 2021
(117-7469006.01)

Mr. Thomas Wentland
Waste Management Engineer
Wisconsin Department of Natural Resources
P.O. Box 408
Plymouth, WI 53073-0408

RE: Annual Progress Report, Source Area Remedial Action, Pentair Flow Technologies, LLC Facility, Delavan, Wisconsin
BRRTS# 02-65-529579, FID# 265091640

Dear Mr. Wentland:

Enclosed is the Annual Progress Report for the source area remedial action at the Pentair Flow Technologies, LLC (former Sta-Rite Industries) facility in Delavan, Wisconsin.

SITE NAME/ACTIVITY:
Contract No. SF-90-02
Delavan Municipal Well #4
Delavan, Wisconsin
Source Area Remediation

DATE: February 25, 2021

PERIOD: January 1 through December 31, 2020

The format of this report follows the Wisconsin Department of Natural Resources (WDNR) "Guidance for Design, Installation, and Operation of Soil Venting Systems," WDNR Emergency and Remedial Response Section, July 1993, PUBL-SW185-93.

The following activities took place in 2020:

1. The groundwater extraction wells on the Delavan facility were operated and samples were collected from the storm sewer outfall (SS-1 sample identification) where the groundwater is discharged.

2. A new 1.5 horsepower 30 gallon-per-minute electric submersible pump was installed in extraction well EX-1 on April 1st.

3. Annual sampling of the wells that are part of the groundwater monitoring program for the Delavan facility was performed in July. All existing site monitor wells were also inspected and any damage to the surface seals, protective casings or well casings were noted.

4. An annual site inspection of the Delavan facility was performed during the annual groundwater sampling event to document the surface conditions in the two areas on the Delavan facility

property containing residual volatile organic compounds (VOCs) impacts in the subsurface soil. A visual inspection of the entire Delavan facility property was also performed to document any potential land-use changes including the undeveloped east half of the property. Photographs were also be taken to document site conditions.

5. The Wisconsin Pollutant Discharge Elimination System (WPDES) permit for the Delavan facility groundwater extraction system was changed from an individual permit to a general permit in October. The sampling frequency of the SS-1 storm sewer outfall was also changed from monthly to quarterly with the switch from the individual permit to the general permit. The parameter list for the SS-1 samples was also modified with the switch from the individual permit to the general permit.

If you require additional information or have any questions regarding these matters, please contact me at your convenience.

Sincerely,

Tetra Tech

Mark A. Manthey, P.G.
Associate Hydrogeologist
mark.manthey@tetratech.com

Encs.

cc: Maxwell Geyer, Pentair Flow Technologies, LLC (Electronic copy via email.)
, Senior Toxicologist, Wisconsin Department of Health Services (Electronic copy via email.)
William Ryan, EPA (Electronic copy via email.)

2020 ANNUAL
PROGRESS REPORT
PENTAIR FLOW TECHNOLOGIES, LLC
DELAVAN, WISCONSIN FACILITY
SOURCE AREA REMEDIATION

BRRTS# 02-65-529579
FACILITY ID# 265091640

February 25, 2021

Prepared For:

Pentair Flow Technologies, LLC
293 Wright Street
Delavan, Wisconsin 53115

Prepared By:

Tetra Tech
Brookfield Lakes Corporate Center XII
175 N. Corporate Drive, Suite 100
Brookfield, Wisconsin 53045

Project No. 117-7469006

CERTIFICATION

Hydrogeologist:

I hereby certify that I am a hydrogeologist as that term is defined in s. NR712.03(1), Wis. Adm. Code, and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR700 to 726, Wis. Adm. Code.

Mark A. Manthey, P.G.
Associate Hydrogeologist
Tetra Tech

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SUMMARY OF PROGRESS MADE THIS REPORTING PERIOD

The following remedial action activities took place in 2020:

1. The groundwater extraction wells on the Delavan facility were operated and samples were collected from the storm sewer outfall (SS-1 sample identification) where the groundwater is discharged.

2. A new 1.5 horsepower 30 gallon-per-minute (gpm) pump was installed in extraction well EX-1 on April 1st.

3. One round of groundwater samples was collected from the monitor wells and groundwater extraction wells that are part of the groundwater monitoring program for the Delavan facility July 17th to July 18th. All existing Delavan facility monitor wells were also inspected and any damage to the surface seals, protective casings or well casings were noted.

   The analytical results from 2020 showed moderate to slight decreases in the concentrations or no detections of the volatile organic compounds (VOCs) analyzed in nine (9) of the wells sampled. The reported VOC concentrations for the 2019 and 2020 samples collected from monitor well TW-4 exhibited slight decreases with the exception of trichloroethene (TCE), which exhibited a slight increase form 18 ug/L in 2019 to 21 ug/L in 2020. VOC concentrations exhibited stable to moderate increases in concentration in four monitor wells and one extraction well. The analytical results from the 2020 sampling round indicate the contaminant plume is exhibiting an overall stable to decreasing trend in the site contaminants. The analytical results for the groundwater samples collected from the site during this reporting period are summarized on Table 1, Table 2, and Figure 1. Charts showing the trends in VOC concentrations for select site monitor wells are included as Figures 2 through 8. Laboratory results and field data sheets for the annual groundwater sampling event are included in Appendix B and copies of the discharge monitoring reports containing the analytical results collected at the storm sewer outfall where the groundwater pumped from the Delavan facility

groundwater extraction system extraction wells discharges are provided in Appendix C.

4. As described in the Final Institutional Control Implementation and Assurance Plan (ICIAP) for the Delavan facility property (February 16, 2018), an annual site inspection of the Delavan facility was performed during the annual groundwater sampling event to document the surface conditions in the two areas on the Delavan facility property containing residual VOCs impacts in the subsurface soil. The first area is located next to the north wall of Plant 2 in the former sump source area and contains residual TCE impacts in the soil at a depth of 28 feet below ground surface that are protective of commercial and industrial site uses but are not protective of non-commercial/non-industrial uses. The second area is found beneath the concrete floor of Plant 1 and south of the south wall of Plant 1 and contains pervasive low-level VOCs impacts in the subsurface soil. The approximate extent of the low-level VOCs impacts in the soil beneath and south of Plant 1 is shown on Figure 1. Inspection of surface conditions in this area is needed to confirm the surface cover of the concrete floor of Plant 1 and the paved areas south of the south wall of Plant 1 are still intact to prevent direct contact with the potentially impacted soils. A visual inspection of the entire Delavan facility property was also performed to document any potential land-use changes including the former locations of the chip storage extraction system (CSES) and southeast extraction system (SES) and the undeveloped land on the east half of the property. Photographs were taken to document site conditions.

   The site inspection confirmed the surface cover remains intact in the area of the residual VOCs impacts beneath and south of Plant 1 and the surface conditions in the former sump source area are unchanged. The undeveloped land on the east half of the property remains undeveloped and land use in and around the developed portion of the Delavan facility property including the former CSES area and former SES area remains the same. Photographs documenting site conditions are included in Appendix A.

5. The Wisconsin Pollutant Discharge Elimination System (WPDES) permit for the Delavan facility groundwater extraction system was changed from an individual permit to a general permit in October. The sampling frequency of the SS-1 storm sewer outfall was changed from monthly to quarterly with the switch from the individual permit to the general permit. Monthly

reporting of the daily volume of groundwater discharged to the SS-1 storm sewer outfall is still required. The parameter list for the SS-1 samples was also modified with the switch from the individual permit to the general permit. The parameters that are required to be reported quarterly for samples collected at the SS-1 storm sewer outfall under the general permit are as follows:

a. Field pH
b. Total Suspended Solids
c. Tetrachloroethene (PCE)
d. 1,1,1-Trichloroethane (TCA)
e. Trichloroethene (TCE)
f. Vinyl Chloride

GROUNDWATER

Residual groundwater impacts originating from the former SES and former sump source areas are controlled by extraction wells EX-1 and EX-7R. Groundwater downgradient of the former CSES source area and the pervasive low-level residual VOCs impacts in the subsurface soil beneath a portion of the concrete floor of Plant 1 and south of the south wall of Plant 1 is controlled by extraction wells EX-2R, EX-3R, EX-4R, EX-5R, and EX-6 (see Figure 1). Wastewater discharge monitoring reports documenting the flow rate and effluent chemistry where the combined flow from the seven extraction wells is discharged to the storm sewer (storm sewer outfall SS-1) are provided in Appendix C.

Groundwater Sampling

The annual groundwater sampling round was conducted July 22nd to July 23rd. The monitor wells and groundwater extraction wells that are part of the Delavan facility groundwater monitoring program are listed on Table 4. The field sampling forms and the analytical results for the annual sampling round are provided in Appendix B. The analytical results for the sampling points that are

part of the Delavan facility groundwater monitoring plan are summarized on Table 1 and Table 2. Table 1 presents the analytical results for the chlorinated volatile organic compounds (CVOCs) for which all of the site monitoring points are analyzed, which include tetrachloroethene (PCE), 1,1,1-trichloroethane (TCA), trichloroethene (TCE), 1,1,2-trichloroethane and vinyl chloride. Table 2 summarizes the analytical results for monitor well TW-4, which is analyzed for the full list of volatile organic compounds (VOCs). Total VOC concentrations for the annual sampling event are also listed next to each sampling point on Figure 1. Time versus concentration plots were prepared and graphed for contaminant concentrations in the most highly impacted wells near Plant 1 and Plant 2 and are included as Figures 2 through 8.

The following summarizes the trends in water quality at site monitoring points.

Plant 1: Four monitor wells and two extraction wells were sampled during this reporting period. Contaminants of concern are TCA and TCE. The PCE results for the Plant 1 wells are also discussed as it is a contaminant of concern at Plant 2.

PCE: No PCE was detected in any of the groundwater samples collected from the Plant 1 wells.

TCA: TCA was detected in the groundwater samples collected from three of the Plant 1 monitor wells sampled and extraction well EX-3R. All the reported TCA concentrations were below the TCA Chapter NR140 groundwater quality standards. Comparison of the 2019 TCA results to the 2020 TCA results is presented below:
TCA NR140 Enforcement Standard (ES) = 200 ug/L
TCA NR140 Preventive Action Limit (PAL) = 40 ug/L

- TCA concentrations in MW-1026 increased slightly from 2.8 ug/L to 3.2 ug/L. The reported TCA concentrations in previous samples collected from MW-1026 were 11 ug/L in 2018, 14 ug/L in 2017, 21

ug/L in 2016, 18 ug/L in 2015, 7.4 ug/L in 2014, 15 ug/L in 2013, 25 ug/L in 2012, 20 ug/L in 2011, 15 ug/L in 2010, 6.9 ug/L in 2009, not detected in 2008, 41 ug/L in 2007 and 93 ug/L in 2006. The 2020 analytical data confirms an overall declining trend in TCA concentrations at MW-1026 over the past 14 years.

- The TCA concentration in MW-1027 decreased from 4.9 ug/L in 2019 to 2.5 ug/L in 2020. TCA concentrations in MW-1027 have exhibited a declining trend since the 2005 sampling event and TCA concentrations in MW-1027 have not exceeded its PAL since the July 2006 sampling event. 1994 was the last time the TCA concentration in MW-1027 exceeded the ES.

- The reported TCA concentrations in TW-4 decreased from 26 ug/L in 2019 to 20 ug/L in 2020. TCA concentrations in TW-4 have been below its PAL since the July 2013 sampling round and the 2011 through 2020 TCA concentrations are the lowest reported TCA concentrations for samples collected from TW-4. The TCA data suggest there is a declining trend in TCA impacts at TW-4. 2001 was the last time the TCA concentration in TW-4 exceeded the ES.

- The TCA concentration in D-25R decreased from 0.55 ug/L in 2019 to no detection (detection limit = 0.38 ug/L) in 2020. TCA concentrations in the D-25R samples have exhibited a declining trend since the 2005 sampling event and TCA concentrations have been below the PAL since the October 1996 sampling round.

- The TCA concentration in extraction well EX-2R decreased from 1.0 ug/L in 2019 to no detection (detection limit = 0.38 ug/L) in 2020. TCA concentration in EX-2R have not exceeded the PAL since 1997.

- The TCA concentration in extraction well EX-3R increased slightly from 4.5 ug/L in 2019 to 5.0 ug/L in 2020. EX-3R is the replacement extraction well for original extraction well EX-3 and was brought on-line in September 2017. TCA concentrations in the EX-3 samples have not exceeded the PAL since 1997.

TCE: TCE concentrations exceeded the NR140 ES of 5.0 ug/L in the groundwater samples collected from monitor wells MW-1027 and TW-4 and extraction well EX-3R during this reporting period. The reported TCE concentration in the samples collected from monitor well MW-1026 and extraction well EX-2R exceeded the PAL of 0.50 ug/L. TCE was not detected in the groundwater sample collected from monitor well D-25R. Comparison of the 2019 TCE results to the 2020 TCE results is presented below:
TCE NR140 ES = 5.0 ug/L
TCE NR140 PAL = 0.50 ug/L

- TCE concentrations in MW-1026 increased slightly from 0.98 ug/L to 1.3 ug/L. TCE concentrations in the groundwater samples collected from MW-1026 are exhibiting an overall declining trend since the 2005 sampling round when the reported TCE concentration in the MW-1026 sample was 21 ug/L.

- The TCE concentration in MW-1027 decreased from 41 ug/L to 37 ug/L. The reported TCE concentration in the 2018 groundwater sample collected from MW-1027 was 27 ug/L, which is the lowest historical TCE concentration for a MW-1027 sample. TCE concentrations at MW-1027 are exhibiting an overall declining trend since 1997.

- The TCE concentration in monitor well TW-4 increased from 18 ug/L to 21 ug/L. Review of the TCE results for the TW-4 samples presented

on Table 1 shows TCE concentrations have been below 30 ug/L since the July 2016 sampling event and have exhibited on overall declining trend since 1993.

- At monitor well D-25R, the TCE concentration decreased from 0.54 ug/L to no detection (detection limit = 0.16 ug/L). The 0.54 ug/L TCE concentration for the 2019 sample was the lowest TCE concentration reported for samples collected from D-25R since April of 1997 when no TCE was detected in the sample above the detection limit of 0.5 ug/L. The TCE data indicate an overall declining trend in TCE impacts at D-25R. TCE concentrations in groundwater samples collected from D-25R have not exceeded the ES since the July 2010 sampling event.

- The TCE concentration in extraction well EX-2R decreased slightly from 2.8 ug/L to 2.4 ug/L. TCE concentrations in the EX-2R samples have been below 10 ug/L since the July 2012 sampling event.

- The TCE concentration in extraction well EX-3R increased from 5.2 ug/L to 6.3 ug/L. TCE concentrations also increased from 2018 to 2019. TCE concentrations are still exhibiting a decreasing trend at EX-3/EX-3R even with the increase from 2018 to 2020.

Plant 2: Seven monitor wells and two extraction wells were sampled during this reporting period. Contaminants of concern are PCE, TCA, and TCE.

PCE: PCE was detected above its ES of 5.0 ug/L in the groundwater samples collected from monitor well D-15 and extraction well EX-7R. The PAL for PCE, which is 0.50 ug/L, was exceeded in the groundwater sample collected from monitor well TW-3. No PCE was detected in the groundwater samples collected from monitor wells D-18, MW-2004, MW-2005R, MW-2011 and TW-1 and extraction well EX-1. A comparison of the 2019 PCE results to

the 2020 PCE results is presented below:

PCE NR140 ES = 5.0 ug/L

PCE NR140 PAL = 0.50 ug/L

- No PCE was detected in the samples collected from monitor wells D-18, MW-2004, MW-2005R, MW-2011 and TW-1 in 2019 and 2020. PCE was last detected in D-18 in 2009 and was last detected in MW-2004 in 1997. PCE has never been detected in MW-2011 and was last detected in TW-1 in 2008. The PCE concentrations in the samples collected from MW-2005R, which replaced original monitor well MW-2005 in 2007, have been below 3 ug/L since the July 2007 sampling event and suggest an overall stable to declining trend in PCE impacts at MW-2005R since 2007. The last sample collected from MW-2005 in September 2004 had a reported PCE concentration of 17 ug/L.

- PCE concentration in monitor well D-15 increased from 8.3 ug/L to 13 ug/L. The PCE concentrations in D-15 have ranged from 4.2 ug/L to 47 ug/L since the July 2010 sampling event. The PCE concentrations for the 2014 and 2015 samples are the lowest reported PCE concentration for samples collected from D-15 between the November 1991 sampling round and the 2020 sampling round. The 2020 PCE results confirms an overall decreasing trend in PCE concentrations at monitor well D-15 since the July 2010 sampling round when the reported PCE concentration in D-15 was 47 ug/L.

- The PCE concentration in monitor well TW-3 increased from no detection (detection limit = 0.37 ug/L) in 2019 to 0.91 ug/L in 2020. PCE impacts in TW-3 have been below the 5.0 ug/L ES since the April 2002 sampling event.

- The PCE concentration in extraction well EX-1 decreased from 0.53

ug/L in 2019 to no detection (detection limit = 0.37 ug/L) in 2020. PCE concentrations in EX-1 have been below the ES of 5.0 ug/L since the 2004 sampling event.

- The PCE concentration in replacement extraction well EX-7R, which replaced original extraction well EX-7 and was brought on-line in September 2017, decreased slightly from 5.4 ug/L in 2019 to 5.0 ug/L in 2020. The PCE results from EX-7 and EX-7R from the 2010 to 2020 sampling rounds suggest an overall declining trend in PCE impacts in the former sump source area.

TCA: TCA was only detected in the groundwater sample collected from monitor well MW-2011 at a concentration of 2.0 ug/L, which is well below the Chapter NR140 PAL of 40 ug/L. All the reported TCA detections in samples collected from MW-2011 are below the NR140 PAL.

TCE: The Chapter NR140 ES for TCE of 5.0 ug/L was exceeded in the groundwater samples collected from monitor wells MW-2011 and D-15. The PAL for TCE (0.50 ug/L) was exceeded in the groundwater sample collected from replacement extraction well EX-7R. No TCE was detected in the groundwater samples collected from monitor wells D-18, MW-2004, MW-2005R, TW-1 and TW-3. A comparison of the 2018 TCE results to the 2019 TCE results is presented below:

TCE NR140 ES = 5.0 ug/L

TCE NR140 PAL = 0.50 ug/L

- No TCE was detected in the 2018 and 2019 groundwater samples collected from monitor wells D-18, MW-2004, MW-2005R, TW-1 and TW-3 and extraction well EX-1. TCE impacts in D-18 have been below 1.0 ug/L since the July 2010 sampling event and have not exceeded the ES of 5.0 ug/L since 2003. TCE concentrations have been below the ES

of 5.0 ug/L in groundwater samples collected from monitor well MW-2004 since the 1997 annual sampling event and the PAL has not been exceeded since the 2015 sampling event. TCE has never been detected in a groundwater sample collected from MW-2005R, which replaced original monitor well MW-2005 in 2007. The last sample collected from MW-2005 in September 2004 had a reported TCE concentration of 1.3 ug/L. TCE was last detected in a groundwater sample collected from monitor well TW-1 in July 2012 at a concentration of 0.31 ug/L. TCE was last detected in the July 2016 sample collected from TW-3 at a concentration of 0.29 ug/L. TCE concentrations in TW-3 have been below the ES since the June 2003 sampling event. TCE concentrations in extraction well EX-1 have been below the ES since 2004 and below the PAL since 2013.

- The TCE reported concentrations in the groundwater samples collected from monitor well MW-2011 in 2019 and 2020 were the same (13 ug/L). The reported TCE concentrations in MW-2011 have ranged from 35 ug/L to 7.2 ug/L from 2014 to 2020 and are on a decreasing trend.

- The TCE concentration in monitor well D-15 increased from 8.4 ug/L to 11 ug/L. Review of the TCE data presented on Figure 5 shows TCE concentrations in D-15 are exhibiting on overall decreasing trend since the April 2001 sampling event.

- The reported TCE concentration in extraction well EX-7R decreased slightly from 5.4 ug/L in 2019 to 5.0 ug/L in 2020. The TCE results from EX-7 and EX-7R from the 2010 to 2020 sampling rounds suggest an overall declining trend in PCE impacts in the former sump source area.

Extraction Wells Maintenance and Meter Readings

The pump in extraction well EX-1 shut down on October 31, 2019. Pentair Flow Technologies personnel determined the pump needed to be replaced. A new 1.5 horsepower 30 gpm electric submersible pump was installed in extraction wells EX-1 on April 1, 2020.

As reported in the 2018 Annual Progress report, the four Badger Meter Dynasonics® U500w Ultrasonic meters that read flow from extraction wells EX-1, EX-2R, EX-3R, EX-4R and EX-5R were installed and brought on-line in May 2018. The meter that reads flow from EX-6 was installed and brought on-line in August 2018 and the meter that reads flow from EX-7R was installed and brought on-line in November 2018. The meters that read flow from extraction wells EX-1, EX-2R, EX-3R, EX-4R, EX-5R and EX-6 are installed in storm sewer manholes on the Delavan facility property. One meter reads the combined flow from extraction wells EX-2R and EX-3R and four meters read the individual flow from EX-1, EX-4R, EX-5R and EX-6. The meter that reads the flow from extraction well EX-7R is installed in an insulated enclosure at the wellhead. The monthly flow data from the U500w Ultrasonic meters downloaded from the AquaCUE® Flow Measurement Manager site is summarized on Table 3. The flow data presented on Table 3 indicates the average monthly pumping rate in extraction well EX-1 ranged from 34.90 gpm to 42.59 gpm from April to November and then declined to 9.42 gpm in December. Pumping rates in EX-1 have exhibited similar declines in the past and is most likely due to drawdown in the well reaching the inlet of the pump.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Significant reductions in VOC impacts at site monitor wells have been observed since the remedial action began. While VOC removal from the dual soil vapor extraction/groundwater extraction (SVE/GWE) wells in the former CSES and former SES areas and the SVE wells in the former sump source area has been discontinued, hydraulic control of the contaminant plume is maintained

by pumping from the seven groundwater extraction wells located on the Delavan facility property (EX-1, EX-2R, EX-3R, EX-4R, EX-5R, EX-6 and EX-7R).

Recommendations

1. Pumping from extraction wells EX-1, EX-2R, EX-3R, EX-4R, EX-5R, EX-6 and EX-7R will continue.

2. The groundwater samples collected from EX-1 indicate concentrations of the Delavan facility contaminants of concern have been below their respective ESs since the September 2004 sampling event and no VOCs were detected in the sample collected from EX-1 in July 2020. The analytical results for the groundwater samples collected from EX-1 suggest it may be appropriate to stop groundwater extraction from EX-1. If the annual groundwater sample collected from EX-1 in 2021 has no detection of the Delavan facility contaminants of concern or has detections of the contaminants of concern that are below their respective PALs, a recommendation to stop groundwater extraction from EX-1 will be made in the 2021 progress report. If pumping from EX-1 is stopped, EX-1 will not be decommissioned as it will be used as a backup for extraction well EX-7R for instances when EX-7R is shut down for repairs or if the pump in EX-7R fails.

3. Annual sampling of the monitor wells and extraction wells that are part of the groundwater monitoring program for the Delavan facility will continue (Table 4). All the site monitor wells will be inspected as part of the annual groundwater sampling event.

4. An annual site inspection of the Delavan facility property to document current site conditions and land use as described in the Final ICIAP will be performed in conjunction with the annual groundwater sampling event.

FIGURES

Figure 1. Site Layout and Total VOC Concentrations for Site Groundwater Monitoring Points

Figure 2. Plant 1 Trichloroethene (TCE) Concentration Changes

Figure 3. Plant 1 1,1,1-Trichloroethane (TCA) Concentration Changes

Figure 4. Plant 1 Total VOC Concentration Changes

Figure 5. Plant 2 Trichloroethene (TCE) Concentration Changes

Figure 6. Plant 2 1,1,1-Trichloroethane (TCA) Concentration Changes

Figure 7. Plant 2 Tetrachloroethene (PCE) Concentration Changes

Figure 8. Plant 2 Total VOC Concentration Changes

TABLES

Table 1. Summary of Target Compound List VOCs Groundwater Monitoring Analytical Results for Pentair Flow Technologies, LLC Delavan Facility Monitoring Points

Table 2. Summary of VOCs Groundwater Monitoring Analytical Results for Plant #1 Monitor Well TW-4

Table 3. Pentair Flow Technologies, LLC Delavan Facility Extraction Wells Flow Data

Table 4. Delavan Facility Groundwater Monitoring Program

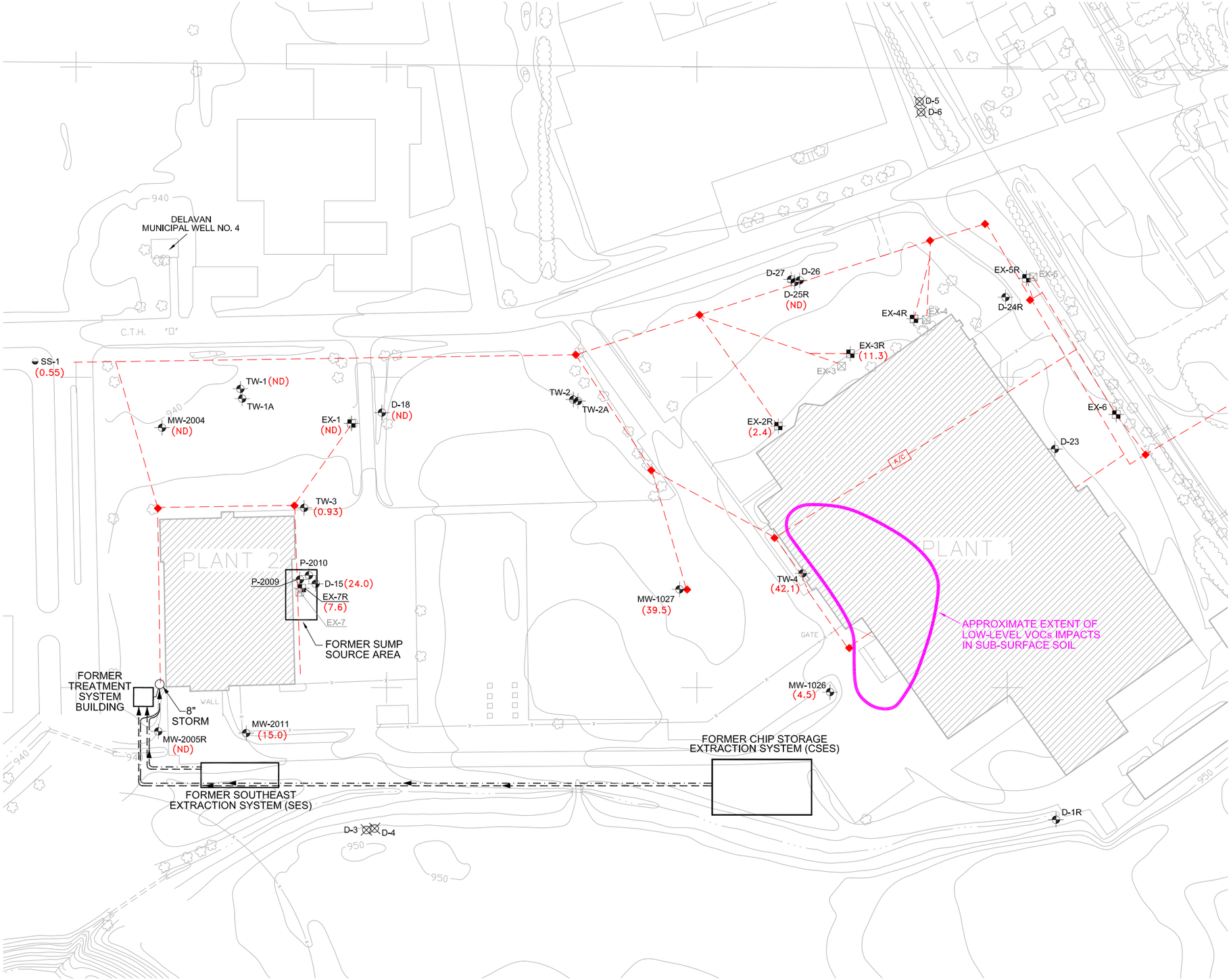
APPENDICES

Appendix A. Site Inspection Photographs

Appendix B. Groundwater Monitoring Analytical Results and Field Data Sheets.

Appendix C. Wastewater Discharge Monitoring Reports and Storm Sewer Outfall SS-1 Analytical Results

FIGURES



EXPLANATION

- MW-2004 — MONITOR WELL LOCATION AND DESIGNATION
- D-4 — FORMER LOCATION AND DESIGNATION OF MONITOR WELL THAT WAS ABANDONED ON JULY 14, 2019
- E-3 — EXTRACTION WELL LOCATION AND DESIGNATION
- SS-1 — STORM SEWER SAMPLE LOCATION AND DESIGNATION
- P-2009 — PIEZOMETER LOCATION AND DESIGNATION
- EX-7 — FORMER EXTRACTION WELL LOCATION AND DESIGNATION (FILLED AND SEALED IN 2017)
- EXTRACTION WELL/ STORM SEWER PIPING
- (11.3) — TOTAL VOCs CONCENTRATION (ug/L) FROM 2020 SAMPLING ROUND
- (ND) — NO VOCs DETECTED

N

SCALE

0 330

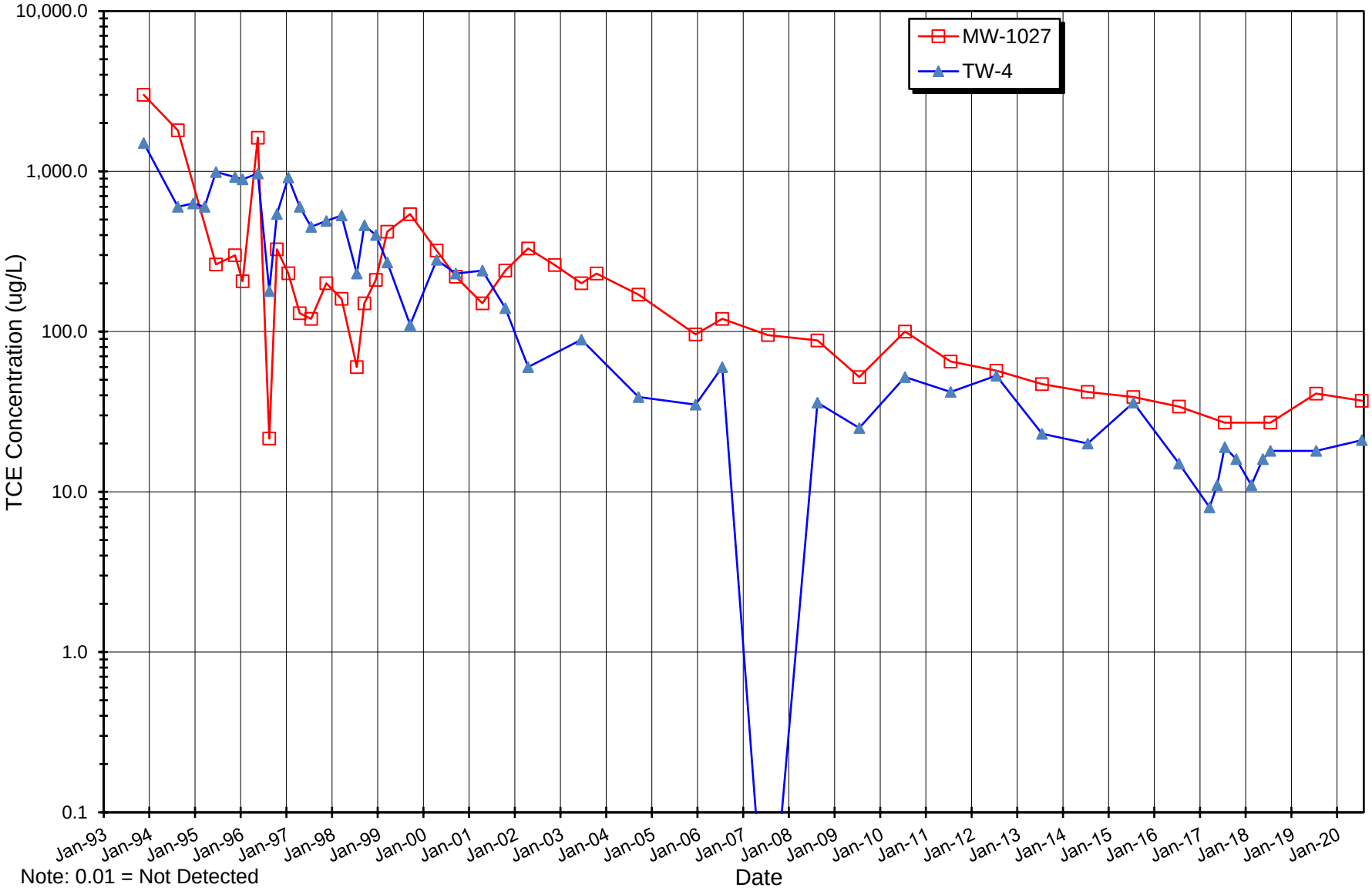
Feet

Base map from Areo-Metric Engineering, 4/16/88.

STA-RITE INDUSTRIES, INC. DELAVAN, WISCONSIN	DATE:	02/09/21
SITE LAYOUT AND TOTAL VOCs CONCENTRATIONS FOR GROUNDWATER MONITORING POINTS	DESIGNED:	CMP
	CHECKED:	MAM
	APPROVED:	MAM
	DRAWN:	CMP
	PROJ.:	117-7469006
TETRA TECH	Figure 1	

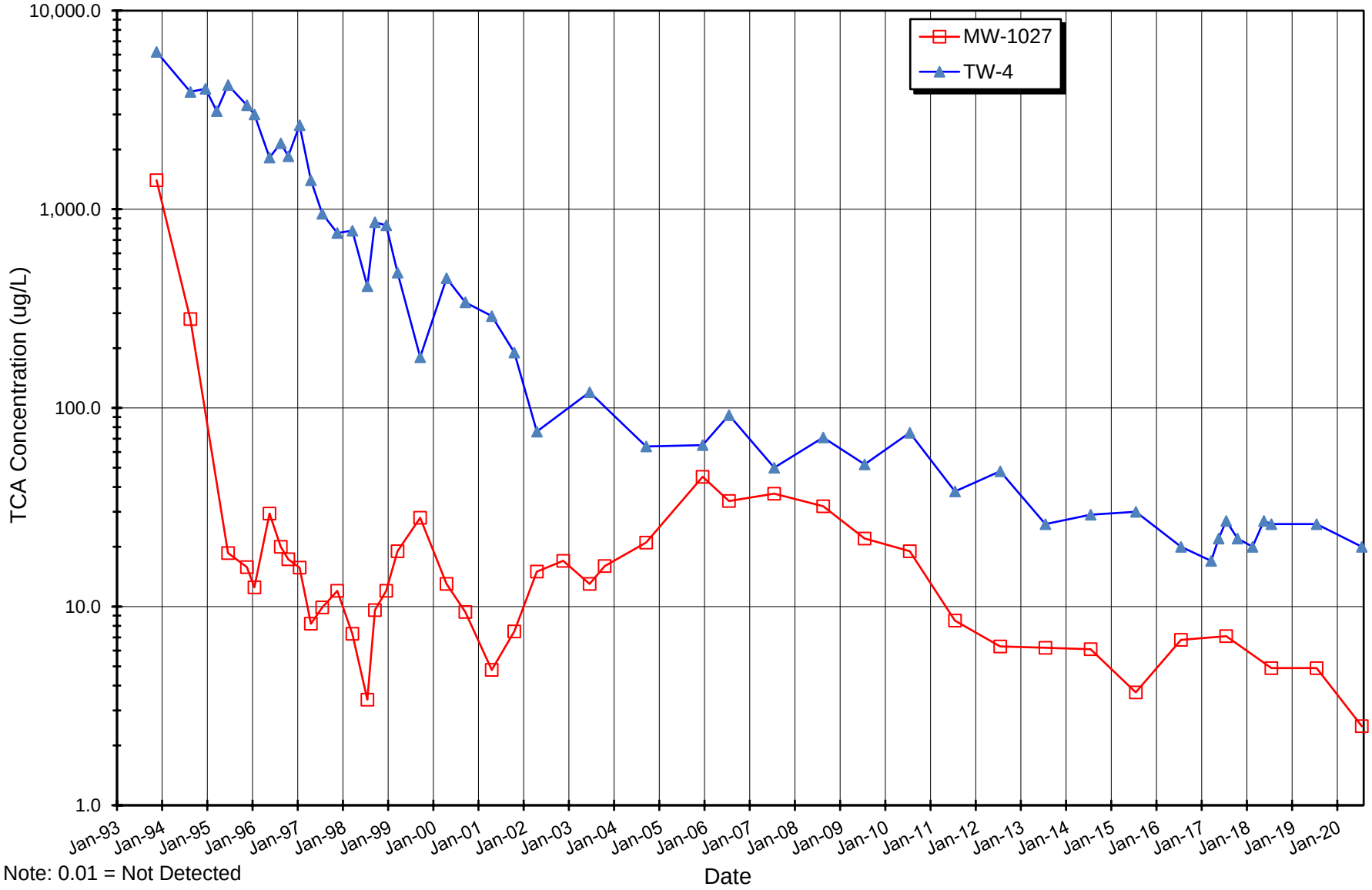
S:\CAD\STA-RITE\DELAVAN\FEBRUARY 2021\7469006FIG1_02-09-21.DWG

Figure 2. Plant 1 Trichloroethene (TCE) Concentration Changes
ES = 5 ug/L, PAL = 0.5 ug/L



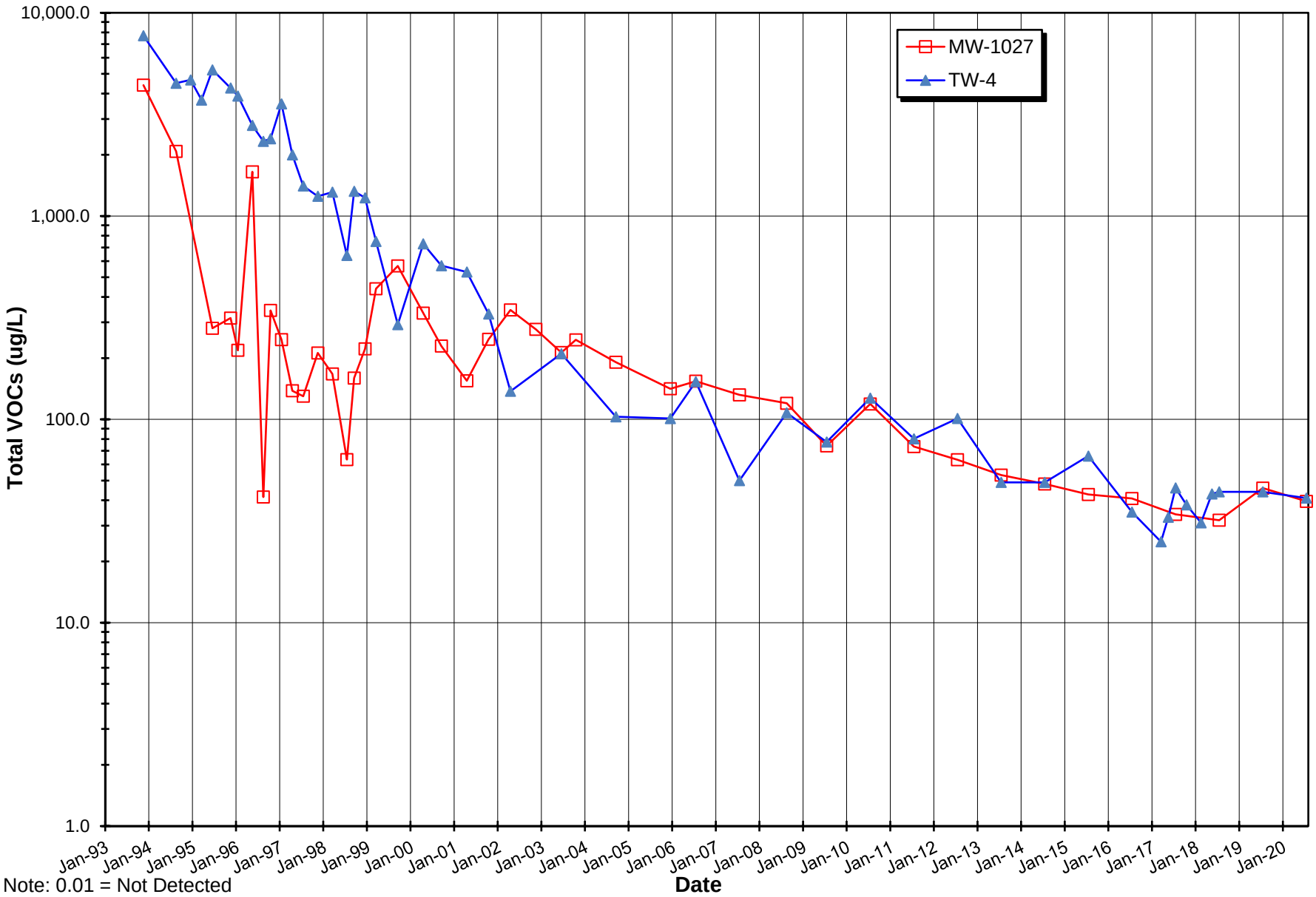
Note: 0.01 = Not Detected

Figure 3. Plant 1 1,1,1-Trichloroethane (TCA) Concentration Changes
ES = 200 ug/L, PAL = 40 ug/L



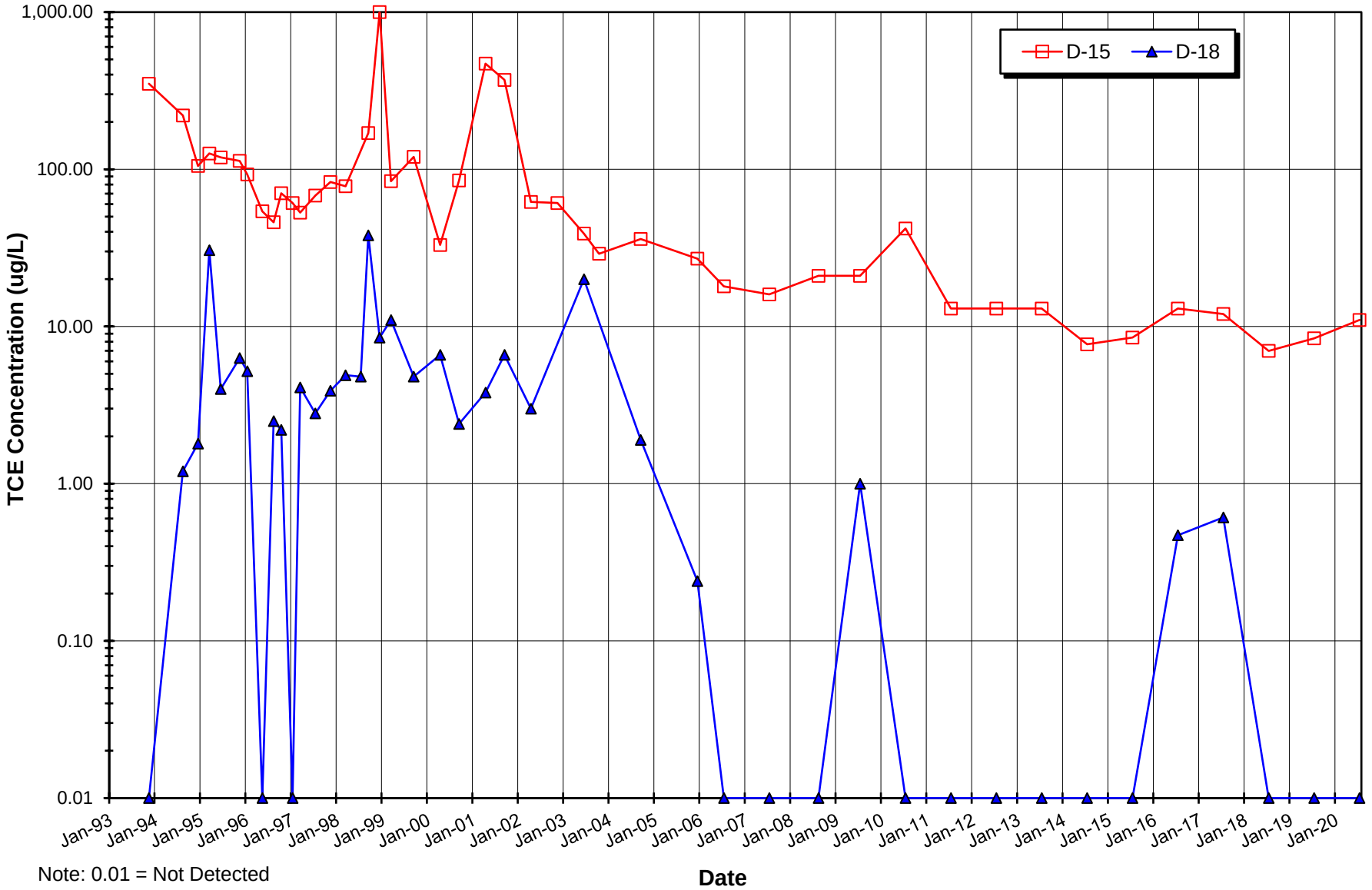
Note: 0.01 = Not Detected

Figure 4. Plant 1 Total VOC Concentration Changes



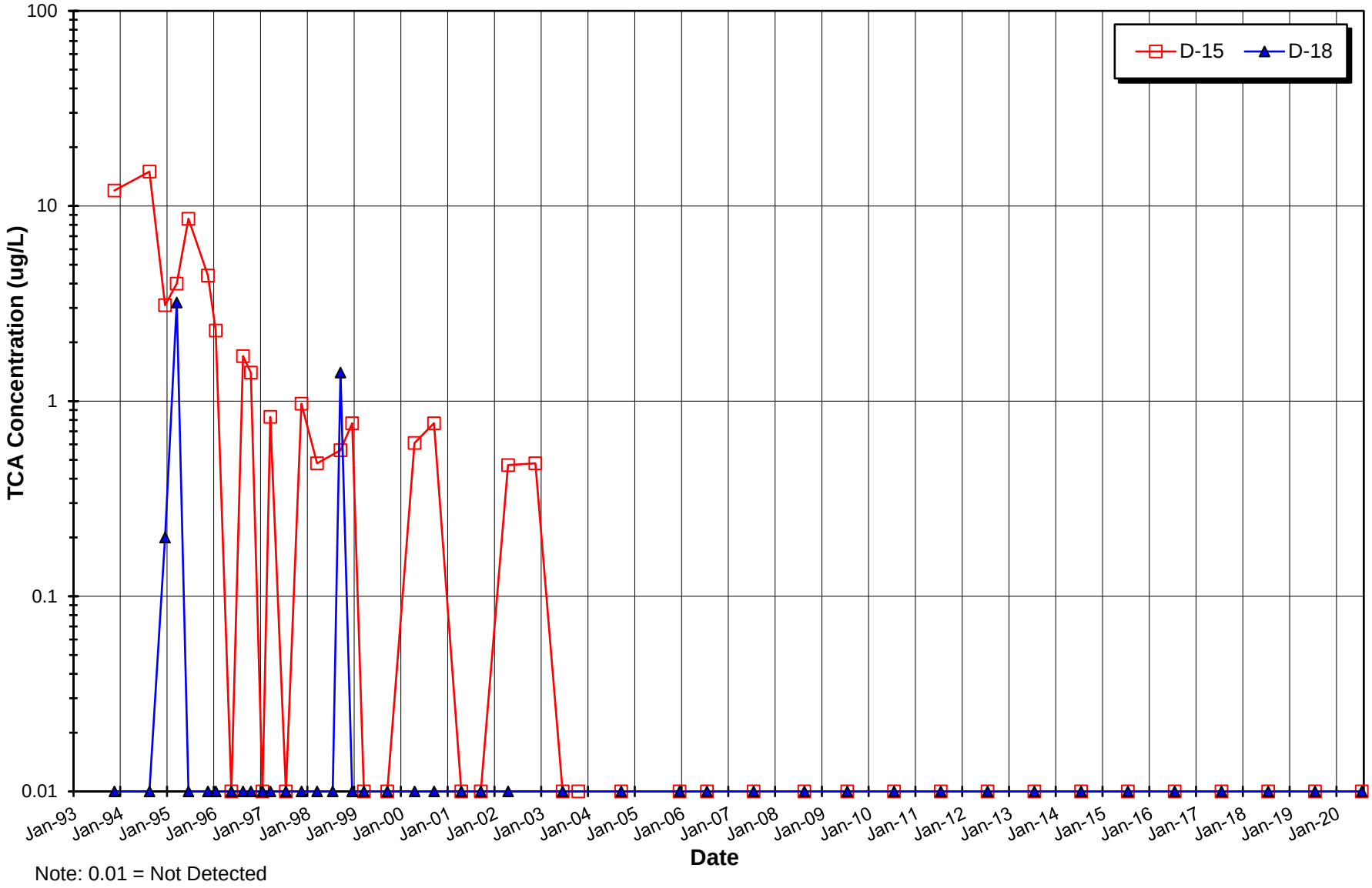
Note: 0.01 = Not Detected

Figure 5. Plant 2 Trichloroethene (TCE) Concentration Changes
ES = 5 ug/L, PAL = 0.5 ug/L



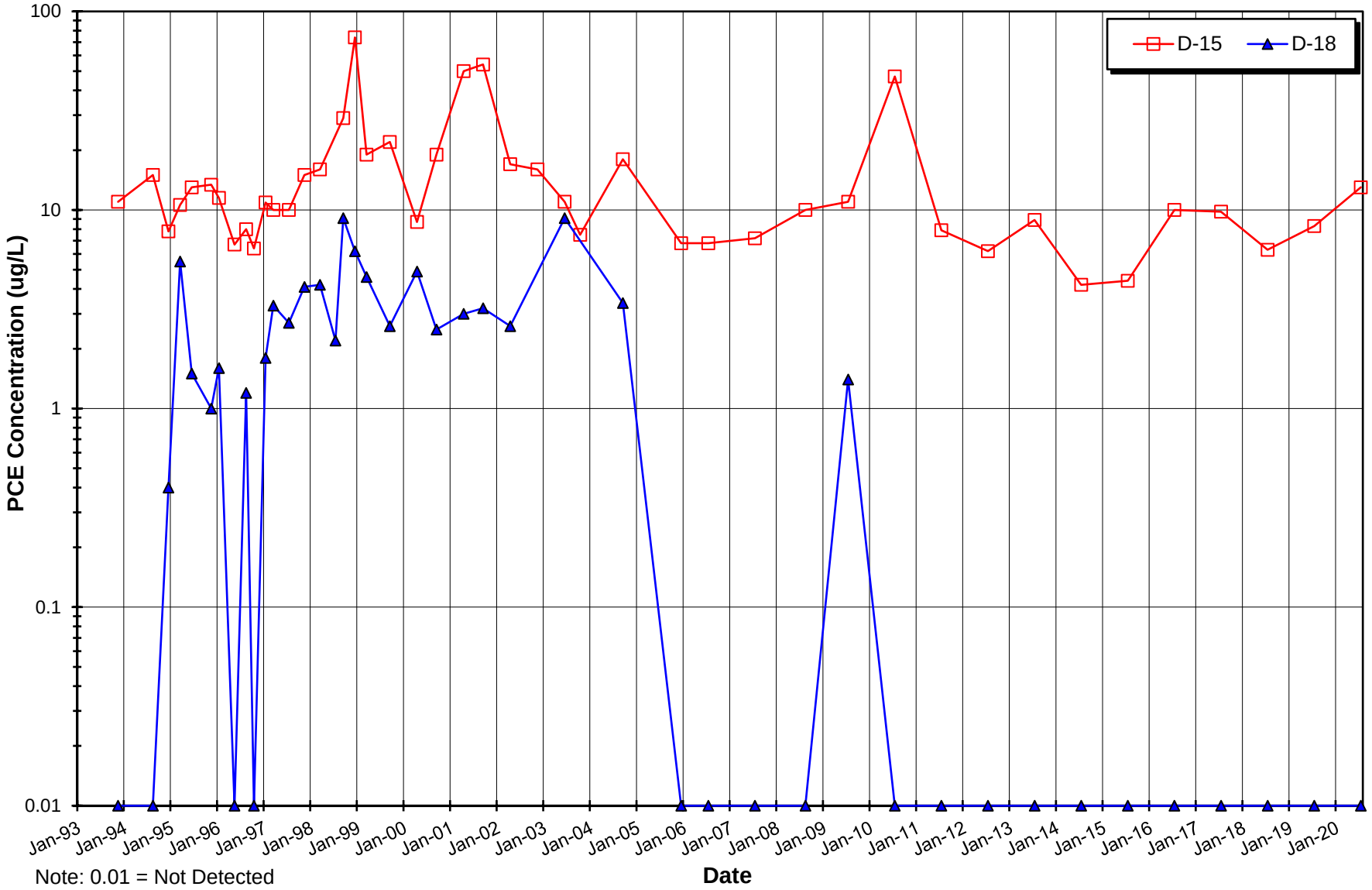
Note: 0.01 = Not Detected

Figure 6. Plant 2 1,1,1-Trichloroethane (TCA) Concentration Changes
ES = 200 ug/L, PAL = 40 ug/L



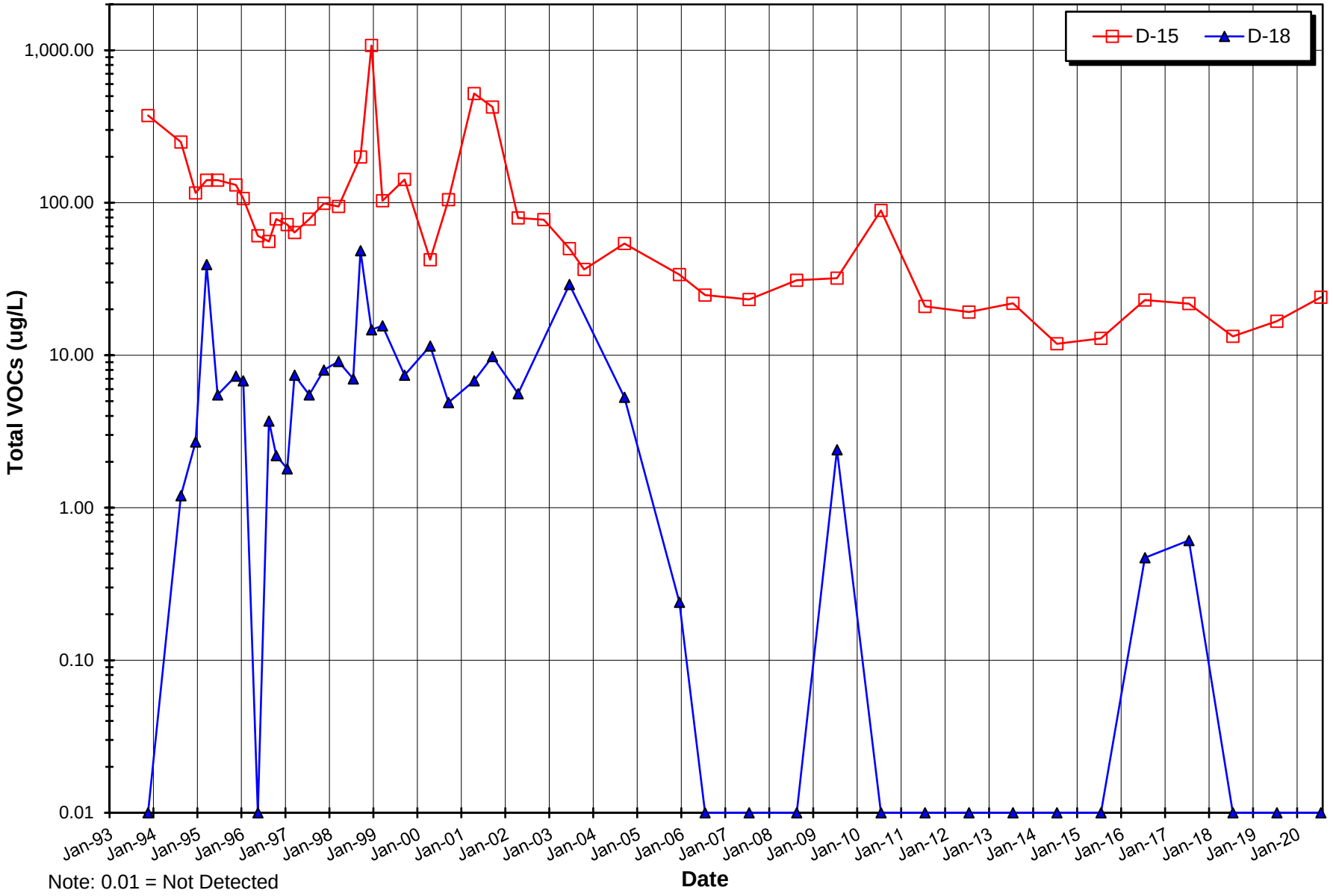
Note: 0.01 = Not Detected

Figure 7. Plant 2 Tetrachloroethene (PCE) Concentration Changes
ES = 5 ug/L, PAL = 0.5 ug/L



Note: 0.01 = Not Detected

Figure 8. Plant 2 Total VOC Concentration Changes



Note: 0.01 = Not Detected

TABLES

Table 1. Summary of Target Compound List VOCs Groundwater Monitoring Analytical Results for Pentair Flow Technologies, LLC Delavan Facility Monitoring

SAMPLE ID	DATE	PCE	1,1,1-TCA	TCE	1,1,2-TCA	Vinyl Chloride	**Total VOCs**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140 ES		5.0	200	5	5	0.2	
NR 140 PAL		0.5	40	0.5	0.5	0.02	
Plant #1							
MW-1026	10/29/91	**0.60**	**16000**	**1300**	**8.2**	<0.3	17308.8
	10/29/91	**1.2**	**15000**	**1300**	**7.1**	<0.3	16308.3
Downgradient	12/11/91	**1.0**	**22000**	**1500**	**10**	<0.3	23511
Monitor	11/11/93	<0.5	**4500**	**250**	**1.0**	<0.3	4751
Wells	08/16/94	<1	**1500**	**210**	NA	<5	1710
MW-1026	12/13/94	<25	**865**	**183**	NA	<25	1048
	03/13/95	NA	NA	NA	NA	NA	0
	06/21/95	<0.34	**41.9**	**72**	<0.19	<0.27	113.9
	11/07/95	<0.5	<0.5	**52.4**	NA	<0.5	52.4
	01/25/96	<0.5	**49.6**	**30.8**	NA	<0.5	80.4
	05/13/96	<0.5	**74.4**	**27.1**	NA	<0.5	101.5
	08/13/96	<0.5	**41**	**33.1**	**5.6**	<0.5	79.7
	10/08/96	<0.5	**26.1**	**21.5**	**1.8**	<0.5	49.4
	01/21/97	<0.5	**27**	**17.1**	NA	<0.5	44.1
	04/01/97	<0.63	**28**	**15**	NA	<0.46	43
	07/23/97	<0.63	**22**	**11**	**1.0**	<0.46	34
	11/18/97	<0.25	**20**	**13**	NA	<0.25	33
	03/23/98	<0.63	**15**	**10**	NA	<0.46	25
	07/27/98	<0.25	**8.4**	**4.5**	**1.8**	<0.25	14.7
	09/28/98	<0.63	**21**	**15**	**1.7**	<0.46	37.7
	12/08/98	<0.63	**24**	**14**	NA	<0.46	38
	03/12/99	<0.63	**21**	**13**	NA	<0.46	34
	09/25/03	<0.50	**25**	**6.1**	<0.25	<0.25	31.1
	12/15/03	<0.50	**34**	**10**	<0.20	<0.25	44
	12/14/05	<0.50	**91**	**21**	**0.27**	<0.20	112.27
	07/31/06	<1.0	**93**	**18**	NA	NA	111
	07/31/07	<0.50	**41**	**9.8**	<0.25	<0.20	50.8
	08/19/08	<0.50	<0.50	<0.20	<0.25	<0.20	0
	07/28/09	<0.50	**6.9**	**8**	<0.25	<0.20	14.9
	07/14/10	<0.50	**15**	**3.2**	<0.25	<0.20	18.2
	07/21/11	<0.50	**20**	**5.9**	<0.25	<0.20	25.9
MW-1026	07/10/12	<0.17	**25**	**7.3**	<0.28	<0.10	32.3

Table 1. Summary of Target Compound List VOCs Groundwater Monitoring Analytical Results for Pentair Flow Technologies, LLC Delavan Facility Monitoring

SAMPLE ID	DATE	PCE	1,1,1-TCA	TCE	1,1,2-TCA	Vinyl Chloride	**Total VOCs**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140 ES		5.0	200	5	5	0.2	
NR 140 PAL		0.5	40	0.5	0.5	0.02	
MW-1026	07/24/13	<0.17	**15**	**4.4**	<0.28	<0.10	19.4
	07/29/14	<0.17	**7.4**	**1.8**	<0.28	<0.10	9.2
	07/14/15	<0.17	**18**	**5.3**	<0.28	<0.10	23.3
	07/29/16	<0.37	**21**	**6.2**	<0.35	<0.20	27.2
	07/13/17	<0.37	**14**	**3.6**	<0.35	<0.20	17.6
	07/30/18	<0.37	**11**	**2.7**	<0.35	<0.20	13.7
	07/18/19	<0.37	**2.8**	**0.98**	<0.35	<0.20	3.78
MW-1026	07/22/20	<0.37	**3.2**	**1.3**	<0.35	<0.20	4.5
MW-1027	10/29/91	<0.5	**780**	**1700**	<0.5	<0.3	2480
	12/12/91	<0.5	**500**	**1200**	<0.5	<0.3	1700
	11/11/93	<0.5	**1400**	**3000**	<0.5	<0.3	4400
	08/17/94	<1	**280**	**1800**	NA	<5	2080
	06/21/95	<0.34	**18.6**	**262**	<0.19	<0.27	280.6
	11/07/95	<0.5	**15.8**	**299**	NA	<0.5	314.8
	01/26/96	<0.5	**12.5**	**206**	NA	<0.5	218.5
	05/13/96	<0.5	**29.4**	**1620**	NA	<0.5	1649.4
	08/14/96	<0.5	**20**	**21.5**	<0.5	<0.5	41.5
	10/08/96	<0.5	**17.3**	**326**	<0.5	<0.5	343.3
	01/21/97	<0.5	**15.7**	**231**	NA	<0.5	246.7
	04/01/97	<0.63	**8.2**	**130**	NA	<0.46	138.2
	07/24/97	<0.63	**9.9**	**120**	<0.15	<0.46	129.9
	11/18/97	<0.25	**12**	**200**	NA	<0.25	212
	03/23/98	<0.63	**7.3**	**160**	NA	<0.46	167.3
	07/28/98	<1.2	**3.4**	**60**	<1.2	<1.2	63.4
	09/28/98	<0.63	**9.6**	**150**	<0.28	<0.46	159.6
	12/08/98	<1.3	**12**	**210**	NA	<0.46	222
	03/11/99	<3.2	**19**	**420**	NA	<2.3	439
	09/02/99	<3.2	**28**	**540**	NA	NA	568
	04/25/00	<3.2	**13**	**320**	NA	<2.3	333
	09/25/00	<3.2	**9.4**	**220**	NA	NA	229.4
	04/23/01	<1.0	**4.8**	**150**	NA	<1.0	154.8
	10/02/01	<1.0	**7.5**	**240**	<1.0	NA	247.5
MW-1027	04/16/02	<1.2	**15**	**330**	<1.2	NA	345

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SAMPLE ID	DATE	PCE	1,1,1-TCA	TCE	1,1,2-TCA	Vinyl Chloride	**Total VOCs**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140 ES		5.0	200	5	5	0.2	
NR 140 PAL		0.5	40	0.5	0.5	0.02	
MW-1027	11/19/02	<1.2	**17**	**260**	<1.2	NA	277
	06/24/03	<5.0	**13**	**200**	<2.5	NA	213
	10/20/03	<0.50	**16**	**230**	<0.25	NA	246
	09/21/04	<2.0	**21**	**170**	NA	<0.80	191
	12/14/05	<0.50	**45**	**96**	**0.38**	<0.20	141.38
	07/31/06	<1.0	**34**	**120**	NA	NA	154
	07/31/07	<0.50	**37**	**95**	<0.25	<0.20	132
	08/19/08	<0.50	**32**	**88**	<0.25	<0.20	120
MW-1027	07/28/09	<0.50	**22**	**52**	<0.25	<0.20	74
	07/14/10	<0.50	**19**	**100**	<0.25	<0.20	119
	07/21/11	<0.50	**8.5**	**65**	<0.25	<0.20	73.5
	07/10/12	<0.17	**6.3**	**57**	<0.28	<0.10	63.3
	07/24/13	<0.17	**6.2**	**47**	<0.28	<0.10	53.2
	07/29/14	<0.17	**6.1**	**42**	<0.28	<0.10	48.1
	07/14/15	<0.17	**3.7**	**39**	<0.28	<0.10	42.7
	07/29/16	<0.37	**6.8**	**34**	<0.35	<0.20	40.8
	07/13/17	<0.37	**7.1**	**27**	<0.35	<0.20	34.1
	07/30/18	<0.37	**4.9**	**27**	<0.35	<0.20	31.9
	07/17/19	<0.37	**4.9**	**41**	<0.35	<0.20	45.9
MW-1027	07/22/20	<0.37	**2.5**	**37**	<0.35	<0.20	39.5
TW-4	11/05/91	**0.50**	**10000**	**1100**	**5.6**	<0.3	11106.1
	12/12/91	**0.60**	**11000**	**1200**	**4.5**	<0.3	12205.1
	11/11/93	**0.80**	**6200**	**1500**	**3.2**	<0.3	7704
	08/17/94	<1	**3900**	**600**	NA	<5	4500
	12/14/94	<50	**4040**	**630**	NA	<50	4670
	03/13/95	ND	**3120**	**600**	NA	ND	3720
	06/21/95	NA	**4220**	**990**	**17.6**	**5.4**	5233
TW-4	11/08/95	**1.2**	**3340**	**920**	NA	<0.5	4261.2
	01/25/96	**1.1**	**3000**	**891**	NA	<0.5	3892.1
	05/14/96	**0.90**	**1820**	**969**	NA	<0.5	2789.9
	08/14/96	<0.5	**2150**	**179**	**1.8**	<0.5	2330.8
	10/08/96	**0.90**	**1850**	**541**	**6.3**	<0.5	2398.2
TW-4	01/21/97	<0.5	**2650**	**913**	NA	<0.5	3563

Table 1. Summary of Target Compound List VOCs Groundwater Monitoring Analytical Results for Pentair Flow Technologies, LLC Delavan Facility Monitoring

SAMPLE ID	DATE	PCE	1,1,1-TCA	TCE	1,1,2-TCA	Vinyl Chloride	**Total VOCs**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140 ES		5.0	200	5	5	0.2	
NR 140 PAL		0.5	40	0.5	0.5	0.02	
TW-4	04/01/97	**0.83**	**1400**	**600**	NA	<0.46	2000.83
	07/23/97	**0.67**	**950**	**450**	**4.4**	<0.46	1405.07
	11/18/97	**0.83**	**760**	**490**	NA	<0.25	1250.83
	03/23/98	**0.74**	**780**	**530**	NA	<0.46	1310.74
TW-4	07/27/98	<2.5	**410**	**230**	<2.5	<2.5	640
	09/28/98	<0.63	**860**	**460**	**2.8**	<0.46	1322.8
	12/05/98	<6.3	**830**	**400**	NA	<4.6	1230
	03/11/99	<6.3	**480**	**270**	NA	<4.6	750
	09/02/99	<3.2	**180**	**110**	**2.4**	<2.3	292.4
	04/25/00	<3.2	**450**	**280**	NA	<2.3	730
	09/26/00	<6.3	**340**	**230**	<1.5	<4.6	570
	04/23/01	**0.60**	**290**	**240**	NA	<0.25	530.6
	10/02/01	<2.0	**190**	**140**	<2.0	<2.0	330
	04/16/02	<0.25	**76**	**60**	**1.5**	<0.25	137.5
TW-4	06/24/03	<1.0	**120**	**89**	**1.4**	<1.0	210.4
	09/21/04	<0.50	**64**	**39**	NA	<0.20	103
	12/14/05	<0.50	**65**	**35**	**0.92**	<0.20	100.92
	07/31/06	<0.50	**92**	**60**	**1.3**	<0.20	153.3
	07/31/07	<0.50	**50**	<0.20	<0.25	<0.20	50
	08/20/08	<0.50	**71**	**36**	**0.73**	<0.20	107.73
	07/28/09	<0.50	**52**	**25**	**0.34**	<0.20	77.34
TW-4	07/14/10	<0.50	**75**	**52**	**0.28**	<0.20	127.28
	07/21/11	<0.50	**38**	**42**	**0.28**	<0.20	80.28
	07/10/12	<0.17	**48**	**53**	<0.28	<0.10	101
	07/24/13	<0.17	**26**	**23**	<0.28	<0.10	49
	07/29/14	<0.17	**29**	**20**	<0.28	<0.10	49
	07/14/15	<0.17	**30**	**36**	<0.28	<0.10	66
TW-4	07/29/16	<0.37	**20**	**15**	<0.35	<0.20	35
	03/01/17	<0.37	**17**	**8.0**	<0.35	<0.20	25
	05/17/17	<0.37	**22**	**11**	<0.35	<0.20	33
	07/13/17	<0.37	**27**	**19**	<0.35	<0.20	46
	10/24/17	<0.37	**22**	**16**	<0.35	<0.20	38
TW-4	02/28/18	<0.37	**20**	**11**	<0.35	<0.20	31

Table 1. Summary of Target Compound List VOCs Groundwater Monitoring Analytical Results for Pentair Flow Technologies, LLC Delavan Facility Monitoring

SAMPLE ID	DATE	PCE	1,1,1-TCA	TCE	1,1,2-TCA	Vinyl Chloride	**Total VOCs**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140 ES		5.0	200	5	5	0.2	
NR 140 PAL		0.5	40	0.5	0.5	0.02	
TW-4	05/10/18	<0.74	**27**	**16**	<0.33	<0.50	43
	07/30/18	<0.37	**26**	**18**	<0.35	<0.20	44
	07/18/19	<0.37	**26**	**18**	<0.35	<0.20	44
TW-4	07/23/20	<0.37	**20**	**21**	<0.35	<0.20	41
D-25R	10/29/91	<0.5	<0.5	**11**	<0.5	<0.3	11
	12/13/91	**0.60**	13	**13**	<0.5	<0.3	26.6
D-25R	11/11/93	<0.5	**6.0**	**4.7**	<0.5	<0.3	10.7
	08/17/94	<1	**3.1**	**4.6**	NA	<5	7.7
	12/13/94	**0.40**	**4.7**	**5.4**	NA	<0.5	10.5
	03/13/95	ND	**4.3**	**3.2**	NA	ND	7.5
	06/26/95	<0.34	**3.1**	<0.19	<0.19	<0.27	3.1
D-25R	11/07/95	<0.5	**5.1**	<0.5	NA	<0.5	5.1
	01/25/96	<0.5	**4.7**	**5.1**	NA	<0.5	9.8
	05/14/96	<0.5	**6.9**	**6.3**	NA	<0.5	13.2
	08/14/96	**1.5**	**43.7**	**38.3**	<0.5	<0.5	83.5
D-25R	10/09/96	<0.5	**8.2**	**10.1**	<0.5	<0.5	18.3
	01/20/97	<0.5	**10.4**	<0.5	NA	<0.5	10.4
	04/01/97	**0.77**	**11**	**9.1**	NA	<0.46	20.87
	07/24/97	**0.86**	**9.5**	**9.8**	<0.15	<0.46	20.16
	11/18/97	**0.84**	**6.7**	**8.7**	NA	<0.25	16.24
	03/23/98	**0.71**	**5**	**7.5**	NA	<0.46	13.21
	07/28/98	<0.25	**2.1**	**2.7**	<0.25	<0.25	4.8
	09/28/98	**0.78**	**6.6**	**9.2**	<0.28	<0.46	16.58
	12/08/98	**0.70**	**6.5**	**8.7**	NA	<0.46	15.9
	03/12/99	**0.78**	**5.6**	**7.7**	NA	<0.46	14.08
	09/02/99	**0.72**	**6.7**	**8.4**	NA	NA	15.82
	04/25/00	**1.0**	**3.5**	**4.0**	NA	<0.46	8.5
	09/26/00	**0.82**	**4.5**	**4.7**	NA	NA	10.02
D-25R	04/23/01	**0.45**	**3.1**	**4.3**	NA	<0.25	7.85
	10/02/01	**0.58**	**4.0**	**3.8**	<0.25	NA	8.38
	04/16/02	**0.58**	**4.3**	**4.7**	<0.25	NA	9.58
	11/19/02	**0.87**	**7.6**	**6.2**	<0.25	NA	14.67
D-25R	06/24/03	**0.86**	**6.1**	**7.7**	<0.25	NA	14.66

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SAMPLE ID	DATE	PCE	1,1,1-TCA	TCE	1,1,2-TCA	Vinyl Chloride	**Total VOCs**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140 ES		5.0	200	5	5	0.2	
NR 140 PAL		0.5	40	0.5	0.5	0.02	
D-25R	10/20/03	**0.71**	**4.3**	**4.6**	<0.25	NA	9.61
	09/21/04	**0.61**	**3.5**	**3.3**	NA	<0.20	7.41
	12/13/05	**0.59**	**15**	**12**	<0.25	<0.20	27.59
D-25R	07/31/06	**0.53**	**12**	**25**	NA	NA	37.53
	07/31/07	<0.50	**8.0**	**12**	<0.25	<0.20	20
	08/20/08	**0.51**	**7.3**	**8.3**	<0.25	<0.20	16.11
D-25R	07/28/09	<0.50	**6.2**	**6.0**	<0.25	<0.20	12.2
	07/13/10	<0.50	**8.4**	**7.6**	<0.25	<0.20	16
	07/20/11	<0.50	**1.4**	**2.7**	<0.25	<0.20	4.1
	07/10/12	<0.17	**1.3**	**1.4**	<0.28	<0.10	2.7
	07/24/13	<0.17	**1.0**	**1.0**	<0.28	<0.10	2
D-25R	07/29/14	<0.17	**0.7**	**0.82**	<0.28	<0.10	1.49
	07/14/15	<0.17	<0.20	**0.71**	<0.28	<0.10	0.71
	07/28/16	<0.37	<0.38	**0.57**	<0.35	<0.20	0.57
	07/12/17	<0.37	**2.9**	**2.3**	<0.35	<0.20	5.2
	07/30/18	<0.37	<0.38	**0.55**	<0.35	<0.20	0.55
	07/17/19	<0.37	0.55	**0.54**	<0.35	<0.20	1.09
D-25R	07/22/20	<0.37	<0.38	<0.16	<0.35	<0.20	0
EX-2	11/07/91	<0.5	**870**	**210**	**1.1**	<0.3	1081.1
	12/18/91	<0.5	**1260**	**268**	**1.4**	<0.3	1529.4
Original	11/11/93	<0.5	**890**	**250**	**1.3**	<0.3	1141.3
Extraction	12/13/94	<0.5	**17.3**	**3.5**	NA	<0.5	20.8
Wells	06/21/95	<0.34	**375**	**96.4**	<0.19	<0.27	471.4
EX-2 /	08/14/96	<0.5	**99.8**	**52**	<0.5	<0.5	151.8
EX-2R	07/25/97	<0.63	**1.2**	**2.6**	<0.15	<0.46	3.8
	07/28/98	<0.25	**0.79**	**2.1**	<0.25	<0.25	2.89
	09/07/99	<0.63	**15**	**34**	NA	NA	49
	04/18/00	<0.63	**1.3**	**3.7**	NA	<0.46	5
	09/26/00	<0.63	**18**	**36**	NA	<0.46	54
	04/19/01	<0.25	**2.6**	**8.4**	NA	<0.25	11
	10/02/01	<0.25	**16**	**34**	<0.25	NA	50
	04/16/02	<0.25	**8.4**	**22**	<0.25	NA	30.4
EX-2R	06/24/03	<0.50	**0.69**	**2.9**	<0.25	NA	3.59

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SAMPLE ID	DATE	PCE	1,1,1-TCA	TCE	1,1,2-TCA	Vinyl Chloride	**Total VOCs**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140 ES		5.0	200	5	5	0.2	
NR 140 PAL		0.5	40	0.5	0.5	0.02	
EX-2R	09/21/04	<0.50	**11**	**25**	NA	<0.20	36
	07/31/06	<0.50	**0.61**	**1.7**	NA	NA	2.31
	07/31/07	<0.50	**6.3**	**6.7**	<0.25	<0.20	13
	08/20/08	<0.50	**15**	**22**	<0.25	<0.20	37
EX-2R	07/28/09	<0.50	**5.0**	**4.5**	<0.25	<0.20	9.5
	10/05/10	<0.50	**8.2**	**21**	<0.25	<0.20	29.2
	07/21/11	<0.50	**5.0**	**15**	<0.25	<0.20	20
EX-2R	07/11/12	<0.17	**3.2**	**9.8**	<0.28	<0.10	13
	07/24/13	<0.17	**4.6**	**7.0**	<0.28	<0.10	11.6
	07/30/14	<0.17	**3.3**	**5.8**	<0.28	<0.10	9.1
	07/15/15	<0.17	**1.4**	**3.8**	<0.28	<0.10	5.2
	07/28/16	<0.37	**4.2**	**7.1**	<0.35	<0.20	11.3
	10/24/17	<0.37	**3.7**	**6.3**	<0.35	<0.20	10
	07/31/18	<0.37	**1.7**	**3.6**	<0.35	<0.20	5.3
	07/18/19	<0.37	**1.0**	**2.8**	<0.35	<0.20	3.8
EX-2R	07/23/20	<0.37	<0.38	**2.4**	<0.35	<0.20	2.4
EX-3	11/07/91	<0.5	**50**	**14**	<0.5	<0.3	64
	12/18/91	<0.5	30.3	**9.5**	<0.5	<0.3	39.8
Original	11/11/93	<0.5	<0.5	<0.5	<0.5	<0.3	0
Extraction	12/13/94	<0.5	**14.4**	**5.8**	NA	<0.5	20.2
Wells	06/21/95	<0.34	**8.7**	**4.0**	<0.19	<0.27	12.7
	08/14/96	<0.5	**4.5**	**3.6**	<0.5	<0.5	8.1
	07/25/97	<0.63	**93**	**52**	**0.4**	<0.46	145.4
EX-3	07/28/98	<0.25	**30**	**28**	<0.25	<0.25	58
	09/07/99	<0.63	**22**	**26**	NA	NA	48
	04/18/00	<0.63	**37**	**55**	NA	<0.46	92
	09/26/00	<0.63	**25**	**28**	NA	NA	53
	04/19/01	<0.25	**27**	**38**	NA	<0.25	65
	10/02/01	<0.25	**13**	**17**	<0.25	NA	30
	04/16/02	<0.25	**21**	**28**	<0.25	NA	49
	06/24/03	<0.50	**23**	**46**	<0.25	NA	69
	09/21/04	<0.50	**13**	**17**	NA	<0.20	30
EX-3	12/14/05	<0.50	**28**	**34**	**0.29**	<0.20	62.29

Table 1. Summary of Target Compound List VOCs Groundwater Monitoring Analytical Results for Pentair Flow Technologies, LLC Delavan Facility Monitoring

SAMPLE ID	DATE	PCE	1,1,1-TCA	TCE	1,1,2-TCA	Vinyl Chloride	**Total VOCs**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140 ES		5.0	200	5	5	0.2	
NR 140 PAL		0.5	40	0.5	0.5	0.02	
EX-3	07/31/06	<0.50	**32**	**66**	NA	NA	98
	07/31/07	<0.50	**15**	**25**	<0.25	<0.20	40
	08/20/08	<0.50	**7.5**	**3.6**	<0.25	<0.20	11.1
	07/28/09	<0.50	**14**	**21**	<0.25	<0.20	35
	07/14/10	<0.50	**38**	**29**	**0.34**	<0.20	67.34
EX-3	07/21/11	<0.50	**34**	**33**	**0.33**	<0.20	67.33
	07/11/12	<0.17	**15**	**18**	<0.28	<0.10	33
	07/24/13	<0.17	**2.2**	**2.2**	<0.28	<0.10	4.4
	07/30/14	<0.17	**1.6**	**2.2**	<0.28	<0.10	3.8
EX-3/	07/15/15	<0.17	**3.1**	**3.5**	<0.28	<0.10	6.6
EX-3R	10/24/17	<0.37	**2.3**	**3.3**	<0.35	<0.20	5.6
	07/31/18	<0.37	**2.4**	**2.4**	<0.35	<0.20	4.8
	07/18/19	<0.37	**4.5**	**5.2**	<0.35	<0.20	9.7
EX-3R	07/23/20	<0.37	**5.0**	**6.3**	<0.35	<0.20	11.3
EX-4R	07/18/19	<0.37	**1.0**	**1.0**	<0.35	<0.20	2
EX-5R	07/18/19	<0.37	<0.38	<0.16	<0.35	<0.20	0
EX-6	07/18/19	<0.37	<0.38	<0.16	<0.35	<0.20	0
SS-1	11/11/93	**0.90**	**71**	**24**	<0.5	<0.3	95.9
	08/16/94	<1	**55**	**25**	NA	<5	80
Storm Sewer	12/14/94	0.10	**11.2**	**3.0**	NA	<0.5	14.3
Outfall	06/21/95	<0.34	**31.2**	**18.1**	<0.19	<0.27	49.3
	11/06/95	<0.5	**21.7**	<0.5	NA	<0.5	21.7
	01/25/96	**2.6**	**17.1**	**21.1**	NA	<0.5	40.8
SS-1	05/13/96	**0.60**	**12.6**	**8.2**	NA	<0.5	21.4
	08/13/96	**0.70**	**8.3**	**7.8**	<0.5	<0.5	16.8
	10/08/96	**0.70**	**6.7**	**8.8**	<0.5	<0.5	16.2
	01/20/97	**0.70**	**8.1**	**8.9**	<0.5	<0.5	17.7
	04/01/97	**0.74**	**5.8**	**6.6**	NA	<0.46	13.14
	07/23/97	<0.63	**1.2**	**1.5**	<0.15	<0.46	2.7
	11/18/97	<0.25	**4.9**	**4.9**	NA	<0.25	9.8
SS-1	09/02/99	**3.4**	**3.1**	**17**	NA	<0.46	23.5
	09/25/00	<0.63	**0.37**	**2.1**	NA	NA	2.47
SS-1	10/01/01	<0.25	**1.5**	**3.7**	<0.25	<0.25	5.2

Table 1. Summary of Target Compound List VOCs Groundwater Monitoring Analytical Results for Pentair Flow Technologies, LLC Delavan Facility Monitoring

SAMPLE ID	DATE	PCE	1,1,1-TCA	TCE	1,1,2-TCA	Vinyl Chloride	**Total VOCs**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140 ES		5.0	200	5	5	0.2	
NR 140 PAL		0.5	40	0.5	0.5	0.02	
SS-1	04/17/02	**1.1**	**1.4**	**5.2**	<0.25	NA	7.7
	12/04/02	**0.71**	**1.2**	**4.4**	<0.25	<0.25	6.31
	03/08/04	<0.50	**0.90**	**2.5**	<0.25	<0.20	3.4
	04/05/04	<0.50	<0.50	**3.2**	<0.25	<0.20	3.2
	06/22/05	**0.78**	**0.52**	**2.2**	<0.25	<0.20	3.5
	12/07/05	**1.8**	**0.67**	**0.64**	<0.25	<0.20	3.11
SS-1	08/01/06	**0.71**	<0.50	**1.6**	NA	<0.20	2.31
	08/01/07	<0.50	**0.80**	**1.9**	<0.25	<0.20	2.7
	08/20/08	**0.50**	<0.50	**0.79**	<0.25	<0.20	1.29
	07/28/09	<0.50	**1.8**	**3.2**	<0.25	<0.20	5
	07/20/10	<0.50	<0.50	**0.47**	<0.25	<0.20	0.47
	07/13/11	<0.50	<0.50	**1.5**	<0.25	<0.20	1.5
	07/10/12	<0.17	<0.20	**1.5**	<0.28	<0.10	1.5
	07/15/13	<0.17	<0.20	<0.19	<0.28	<0.10	0
	07/14/14	<0.17	<0.20	**0.75**	<0.28	<0.10	0.75
SS-1	07/06/15	**0.67**	<0.20	**0.85**	<0.28	<0.10	1.52
	07/20/16	<0.37	<0.38	**0.88**	<0.35	<0.20	0.88
	07/19/17	<0.37	<0.38	<0.16	<0.35	<0.20	0
	07/11/18	<0.37	<0.38	**0.51**	<0.35	<0.20	0.51
	07/23/19	<0.37	<0.38	**0.51**	<0.35	<0.20	0.51
SS-1	07/23/20	<0.37	<0.38	**0.55**	<0.35	<0.20	0.55
Plant #2							
D-18	11/04/91	<0.5	<0.5	**1.5**	<0.5	<0.3	1.5
D-18	12/12/91	**0.90**	0.5	**2.1**	<0.5	<0.3	3.5
Southeast	11/11/93	<0.5	<0.5	<0.5	<0.5	<0.3	0
Source Area	08/16/94	<1	<1	**1.2**	NA	<5	1.2
and	12/13/94	**0.40**	**0.20**	**1.8**	NA	**0.30**	2.7
Former Sump	03/13/95	**5.5**	**3.2**	**30.6**	NA	ND	39.3
Source Area	06/21/95	**1.5**	<0.13	**4.0**	<0.19	<0.27	5.5
Monitor	11/06/95	**1.0**	<0.5	**6.3**	NA	<0.5	7.3
Wells	01/25/96	**1.6**	<0.5	**5.2**	NA	<0.5	6.8
D-18	05/13/96	**<0.5**	<0.5	<0.5	NA	<0.5	0
D-18	08/13/96	**1.2**	<0.5	**2.5**	<0.5	<0.5	3.7

Table 1. Summary of Target Compound List VOCs Groundwater Monitoring Analytical Results for Pentair Flow Technologies, LLC Delavan Facility Monitoring

SAMPLE ID	DATE	PCE	1,1,1-TCA	TCE	1,1,2-TCA	Vinyl Chloride	**Total VOCs**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140 ES		5.0	200	5	5	0.2	
NR 140 PAL		0.5	40	0.5	0.5	0.02	
D-18	10/08/96	<0.5	<0.5	**2.2**	<0.5	<0.5	2.2
	01/20/97	**1.8**	<0.5	<0.5	NA	<0.5	1.8
	03/31/97	**3.3**	<0.28	**4.1**	NA	<0.46	7.4
	07/23/97	**2.7**	<0.28	**2.8**	<0.15	<0.46	5.5
	11/17/97	**4.1**	<0.28	**3.9**	NA	<0.48	8
	03/23/98	**4.2**	<0.28	**4.9**	NA	<0.46	9.1
	07/27/98	**2.2**	<0.25	**4.8**	<0.15	<0.25	7
	09/25/98	**9.1**	**1.4**	**38**	<0.28	<0.46	48.5
D-18	12/08/98	**6.2**	<0.28	**8.5**	NA	<0.46	14.7
	03/11/99	**4.6**	<0.28	**11**	NA	<0.46	15.6
	09/07/99	**2.6**	<0.28	**4.8**	NA	NA	7.4
	04/25/00	**4.9**	<0.28	**6.6**	NA	<0.46	11.5
	09/25/00	**2.5**	<0.28	**2.4**	NA	NA	4.9
	04/19/01	**3.0**	<0.25	**3.8**	NA	<0.25	6.8
	09/27/01	**3.2**	<0.25	**6.6**	<0.25	NA	9.8
	04/17/02	**2.6**	<0.25	**3.0**	<0.25	NA	5.6
	06/20/03	**9.1**	<0.50	**20**	<0.25	NA	29.1
D-18	10/20/03	**Not Sampled.**					
	09/20/04	**3.4**	<0.50	**1.9**	NA	<0.20	5.3
	12/14/05	<0.50	<0.50	**0.24**	<0.25	<0.20	0.24
	07/31/06	<0.50	<0.50	<0.20	NA	NA	0
D-18	07/31/07	<0.50	<0.50	<0.20	<0.25	<0.20	0
	08/19/08	<0.50	<0.50	<0.20	<0.25	<0.20	0
	07/28/09	**1.4**	<0.50	**1.0**	<0.25	<0.20	2.4
D-18	07/13/10	<0.50	<0.50	<0.20	<0.25	<0.20	0
	07/20/11	<0.50	<0.50	<0.20	<0.25	<0.20	0
	07/10/12	<0.17	<0.20	<0.19	<0.28	<0.10	0
	07/24/13	<0.17	<0.20	<0.19	<0.28	<0.10	0
	07/29/14	<0.17	<0.20	<0.19	<0.28	<0.10	0
D-18	07/14/15	<0.17	<0.20	<0.19	<0.28	<0.10	0
	07/28/16	<0.37	<0.38	**0.47**	<0.35	<0.20	0.47
	07/12/17	<0.37	<0.38	**0.61**	<0.35	<0.20	0.61
D-18	07/30/18	<0.37	<0.38	<0.16	<0.35	<0.20	0

Table 1. Summary of Target Compound List VOCs Groundwater Monitoring Analytical Results for Pentair Flow Technologies, LLC Delavan Facility Monitoring

SAMPLE ID	DATE	PCE	1,1,1-TCA	TCE	1,1,2-TCA	Vinyl Chloride	**Total VOCs**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140 ES		5.0	200	5	5	0.2	
NR 140 PAL		0.5	40	0.5	0.5	0.02	
	07/17/19	<0.37	<0.38	<0.16	<0.35	<0.20	0
D-18	07/22/20	<0.37	<0.38	<0.16	<0.35	<0.20	0
MW-2004	10/29/91	**6.4**	**4.8**	**37**	<0.5	<0.3	48.2
	12/13/91	**11**	**2.6**	**61**	<0.5	<0.3	74.6
	11/11/93	**2.5**	**14**	**5.6**	<0.5	<0.3	22.1
	12/13/94	**0.70**	**0.20**	**1.8**	NA	**0.3**	3
	06/21/95	**3.2**	**17.6**	**14.2**	**3.4**	<0.27	38.4
	08/13/96	**0.96**	**7.2**	**5.2**	<0.5	<0.5	13.36
	07/23/97	<0.63	**1.9**	**1.7**	<0.15	<0.46	3.6
MW-2004	07/27/98	<0.25	<0.25	**0.94**	<0.15	<0.25	0.94
	09/07/99	<0.63	<0.28	<0.49	NA	NA	0
	04/26/00	<0.63	<0.28	<0.49	NA	NA	0
	09/27/01	<0.25	<0.25	<0.25	<0.25	NA	0
	11/18/02	<0.25	<0.25	<0.25	<0.25	NA	0
	06/20/03	<0.50	<0.50	<0.25	<0.25	NA	0
	09/20/04	<0.50	<0.50	<0.20	NA	<0.20	0
	12/13/05	<0.50	<0.50	**0.50**	<0.25	<0.20	0.5
	07/29/06	<0.50	<0.50	**0.37**	NA	NA	0.37
	07/31/07	<0.50	<0.50	<0.20	<0.25	<0.20	0
	08/19/08	<0.50	<0.50	<0.20	<0.25	<0.20	0
MW-2004	07/28/09	<0.50	<0.50	<0.20	<0.25	<0.20	0
	07/13/10	<0.50	<0.50	<0.20	<0.25	<0.20	0
	07/20/11	<0.50	<0.50	<0.20	<0.25	<0.20	0
	07/10/12	<0.17	<0.20	<0.19	<0.28	<0.10	0
MW-2004	07/24/13	<0.17	<0.20	<0.19	<0.28	<0.10	0
	07/29/14	<0.17	<0.20	<0.19	<0.28	<0.10	0
	07/14/15	<0.17	<0.20	**0.65**	<0.28	<0.10	0.65
	07/28/16	<0.37	<0.38	<0.16	<0.35	<0.20	0
	07/12/17	<0.37	<0.38	<0.16	<0.35	<0.20	0
	07/30/18	<0.37	<0.38	<0.16	<0.35	<0.20	0
	07/17/19	<0.37	<0.38	<0.16	<0.35	<0.20	0
MW-2004	07/22/20	<0.37	<0.38	<0.16	<0.35	<0.20	0
MW-2005	10/28/91	**30**	**2.7**	**20**	<0.5	<0.3	52.7
MW-2005	12/13/91	**32**	**3.0**	**23**	<0.5	<0.3	58

Table 1. Summary of Target Compound List VOCs Groundwater Monitoring Analytical Results for Pentair Flow Technologies, LLC Delavan Facility Monitoring

SAMPLE ID	DATE	PCE	1,1,1-TCA	TCE	1,1,2-TCA	Vinyl Chloride	**Total VOCs**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140 ES		5.0	200	5	5	0.2	
NR 140 PAL		0.5	40	0.5	0.5	0.02	
MW-2005	11/11/93	**47**	**3.1**	**31**	<0.5	<0.3	81.1
	12/13/94	**0.40**	<0.5	<0.5	NA	<0.5	0.4
	08/16/94	<1	<1	<1	NA	<5	0
	06/21/95	**0.70**	<0.13	**0.70**	<0.19	<0.27	1.4
	11/07/95	**1.9**	<0.5	**2.7**	NA	<0.5	4.6
	01/25/96	**10.9**	<0.5	**5.2**	NA	<0.5	16.1
	05/13/96	<0.5	<0.5	<0.5	NA	<0.5	0
	08/13/96	**10.2**	<0.5	**2.1**	<0.5	<0.5	12.3
	10/08/96	**13**	<0.5	<0.5	<0.5	<0.5	13
	01/20/97	**24**	<0.5	**10.1**	NA	<0.5	34.1
MW-2005	04/01/97	**47**	0.76	**8.8**	NA	<0.46	56.56
	07/23/97	<0.63	15	**1.6**	<0.15	<0.46	16.6
	11/18/97	**2.7**	<0.25	**0.33**	NA	<0.25	3.03
	03/23/98	**3.0**	<0.28	**0.51**	NA	<0.46	3.51
	07/21/98	**19**	<0.25	**1.3**	<0.15	<0.25	20.3
	09/25/98	**14**	<0.28	**1.1**	<0.28	<0.46	15.1
	12/05/98	**6.2**	<0.28	**5.2**	NA	<0.46	11.4
	03/12/99	**7.8**	<0.28	**8.9**	NA	<0.46	16.7
	09/07/99	**7.8**	<0.28	**1.0**	NA	NA	8.8
	04/25/00	**1.2**	<0.28	<0.49	NA	<0.46	1.2
MW-2005	09/25/00	**1.7**	<0.28	<0.49	NA	NA	1.7
	04/19/01	**5.7**	<0.25	**0.60**	NA	<0.25	6.3
	09/27/01	**7.5**	<0.25	**0.62**	<0.25	NA	8.12
	04/17/02	**9.8**	<0.25	**0.89**	<0.25	NA	10.69
	06/20/03	**6.0**	<0.50	**0.87**	<0.25	NA	6.87
MW-2005	09/20/04	**17**	<0.50	**1.3**	NA	<0.20	18.3
MW-2005R	07/30/07	**2.8**	<0.50	<0.20	<0.25	<0.20	2.8
	08/18/08	<0.50	<0.50	<0.20	<0.25	<0.20	0
	07/27/09	<0.50	<0.50	<0.20	<0.25	<0.20	0
	07/13/10	<0.50	<0.50	<0.20	<0.25	<0.20	0
	07/20/11	<0.50	<0.50	<0.20	<0.25	<0.20	0
	07/10/12	<0.17	<0.20	<0.19	<0.28	<0.10	0
MW-2005R	07/24/13	<0.17	<0.20	<0.19	<0.28	<0.10	0

Table 1. Summary of Target Compound List VOCs Groundwater Monitoring Analytical Results for Pentair Flow Technologies, LLC Delavan Facility Monitoring

SAMPLE ID	DATE	PCE	1,1,1-TCA	TCE	1,1,2-TCA	Vinyl Chloride	**Total VOCs**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140 ES		5.0	200	5	5	0.2	
NR 140 PAL		0.5	40	0.5	0.5	0.02	
MW-2005R	07/29/14	**2.9**	<0.20	<0.19	<0.28	<0.10	2.9
	07/14/15	<0.17	<0.20	<0.19	<0.28	<0.10	0
	07/28/16	**2.4**	<0.38	<0.16	<0.35	<0.20	2.4
	07/12/17	<0.37	<0.38	<0.16	<0.35	<0.20	0
	07/30/18	<0.37	<0.38	<0.16	<0.35	<0.20	0
	07/17/19	<0.37	<0.38	<0.16	<0.35	<0.20	0
MW-2005R	07/22/20	<0.37	<0.38	<0.16	<0.35	<0.20	0
MW-2011	07/30/07	<0.50	**2.9**	**30**	<0.25	<0.20	32.9
	08/18/08	<0.50	**2.0**	**12**	<0.25	<0.20	14
MW-2011	07/27/09	<0.50	**1.5**	**14**	<0.25	<0.20	15.5
	07/13/10	<0.50	**2.8**	**13**	<0.25	<0.20	15.8
MW-2011	07/20/11	<0.50	**2.7**	**20**	<0.25	<0.20	22.7
	07/10/12	<0.17	**3.4**	**39**	<0.28	<0.10	42.4
MW-2011	07/24/13	<0.17	**2.3**	**9.0**	<0.28	<0.10	11.3
	07/29/14	<0.17	**4.1**	**35**	<0.28	<0.10	39.1
	07/14/15	<0.17	<0.20	**7.2**	<0.28	<0.10	7.2
	07/28/16	<0.37	**3.3**	**29**	<0.35	<0.20	32.3
	07/12/17	<0.37	**2.1**	**16**	<0.35	<0.20	18.1
	07/30/18	<0.37	**1.2**	**7.6**	<0.35	<0.20	8.8
	07/17/19	<0.37	**2.2**	**13**	<0.35	<0.20	15.2
MW-2011	07/22/20	<0.37	**2.0**	**13**	<0.35	<0.20	15
D-15	11/05/91	**26**	**45**	**420**	<0.5	<0.3	491
	12/12/91	**24**	31	**390**	<0.5	<0.3	445
	11/11/93	**11**	12	**350**	<0.5	<0.3	373
	08/16/94	**15**	**15**	**220**	NA	<5	250
D-15	12/13/94	**7.8**	**3.1**	**105**	NA	<5	115.9
	03/13/95	**10.6**	**4.0**	**126**	NA	ND	140.6
	06/21/95	**13**	**8.6**	**119**	<0.19	<0.27	140.6
	11/06/95	**13.4**	**4.4**	**113**	NA	<0.5	130.8
D-15	01/25/96	**11.5**	**2.3**	**92.8**	NA	<0.5	106.6
	05/13/96	**6.7**	<0.5	**54**	NA	<0.5	60.7
	08/15/96	**8.0**	**1.7**	**46**	<0.5	<0.5	55.7
D-15	10/08/96	**6.4**	**1.4**	**70.4**	<0.5	<0.5	78.2

Table 1. Summary of Target Compound List VOCs Groundwater Monitoring Analytical Results for Pentair Flow Technologies, LLC Delavan Facility Monitoring

SAMPLE ID	DATE	PCE	1,1,1-TCA	TCE	1,1,2-TCA	Vinyl Chloride	**Total VOCs**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140 ES		5.0	200	5	5	0.2	
NR 140 PAL		0.5	40	0.5	0.5	0.02	
D-15	01/20/97	**10.9**	<0.5	**61**	NA	<0.5	71.9
	03/31/97	**10**	**0.83**	**53**	NA	<0.46	63.83
	07/23/97	**10**	<0.28	**68**	<0.15	<0.46	78
	11/17/97	**15**	**0.97**	**83**	NA	<0.48	98.97
	03/23/98	**16**	**0.48**	**78**	NA	<0.46	94.48
	07/27/98	**Not Sampled.**					
	09/26/98	**29**	**0.56**	**170**	<0.28	<0.46	199.56
	12/08/98	**74**	**0.77**	**1000**	NA	<0.46	1074.77
	03/11/99	**19**	<0.56	**84**	NA	<0.92	103
	09/07/99	**22**	<0.56	**120**	NA	NA	142
	04/25/00	**8.7**	**0.61**	**33**	NA	<0.46	42.31
D-15	09/28/00	**19**	**0.77**	**85**	NA	NA	104.77
	04/19/01	**50**	<2.5	**470**	NA	<2.5	520
	09/27/01	**54**	<2.5	**370**	<2.5	NA	424
D-15	04/15/02	**17**	**0.47**	**62**	<2.5	NA	79.47
	11/19/02	**16**	**0.48**	**61**	<0.25	NA	77.48
	06/20/03	**11**	<0.50	**39**	<0.25	NA	50
	10/20/03	**7.5**	<0.50	**29**	<0.25	NA	36.5
D-15	09/20/04	**18**	<0.50	**36**	NA	<0.20	54
	12/13/05	**6.8**	<0.50	**27**	<0.25	<0.20	33.8
	07/27/06	**6.8**	<0.50	**18**	NA	NA	24.8
	07/31/07	**7.2**	<0.50	**16**	<0.25	<0.20	23.2
	08/18/08	**10**	<0.50	**21**	<0.25	<0.20	31
	07/27/09	**11**	<0.50	**21**	<0.25	<0.20	32
D-15	07/13/10	**47**	<0.50	**42**	<0.25	<0.20	89
	07/20/11	**7.9**	<0.50	**13**	<0.25	<0.20	20.9
	07/10/12	**6.2**	<0.20	**13**	<0.28	<0.10	19.2
	07/24/13	**8.9**	<0.20	**13**	<0.28	<0.10	21.9
	07/29/14	**4.2**	<0.20	**7.7**	<0.28	<0.10	11.9
D-15	07/14/15	**4.4**	<0.20	**8.5**	<0.28	<0.10	12.9
	07/28/16	**10**	<0.38	**13**	<0.35	<0.20	23
	07/12/17	**9.8**	<0.38	**12**	<0.35	<0.20	21.8
D-15	07/31/18	**6.3**	<0.38	**7.0**	<0.35	<0.20	13.3

Table 1. Summary of Target Compound List VOCs Groundwater Monitoring Analytical Results for Pentair Flow Technologies, LLC Delavan Facility Monitoring

SAMPLE ID	DATE	PCE	1,1,1-TCA	TCE	1,1,2-TCA	Vinyl Chloride	**Total VOCs**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140 ES		5.0	200	5	5	0.2	
NR 140 PAL		0.5	40	0.5	0.5	0.02	
D-15	07/17/19	**8.3**	<0.38	**8.4**	<0.35	<0.20	16.7
D-15	07/22/20	**13**	<0.38	**11**	<0.35	<0.20	24
TW-1	10/29/91	<0.5	**1.3**	**18**	<0.5	<0.3	19.3
	12/13/91	**4.9**	**1.1**	**48**	<0.5	<0.3	54
	11/11/93	**4.0**	**9.1**	**20**	<0.5	<0.3	33.1
	08/16/94	**2.4**	<1	**14**	NA	<5	16.4
	12/13/94	**0.40**	**0.30**	**4.1**	NA	<0.5	4.8
	03/13/95	NA	**NA**	**NA**	NA	NA	0
	06/21/95	**1.1**	**1.8**	**4.9**	<0.19	<0.27	7.8
	11/07/95	**1.0**	<0.5	**8.7**	NA	<0.5	9.7
	01/25/96	**1.5**	**1.3**	**4.7**	NA	<0.5	7.5
	05/13/96	**1.1**	**0.60**	**2.9**	NA	<0.5	4.6
TW-1	08/13/96	**0.90**	**0.70**	**2.7**	<0.5	<0.5	4.3
	10/08/96	<0.5	<0.5	<0.5	<0.5	<0.5	0
	01/20/97	**2.1**	**3.0**	**10**	NA	<0.5	15.1
	03/31/97	**2.0**	**3.1**	**5.9**	NA	<0.46	11
	07/23/97	**0.88**	**0.74**	**2.5**	<1.1	<0.46	4.12
	11/17/97	**0.88**	**0.55**	**2.0**	NA	<0.48	3.43
	03/23/98	<0.63	<0.28	**1.7**	NA	<0.46	1.7
	07/28/98	<0.25	<0.25	**1.7**	<0.15	<0.25	1.7
	09/26/98	<0.63	<0.28	**1.7**	<0.28	<0.46	1.7
	12/08/98	<0.63	<0.28	**1.5**	NA	<0.46	1.5
TW-1	03/12/99	<0.63	<0.28	**1.0**	NA	<0.46	1
	09/07/99	<0.63	**0.57**	**2.4**	NA	NA	2.97
	09/26/00	**1.1**	**0.81**	**7.3**	NA	NA	9.21
TW-1	09/28/01	<0.25	<0.25	**1.2**	<0.25	NA	1.2
	12/13/05	<0.50	<0.50	**0.22**	<0.25	<0.20	0.22
TW-1	12/13/05	<0.50	<0.50	**0.22**	<0.25	<0.20	0.22
	07/29/06	<0.50	<0.50	**0.20**	NA	NA	0.2
	07/31/07	<0.50	<0.50	**1.2**	<0.25	<0.20	1.2
	08/19/08	**0.53**	<0.50	**0.62**	<0.25	<0.20	1.15
	07/28/09	<0.50	<0.50	**0.27**	<0.25	<0.20	0.27
TW-1	07/13/10	<0.50	<0.50	**0.38**	<0.25	<0.20	0.38

Table 1. Summary of Target Compound List VOCs Groundwater Monitoring Analytical Results for Pentair Flow Technologies, LLC Delavan Facility Monitoring

SAMPLE ID	DATE	PCE	1,1,1-TCA	TCE	1,1,2-TCA	Vinyl Chloride	**Total VOCs**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140 ES		5.0	200	5	5	0.2	
NR 140 PAL		0.5	40	0.5	0.5	0.02	
TW-1	07/20/11	<0.50	<0.50	**0.28**	<0.25	<0.20	0.28
	07/10/12	<0.17	<0.20	**0.31**	<0.28	<0.10	0.31
TW-1	07/24/13	<0.17	<0.20	<0.19	<0.28	<0.10	0
	07/29/14	<0.17	<0.20	<0.19	<0.28	<0.10	0
TW-1	07/14/15	<0.17	<0.20	<0.19	<0.28	<0.10	0
	07/28/16	<0.37	<0.38	<0.16	<0.35	<0.20	0
	07/12/17	<0.37	<0.38	<0.16	<0.35	<0.20	0
	07/30/18	<0.37	<0.38	<0.16	<0.35	<0.20	0
	07/17/19	<0.37	<0.38	<0.16	<0.35	<0.20	0
TW-1	07/22/20	<0.37	<0.38	<0.16	<0.35	<0.20	0
TW-3	10/30/91	**6.8**	**1.7**	**19**	<0.5	<0.3	27.5
	12/12/91	**8.3**	**1.3**	**22**	<0.5	<0.3	31.6
	11/11/93	**7.5**	**0.70**	**12**	<0.5	<0.3	20.2
	12/14/94	**5.3**	**11.6**	**5.5**	NA	<0.5	22.4
TW-3	06/21/95	**5.5**	**11.9**	**7.4**	<0.19	<0.27	24.8
	08/13/96	**2.3**	**9.7**	**8.1**	<0.5	<0.5	20.1
	07/23/97	**1.7**	**3.6**	**4.3**	<0.15	<0.46	9.6
	07/28/98	<0.25	**1.0**	**1.6**	<0.15	<0.25	2.6
	09/07/99	**1.9**	**1.1**	**3.2**	NA	NA	6.2
	04/25/00	**1.2**	**0.74**	**1.9**	NA	<0.46	3.84
TW-3	09/25/00	**1.5**	**0.72**	**3.0**	NA	NA	5.22
	04/19/01	**2.7**	**0.68**	**6.0**	NA	<0.25	9.38
	09/27/01	**7.5**	**1.3**	**21.0**	<0.25	NA	29.8
	04/16/02	**2.1**	**0.40**	**3.2**	<0.25	NA	5.7
	11/19/02	**4.0**	**0.53**	**7.8**	<0.25	NA	12.33
	06/24/03	**2.5**	<0.50	**2.6**	<0.25	NA	5.1
TW-3	10/20/03	**2.8**	<0.50	**2.0**	<0.25	NA	4.8
	09/20/04	**2.8**	<0.50	**2.8**	NA	<0.20	5.6
	12/13/05	**1.7**	<0.50	**1.6**	<0.25	<0.20	3.3
TW-3	07/27/06	**1.4**	<0.50	**1.2**	NA	NA	2.6
	07/31/07	**0.97**	<0.50	**0.94**	<0.25	<0.20	1.91
	08/20/08	**1.5**	<0.50	**0.79**	<0.25	<0.20	2.29
TW-3	07/27/09	**1.8**	<0.50	**0.86**	<0.25	<0.20	2.66

Table 1. Summary of Target Compound List VOCs Groundwater Monitoring Analytical Results for Pentair Flow Technologies, LLC Delavan Facility Monitoring

SAMPLE ID	DATE	PCE	1,1,1-TCA	TCE	1,1,2-TCA	Vinyl Chloride	**Total VOCs**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140 ES		5.0	200	5	5	0.2	
NR 140 PAL		0.5	40	0.5	0.5	0.02	
TW-3	07/13/10	**3.1**	<0.50	**4.9**	<0.25	<0.20	8
	07/20/11	**1.5**	<0.50	**0.63**	<0.25	<0.20	2.13
TW-3	07/10/12	**2.7**	<0.20	**1.1**	<0.28	<0.10	3.8
	07/24/13	**1.3**	<0.20	**0.61**	<0.28	<0.10	1.91
	07/29/14	**0.63**	<0.20	**0.38**	<0.28	<0.10	1.01
TW-3	07/14/15	<0.17	<0.20	**0.64**	<0.28	<0.10	0.64
	07/28/16	**0.54**	<0.38	**0.29**	<0.35	<0.20	0.83
	07/12/17	**0.59**	<0.38	<0.16	<0.35	<0.20	0.59
	07/30/18	<0.37	<0.38	<0.16	<0.35	<0.20	0
	07/17/19	<0.37	<0.38	<0.16	<0.35	<0.20	0
TW-3	07/22/20	**0.91**	<0.38	<0.16	<0.35	<0.20	0.91
EX-1	11/07/91	**8.2**	**3.7**	**20**	<0.5	<0.3	31.9
Original	12/18/91	**6.3**	**3.9**	**14.6**	<0.5	<0.3	24.8
Extraction	11/11/93	**6.8**	**2.3**	**13**	<0.5	<0.3	22.1
Well	12/13/94	**4.7**	**2.7**	**11**	NA	<0.5	18.4
EX-1	06/21/95	**6.2**	<0.13	**14.7**	<0.19	<0.27	20.9
	08/13/96	**2.8**	**1.6**	**6.7**	<0.5	<0.5	11.1
	07/23/97	**3.1**	**1.5**	**5.4**	<0.15	<0.46	10
	07/28/98	<0.25	**0.47**	**5.2**	<0.15	<0.25	5.67
	09/07/99	**3.4**	**0.32**	**8.7**	NA	NA	12.42
	09/26/00	**3.0**	**0.39**	**11**	NA	NA	14.39
	10/02/01	**7.1**	<0.25	**27**	<0.25	NA	34.1
	09/21/04	**3.8**	<0.50	**4.2**	NA	<0.20	8
	12/14/05	**1.4**	<0.50	**1.4**	<0.25	<0.20	2.8
	07/31/06	**1.4**	<0.50	**1.5**	NA	NA	2.9
	07/31/07	**1.3**	<0.50	**0.84**	<0.25	<0.20	2.14
	08/20/08	**1.1**	<0.50	**0.75**	<0.25	<0.20	1.85
	07/14/10	**1.7**	<0.50	**3.1**	<0.25	<0.20	4.8
	07/21/11	**1.1**	<0.50	**1.0**	<0.25	<0.20	2.1
	07/11/12	**1.3**	<0.20	**1.2**	<0.28	<0.10	2.5
EX-1	07/24/13	**0.89**	<0.20	**0.47**	<0.28	<0.10	1.36
	07/30/14	**0.71**	<0.20	**0.42**	<0.28	<0.10	1.13
EX-1	07/15/15	<0.17	<0.20	<0.19	<0.28	<0.10	0

Table 1. Summary of Target Compound List VOCs Groundwater Monitoring Analytical Results for Pentair Flow Technologies, LLC Delavan Facility Monitoring

SAMPLE ID	DATE	PCE	1,1,1-TCA	TCE	1,1,2-TCA	Vinyl Chloride	**Total VOCs**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140 ES		5.0	200	5	5	0.2	
NR 140 PAL		0.5	40	0.5	0.5	0.02	
EX-1	07/28/16	**0.72**	<0.38	<0.16	<0.35	<0.20	0.72
	07/13/17	<0.37	<0.38	<0.16	<0.35	<0.20	0
	07/31/18	**0.60**	<0.38	**0.30**	<0.35	<0.20	0.9
	07/18/19	**0.53**	<0.38	**0.30**	<0.35	<0.20	0.83
EX-1	07/23/20	<0.37	<0.38	<0.16	<0.35	<0.20	0
EX-7	11/07/91	**37**	**5.0**	**350**	<0.5	<0.3	392
Original	12/18/91	**44**	**5.1**	**241**	<0.5	<0.3	290.1
Extraction	11/11/93	**27**	**8.1**	**160**	<0.5	<0.3	195.1
Well	12/13/94	**19.6**	**0.80**	**62.8**	NA	<0.5	83.2
	06/21/95	**60.6**	<0.13	**105**	<0.19	<0.27	165.6
EX-7	08/13/96	**48.3**	<0.5	**243**	<0.5	<0.5	291.3
	07/23/97	**24**	**0.49**	**130**	<0.15	<0.5	154.49
	07/28/98	<50	<50	**1000**	<50	<50	1000
	09/07/99	**130**	<2.8	**490**	NA	NA	620
	04/18/00	**77**	**0.87**	**150**	NA	<0.46	227.87
	09/26/00	**56**	<0.56	**140**	NA	NA	196
EX-7	04/19/01	**56**	<1.0	**110**	NA	<1.0	166
	04/16/02	**19**	<0.25	**35**	NA	<1.0	54
	11/19/02	**26**	**0.40**	**58**	<0.25	NA	84.4
EX-7	06/24/03	**20**	<0.50	**26**	<0.25	NA	46
	10/20/03	<0.50	<0.50	**30**	<0.25	NA	30
	09/21/04	**25**	<0.50	**36**	NA	<0.20	61
	12/14/05	**14**	<0.50	**29**	<0.25	<0.20	43
	07/31/06	**14**	<0.50	**22**	NA	NA	36
	07/31/07	**9.0**	<0.50	**10**	<0.25	<0.20	19
	08/20/08	**6.2**	<0.50	**7.5**	<0.25	<0.20	13.7
	07/29/09	**7.5**	<0.50	**9.3**	<0.25	<0.20	16.8
	07/15/10	**98**	<0.50	**130**	<0.25	<0.20	228
	07/21/11	**7.8**	<0.50	**8.6**	<0.25	<0.20	16.4
	07/11/12	**7.0**	<0.20	<0.19	<0.28	<0.10	7
	07/24/13	**5.6**	<0.20	**3.9**	<0.28	<0.10	9.5
	07/30/14	**6.4**	<0.20	**4.6**	<0.28	<0.10	11
EX-7	07/15/15	**8.8**	<0.20	**6.4**	<0.28	<0.10	15.2

Table 1. Summary of Target Compound List VOCs Groundwater Monitoring Analytical Results for Pentair Flow Technologies, LLC Delavan Facility Monitoring

SAMPLE ID	DATE	PCE	1,1,1-TCA	TCE	1,1,2-TCA	Vinyl Chloride	**Total VOCs**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140 ES		5.0	200	5	5	0.2	
NR 140 PAL		0.5	40	0.5	0.5	0.02	
EX-7/	07/28/16	**6.5**	<0.38	**3.4**	<0.35	<0.20	9.9
EX-7R	10/24/17	**7.3**	<0.38	**3.8**	<0.35	<0.20	11.1
	07/31/18	**4.7**	<0.38	**2.4**	<0.35	<0.20	7.1
	07/18/19	**5.4**	<0.38	**2.4**	<0.35	<0.20	7.8
EX-7R	07/23/20	**5.0**	<0.38	**2.6**	<0.35	<0.20	7.6

Notes:
VOCs = Volatile Organic Compounds
ug/L = micrograms parts per liter, which is equivalent to parts per billion (ppb).
ES = Enforcement Standard, PAL = Preventative Action Limit
Orange Highlight = above ES, Yellow Highlight = above PAL
PCE = Tetrachloroethene
TCA = Trichloroethane TCE = Trichloroethene

Table 2. Summary of VOCs Groundwater Monitoring Analytical Results for Plant #1 Monitor Well TW-4

WELL	DATE	PCE	1,1,1-TCA	TCE	1,1,2-TCA	Vinyl Chloride	Acetone	Benzene	Chloroform	1,1-DCA	1,2-DCA	1,1-DCE	CIS-1,2-DCE	Trans-1,2-DCE	Methylene Chloride	Ethylbenzene	Xylenes, Total	**Total VOCs**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140	ES	5.0	200	5	5	0.2	9000	5.0	6	850	5	7	70	100	5	700	2000	
NR 140	PAL	0.5	40	0.5	0.5	0.02	1800	0.5	0.6	85	0.5	0.7	7	20	0.5	140	400	
TW-4	11/05/91	**0.50**	**10000**	**1100**	**5.6**	<0.3	<1.0	<0.5	**4.0**	**61**	<0.5	**440.0**	**50**	<0.5	**2.4**	<0.5	<1.0	11663.5
	12/12/91	**0.60**	**11000**	**1200**	**4.5**	<0.3	<1.0	<0.5	**3.7**	**93**	**3**	**680.0**	**52**	<0.5	<1	<0.5	<1.0	13036.8
	11/11/93	**0.80**	**6200**	**1500**	**3.2**	<0.3	<1.0	<0.5	<0.5	**26**	<0.5	**490**	**25**	<0.5	<1.0	<0.5	<1.0	8245
	08/17/94	<1	**3900**	**600**	NA	<5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4500
	12/14/94	<50	**4040**	**630**	NA	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4670
	03/13/95	ND	**3120**	**600**	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3720
	06/21/95	NA	**4220**	**990**	**17.6**	**5.4**	<1.0	NA	**3.8**	**113**	<0.5	**415**	**93.6**	NA	NA	NA	NA	5858.4
	11/08/95	**1.2**	**3340**	**920**	NA	<0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4261.2
	01/25/96	**1.1**	**3000**	**891**	NA	<0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3892.1
	05/14/96	**0.90**	**1820**	**969**	NA	<0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2789.9
	08/14/96	<0.5	**2150**	**179**	**1.8**	<0.5	<1.0	<0.5	<0.5	**12**	<1.6	**36.7**	NA	<0.5	NA	<0.5	NA	2379.5
	10/08/96	**0.90**	**1850**	**541**	**6.3**	<0.5	<1.0	<0.5	**1.0**	**36.3**	<1.6	**196**	NA	<0.5	NA	<0.5	NA	2631.5
	01/21/97	<0.5	**2650**	**913**	NA	<0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3563
	04/01/97	**0.83**	**1400**	**600**	NA	<0.46	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000.83
	07/23/97	**0.67**	**950**	**450**	**4.4**	<0.46	**3.4**	**0.3**	**0.70**	**24**	<0.20	**66**	**36**	0.5	<0.87	<0.38	<1.1	1535.97
	11/18/97	**0.83**	**760**	**490**	NA	<0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1250.83
	03/23/98	**0.74**	**780**	**530**	NA	<0.46	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1310.74
	07/27/98	<2.5	**410**	**230**	<2.5	<2.5	<20	<1.0	<2.5	**13**	<2.5	**16**	**21**	<2.5	**15**	<2.5	<5.0	705
	09/28/98	<0.63	**860**	**460**	**2.8**	<0.46	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1322.8
	12/05/98	<6.3	**830**	**400**	NA	<4.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1230
	03/11/99	<6.3	**480**	**270**	NA	<4.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	750
	09/02/99	<3.2	**180**	**110**	**2.4**	<2.3	NA	<1.6	<0.90	<1.2	<1.0	**19**	**2.0**	<2.0	<4.4	<1.9	<5.5	313.4
	04/25/00	<3.2	**450**	**280**	NA	<2.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.5	730
TW-4	09/26/00	<6.3	**340**	**230**	<1.5	<4.6	NA	<3.1	<1.8	**5.2**	<2.0	**15**	**10**	<3.9	<8.7	<3.8	<5.5	600.2

Table 2. Summary of VOCs Groundwater Monitoring Analytical Results for Plant #1 Monitor Well TW-4

WELL	DATE	PCE	1,1,1-TCA	TCE	1,1,2-TCA	Vinyl Chloride	Acetone	Benzene	Chloroform	1,1-DCA	1,2-DCA	1,1-DCE	CIS-1,2-DCE	Trans-1,2-DCE	Methylene Chloride	Ethylbenzene	Xylenes, Total	**Total VOCs**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140	ES	5.0	200	5	5	0.2	9000	5.0	6	850	5	7	70	100	5	700	2000	
NR 140	PAL	0.5	40	0.5	0.5	0.02	1800	0.5	0.6	85	0.5	0.7	7	20	0.5	140	400	
TW-4	04/23/01	**0.60**	**290**	**240**	NA	<0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	530.6
	10/02/01	<2.0	**190**	**140**	<2.0	<2.0	NA	<0.80	<2.0	**2.1**	<2.0	**6.8**	**3.0**	<2.0	**8.1**	<2.0	<2.0	350
	04/16/02	<0.25	**76**	**60**	**1.5**	<0.25	NA	<0.10	<0.25	**1.4**	<0.25	**2.5**	**0.76**	<0.25	**0.47**	<0.25	<0.25	142.63
TW-4	06/24/03	<1.0	**120**	**89**	**1.4**	<1.0	NA	<0.50	<0.50	**2.1**	<1.0	**4.7**	**3.7**	<1.0	<2.0	<1.0	<1.0	220.9
	09/21/04	<0.50	**64**	**39**	NA	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	103
	12/14/05	<0.50	**65**	**35**	**0.92**	<0.20	<2.0	<0.20	<0.20	**0.76**	<0.50	**1.6**	**0.55**	<0.50	<1.0	<0.50	<0.50	103.83
	07/31/06	<0.50	**92**	**60**	**1.3**	<0.20	<2.0	<0.20	<0.20	**1.3**	<0.50	**2.9**	**1.4**	<0.50	<1.0	<0.50	<0.50	158.9
	07/31/07	<0.50	**50**	<0.20	<0.25	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	50
	08/20/08	<0.50	**71**	**36**	**0.73**	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	107.73
	07/28/09	<0.50	**52**	**25**	**0.34**	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	77.34
	07/14/10	<0.50	**75**	**52**	**0.28**	<0.20	NA	<0.20	<0.20	<0.50	<0.50	**2.1**	<0.50	<0.50	<1.0	<0.50	<0.50	129.38
	07/21/11	<0.50	**38**	**42**	**0.28**	<0.20	NA	<0.20	<0.20	**0.52**	<0.50	**0.78**	<0.50	<0.50	<1.0	<0.50	<0.50	81.58
	07/10/12	<0.17	**48**	**53**	<0.28	<0.10	NA	<0.074	<0.20	**1.8**	<0.28	**1.8**	<0.12	<0.25	<0.68	<0.50	<0.068	104.6
	07/24/13	<0.17	**26**	**23**	<0.28	<0.10	NA	<0.074	<0.20	**0.54**	<0.28	**1.1**	<0.12	<0.25	<0.68	**0.13**	**0.20**	50.97
	07/29/14	<0.17	**29**	**20**	<0.28	<0.10	NA	<0.074	<0.20	<0.19	<0.28	**0.9**	<0.12	<0.25	<0.68	<0.13	<0.068	49.9
	07/14/15	<0.17	**30**	**36**	<0.28	<0.10	NA	<0.074	<0.20	**4.9**	<0.28	**1.4**	**1.7**	<0.25	**8.2 B**	<0.10	<0.068	82.2
	07/29/16	<0.37	**20**	**15**	<0.35	<0.20	NA	<0.15	<0.37	<0.41	<0.39	<0.39	<0.41	<0.35	<1.6	<0.18	<0.22	35
	03/01/17	<0.37	**17**	**8.0**	<0.35	<0.20	NA	<0.15	<0.37	<0.41	<0.39	<0.39	<0.41	<0.35	<1.6	<0.18	<0.22	25
	05/17/17	<0.37	**22**	**11**	<0.35	<0.20	NA	<0.15	<0.37	**0.96**	<0.39	**0.90**	<0.41	<0.35	<1.6	<0.18	<0.22	34.86
	07/13/17	<0.37	**27**	**19**	<0.35	<0.20	NA	<0.15	<0.37	**1.1**	<0.39	**1.0**	<0.41	<0.35	<1.6	<0.18	<0.22	48.1
	10/24/17	<0.37	**22**	**16**	<0.35	<0.20	NA	<0.15	<0.37	<0.41	<0.39	**0.91**	<0.41	<0.35	<1.6	<0.18	<0.22	38.91
	02/28/18	<0.37	**20**	**11**	<0.35	<0.20	NA	<0.15	<0.37	<0.41	<0.39	<0.39	<0.41	<0.35	<1.6	<0.18	<0.22	31
	05/10/18	<0.74	**27**	**16**	<0.33	<0.50	NA	<0.43	<0.50	**0.58**	<0.50	**0.70**	<0.41	<0.37	<2.5	<0.33	<0.23	44.28
TW-4	07/30/18	<0.37	**26**	**18**	<0.35	<0.20	NA	<0.15	<0.37	**4.7**	<0.39	**1.6**	<0.41	<0.35	<1.6	<0.18	<0.22	50.3

Table 2. Summary of VOCs Groundwater Monitoring Analytical Results for Plant #1 Monitor Well TW-4

WELL	DATE	PCE	1,1,1-TCA	TCE	1,1,2-TCA	Vinyl Chloride	Acetone	Benzene	Chloroform	1,1-DCA	1,2-DCA	1,1-DCE	CIS-1,2-DCE	Trans-1,2-DCE	Methylene Chloride	Ethylbenzene	Xylenes, Total	**Total VOCs**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140	ES	5.0	200	5	5	0.2	9000	5.0	6	850	5	7	70	100	5	700	2000	
NR 140	PAL	0.5	40	0.5	0.5	0.02	1800	0.5	0.6	85	0.5	0.7	7	20	0.5	140	400	
TW-4	07/18/19	<0.37	**26**	**18**	<0.35	<0.20	NA	<0.15	<0.37	**3.6**	<0.39	**1.1**	0.87	<0.35	<1.6	<0.18	<0.22	49.57
	07/23/20	<0.37	**20**	**21**	<0.35	<0.20	NA	<0.15	<0.37	**1.1**	<0.39	<0.39	<0.41	<0.35	<1.6	<0.18	<0.22	42.1

Notes: All values listed are in parts per billion (ug/L).
VOCs = Volatile Organic Compounds
ES = Enforcement Standard, PAL = Preventative Action Limit
Orange Highlight = above ES, Yellow Highlight = above PAL
ND = not detected, NA = not analyzed or no data available

PCE = Tetrachloroethene
TCA = Trichloroethane
TCE = Trichloroethene

DCA = Dichloroethane
DCE = Dichloroethene

B = Detected in blank sample at a similar concentration.

Table 3. Pentair Flow Technologies, LLC Delavan Facility
Extraction Wells Flow Data

Meter/ Well ID	Date	Meter Reading (gallons)	Monthly Flow Data		
			(gal/month)	(gpd)	(gpm)
EX-1	January-20	18,437,739	0	0.00	0.00
EX-1	February-20	18,437,739	0	0.00	0.00
EX-1	March-20	18,437,739	0	0.00	0.00
EX-1	April-20	20,240,621	1,802,882	60,096.07	41.73
EX-1	May-20	22,141,774	1,901,153	61,327.52	42.59
EX-1	June-20	23,980,914	1,839,140	59,327.10	41.20
EX-1	July-20	25,538,651	1,557,737	50,249.58	34.90
EX-1	August-20	27,393,926	1,855,275	59,847.58	41.56
EX-1	September-20	29,172,449	1,778,523	57,371.71	39.84
EX-1	October-20	31,035,717	1,863,268	60,105.42	41.74
EX-1	November-20	32,699,526	1,663,809	53,671.26	37.27
EX-1	December-20	33,120,027	420,501	13,564.55	9.42
EX-2R EX-3R	January-20	57,875,264	2,038,779	65,767.06	45.67
EX-2R EX-3R	February-20	59,751,474	1,876,210	64,696.90	44.93
EX-2R EX-3R	March-20	61,718,181	1,966,707	63,442.16	44.06
EX-2R EX-3R	April-20	63,591,830	1,873,649	62,454.97	43.37
EX-2R EX-3R	May-20	65,497,809	1,905,979	61,483.19	42.70
EX-2R EX-3R	June-20	67,321,196	1,823,387	60,779.57	42.21
EX-2R EX-3R	July-20	69,190,712	1,869,516	60,306.97	41.88
EX-2R EX-3R	August-20	71,052,054	1,861,342	60,043.29	41.70
EX-2R EX-3R	September-20	72,793,113	1,741,059	58,035.30	40.30
EX-2R EX-3R	October-20	74,599,117	1,806,004	58,258.19	40.46
EX-2R EX-3R	November-20	76,230,313	1,631,196	54,373.20	37.76
EX-2R EX-3R	December-20	77,310,422	1,080,109	34,842.23	24.20
EX-4R	January-20	31,051,319	1,861,034	60,033.35	41.69
EX-4R	February-20	32,788,748	1,737,429	59,911.34	41.61
EX-4R	March-20	34,642,312	1,853,564	59,792.39	41.52
EX-4R	April-20	36,438,860	1,796,548	59,884.93	41.59
EX-4R	May-20	38,295,887	1,857,027	59,904.10	41.60
EX-4R	June-20	40,093,488	1,797,601	59,920.03	41.61
EX-4R	July-20	41,949,823	1,856,335	59,881.77	41.58
EX-4R	August-20	43,804,535	1,854,712	59,829.42	41.55
EX-4R	September-20	45,584,361	1,779,826	59,327.53	41.20
EX-4R	October-20	47,442,357	1,857,996	59,935.35	41.62
EX-4R	November-20	49,239,764	1,797,407	59,913.57	41.61
EX-4R	December-20	51,092,958	1,853,194	59,780.45	41.51
EX-5R	January-20	35,620,092	1,861,719	60,055.45	41.71
EX-5R	February-20	37,359,603	1,739,511	59,983.14	41.65
EX-5R	March-20	39,214,591	1,854,988	59,838.32	41.55
EX-5R	April-20	41,013,392	1,798,801	59,960.03	41.64
EX-5R	May-20	42,873,136	1,859,744	59,991.74	41.66
EX-5R	June-20	44,672,328	1,799,192	59,973.07	41.65
EX-5R	July-20	46,530,108	1,857,780	59,928.39	41.62
EX-5R	August-20	48,386,420	1,856,312	59,881.03	41.58
EX-5R	September-20	50,162,392	1,775,972	59,199.07	41.11
EX-5R	October-20	52,014,813	1,852,421	59,755.52	41.50
EX-5R	November-20	53,809,117	1,794,304	59,810.13	41.53
EX-5R	December-20	55,660,780	1,851,663	59,731.06	41.48

Table 3. Pentair Flow Technologies, LLC Delavan Facility Extraction Wells Flow Data

Meter/ Well ID	Date	Meter Reading (gallons)	Monthly Flow Data		
			(gal/month)	(gpd)	(gpm)
EX-6	January-20	63,123,589	3,646,100	117,616.13	81.68
EX-6	February-20	66,774,179	3,650,590	125,882.41	87.42
EX-6	March-20	70,662,181	3,888,002	125,419.42	87.10
EX-6	April-20	74,428,657	3,766,476	125,549.20	87.19
EX-6	May-20	78,292,007	3,863,350	124,624.19	86.54
EX-6	June-20	81,868,687	3,576,680	119,222.67	82.79
EX-6	July-20	85,510,774	3,642,087	117,486.68	81.59
EX-6	August-20	89,137,440	3,626,666	116,989.23	81.24
EX-6	September-20	92,596,306	3,458,866	115,295.53	80.07
EX-6	October-20	96,427,648	3,831,342	123,591.68	85.83
EX-6	November-20	100,153,007	3,725,359	124,178.63	86.24
EX-6	December-20	104,000,645	3,847,638	124,117.35	86.19
EX-7R	January-20	26,552,788	1,753,636	56,568.90	39.28
EX-7R	February-20	28,174,520	1,621,732	55,921.79	38.83
EX-7R	March-20	29,888,604	1,714,084	55,293.03	38.40
EX-7R	April-20	31,538,677	1,650,073	55,002.43	38.20
EX-7R	May-20	33,238,531	1,699,854	54,834.00	38.08
EX-7R	June-20	34,879,069	1,640,538	54,684.60	37.98
EX-7R	July-20	35,608,852	729,783	23,541.39	16.35
EX-7R	August-20	37,315,980	1,707,128	55,068.65	38.24
EX-7R	September-20	38,935,249	1,619,269	53,975.63	37.48
EX-7R	October-20	39,826,201	890,952	28,740.39	19.96
EX-7R	November-20	41,281,080	1,454,879	48,495.97	33.68
EX-7R	December-20	43,124,084	1,843,004	59,451.74	41.29

Notes:
gal/month: Gallons pumped for the month.
gpd: Average gallons per day.
gpm: Average gallons per minute.

Table 4. Delavan Facility Groundwater Monitoring Program Well List
Pentair Flow Technologies, LLC, Delavan, Wisconsin

Monitoring Point	Sampling Frequency	Parameters
Plant 1 Monitoring Points		
D-25R	Annual	PCE, TCA, TCE, VC
MW-1026	Annual	PCE, TCA, TCE, VC
MW-1027	Annual	PCE, TCA, TCE, VC
TW-4	Annual	VOCs
EX-2R	Annual	PCE, TCA, TCE, VC
EX-3R	Annual	PCE, TCA, TCE, VC
Plant 2 Monitoring Points		
D-15	Annual	PCE, TCA, TCE, VC
D-18	Annual	PCE, TCA, TCE, VC
MW-2004	Annual	PCE, TCA, TCE, VC
MW-2005R	Annual	PCE, TCA, TCE, VC
MW-2011	Annual	PCE, TCA, TCE, VC
TW-1	Annual	PCE, TCA, TCE, VC
TW-3	Annual	PCE, TCA, TCE, VC
EX-1	Annual	PCE, TCA, TCE, VC
EX-7R	Annual	PCE, TCA, TCE, VC
Site Monitoring Point		
Storm Sewer Grate (SS-1)	Annual	PCE, TCA, TCE, VC

PCE = Tetrachloroethene
TCA = 1,1,1-Trichloroethane and 1,1,2-Trichloroethane
TCE = Trichloroethene
VC = Vinyl Chloride
VOCs = Volatile Organic Compounds

APPENDIX A
SITE INSPECTON PHOTOGRAPHS

1. Northwest side of property looking south towards Plant 2.

2.Looking east from west side of Wright Street towards main entrance to Plant 1.

3.View of Plant 2 and green space between Plant 1 and Plant 2 from west side of Wright Street.

4.Looking north from Hobbs Drive at south side of property. Plant 2 on right side of photo. Plant 1 in background.

5.View looking north at south side of property. Plant 2 on left of photo. Undeveloped land on right of photo.

6. North side of property looking east. Plant 1 on right side of photo.

7. View looking north at paved area south of south wall of Plant 1 where low-level VOCs impacts occur in sub-surface soil.

8. View inside south side of Plant 1 in area where low-level VOCs impacts occur in the sub-surface soil.

APPENDIX B
GROUNDWATER MONITORING ANALYTICAL RESULTS AND FIELD DATA SHEETS

TETRA TECH FIELD WATER QUALITY SAMPLING AND ANALYSIS FORM

PROJECT INFORMATION		INSTRUMENTS	
PROJECT	Delavan Facility Remedial Action	Temp. & pH	Hanna
PROJECT NO.	117-7469006.01	Conductivity	Hanna
LOCATION	Delavan, WI	ORP	NA
PERSONNEL	Todd M. Thomson	DO	NA

SAMPLE POINT	MW-2005R	MW-2011	D-15	TW-3	MW-2004
WATER TYPE	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
DATE (month/day/year)	7-22-20	7-22-20	7-22-20	7-22-20	7-22-20
CLOCK TIME (Military)	09:40	15:50	16:50	13:20	09:55
DEPTH TO WATER (ft)*	20.13	21.42	27.08	27.99	22.77
MEASURED WELL DEPTH (ft)*	37.81	36.51	38.18	50.73	39.33
CASING VOLUME (gallons)	3.0	2.6	2.0	3.8	2.8
PURGE VOLUME (gallons)	12	12	10	20	12
DEPTH SAMPLE TAKEN (ft)*	35	32	36	40	35
SAMPLING DEVICE	Hanging Bailer	Hanging Bailer	Hanging Bailer	Hanging Bailer	Hanging Bailer
FIELD TEMPERATURE (°C)	12.3	11.5	13.1	12.8	13.2
pH	7.04	7.00	7.01	7.05	7.14
ELEC. COND. (uS/cm) at 25° C	994	2826	3797	1174	879
ORP (mV)	NA	NA	NA	NA	NA
DISSOLVED OXYGEN (ppm)	NA	NA	NA	NA	NA
DISSOLVED OXYGEN (% Sat.)	NA	NA	NA	NA	NA
COLOR	Clear	Clear	Clear	Clear	Clear
ODOR	None	None	None	None	None
CLARITY	Clear	Clear	Clear	Clear	Clear
SAMPLING PARAMETERS	# OF CONTAINERS & VOLUME; CONTAINER TYPE (A = AMBER GLASS; G = GLASS; P = PLASTIC); PRESERVATIVE TYPE (L = LAB ADDED; F = FIELD ADDED) OR NEUTRAL; FILTERED (YES or NO)				
PCE, TCE, TCA, Vinyl Chloride (EPA Method 8260B)	3 – 40 ml; G; L; HCl; No	3 – 40 ml; G; L; HCl; No	3 – 40 ml; G; L; HCl; No	3 – 40 ml; G; L; HCl; No	3 – 40 ml; G; L; HCl; No
Comments:					
NAME OF LABORATORY	Test America	Test America	Test America	Test America	Test America
DATE SENT TO LAB					
SAMPLER'S NAME	TMT	TMT	TMT	TMT	TMT

*Measured from top of well casing.

TETRA TECH FIELD WATER QUALITY SAMPLING AND ANALYSIS FORM

PROJECT INFORMATION		INSTRUMENTS	
PROJECT	Delavan Facility Remedial Action	Temp. & pH	Hanna
PROJECT NO.	117-7469006.01	Conductivity	Hanna
LOCATION	Delavan, WI	ORP	NA
PERSONNEL	Todd M. Thomson	DO	NA

SAMPLE POINT	TW-1	D-18	D-25R	MW-1027	TW-4
WATER TYPE	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
DATE (month/day/year)	7-22-20	7-22-20	7-22-20	7-23-20	7-23-20
CLOCK TIME (Military)	11:10	12:00	14:40	11:10	12:20
DEPTH TO WATER (ft)*	22.39	25.83	27.69	24.98	32.96
MEASURED WELL DEPTH (ft)*	45.50	39.90	42.39	39.98	50.52
CASING VOLUME (gallons)	3.9	2.4	2.5	2.6	3.0
PURGE VOLUME (gallons)	20	10	12	20	20
DEPTH SAMPLE TAKEN (ft)*	40	35	40	35	45
SAMPLING DEVICE	Hanging Bailer	Hanging Bailer	Hanging Bailer	Hanging Bailer	Hanging Bailer
FIELD TEMPERATURE (°C)	13.0	12.4	12.6	10.9	11.1
pH	7.07	6.88	6.99	7.02	6.84
ELEC. COND. (uS/cm) at 25° C	810	1488	1106	1795	2823
ORP (mV)	NA	NA	NA	NA	NA
DISSOLVED OXYGEN (ppm)	NA	NA	NA	NA	NA
DISSOLVED OXYGEN (% Sat.)	NA	NA	NA	NA	NA
COLOR	Clear	Clear	Clear	Clear	Clear
ODOR	None	None	None	None	None
CLARITY	Clear	Clear	Clear	Clear	Clear
SAMPLING PARAMETERS	# OF CONTAINERS & VOLUME; CONTAINER TYPE (A = AMBER GLASS; G = GLASS; P = PLASTIC); PRESERVATIVE TYPE (L = LAB ADDED; F = FIELD ADDED) OR NEUTRAL; FILTERED (YES or NO)				
PCE, TCE, TCA, Vinyl Chloride (EPA Method 8260B)	3 – 40 ml; G; L; HCl; No	3 – 40 ml; G; L; HCl; No	3 – 40 ml; G; HCl; No	3 – 40 ml; G; L; HCl; No	
VOCs (EPA Method 8260B)					3 – 40 ml; G; L; HCl; No
Comments:					
NAME OF LABORATORY	Test America	Test America	Test America	Test America	Test America
DATE SENT TO LAB					
SAMPLER'S NAME	TMT	TMT	TMT	TMT	TMT

*Measured from top of well casing.

TETRA TECH FIELD WATER QUALITY SAMPLING AND ANALYSIS FORM

PROJECT INFORMATION		INSTRUMENTS	
PROJECT	Delavan Facility Remedial Action	Temp. & pH	Hanna
PROJECT NO.	117-7469006.01	Conductivity	Hanna
LOCATION	Delavan, WI	ORP	NA
PERSONNEL	Todd M. Thomson	DO	NA

SAMPLE POINT	MW-1026	EX-1	EX-2R	EX-3R	EX-7R
WATER TYPE	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
DATE (month/day/year)	7-23-20	7-23-20	7-23-20	7-23-20	7-23-20
CLOCK TIME (Military)	10:00	13:40	13:00	13:20	14:00
DEPTH TO WATER (ft)*	26.69	NA	NA	NA	NA
MEASURED WELL DEPTH (ft)*	36.00	NA	NA	NA	NA
CASING VOLUME (gallons)	1.0	NA	NA	NA	NA
PURGE VOLUME (gallons)	10	Grab	Grab	Grab	Grab
DEPTH SAMPLE TAKEN (ft)*	35	NA	NA	NA	NA
SAMPLING DEVICE	Hanging Bailer	Spigot	Spigot	Spigot	Spigot
FIELD TEMPERATURE (°C)	11.0	13.9	12.2	14.7	13.6
pH	8.76	7.06	7.01	6.97	7.07
ELEC. COND. (uS/cm) at 25° C	3084	1408	2112	1303	1359
ORP (mV)	NA	NA	NA	NA	NA
DISSOLVED OXYGEN (ppm)	NA	NA	NA	NA	NA
DISSOLVED OXYGEN (% Sat.)	NA	NA	NA	NA	NA
COLOR	Light Brown	Clear	Clear	Clear	Clear
ODOR	None	None	None	None	None
CLARITY	Cloudy	Clear	Clear	Clear	Clear
SAMPLING PARAMETERS	# OF CONTAINERS & VOLUME; CONTAINER TYPE (A = AMBER GLASS; G = GLASS; P = PLASTIC); PRESERVATIVE TYPE (L = LAB ADDED; F = FIELD ADDED) OR NEUTRAL; FILTERED (YES or NO)				
PCE, TCE, TCA, Vinyl Chloride (EPA Method 8260B)	3 – 40 ml; G; L; HCl; No	3 – 40 ml; G; L; HCl; No	3 – 40 ml; G; L; HCl; No	3 – 40 ml; G; L; HCl; No	3 – 40 ml; G; L; HCl; No
Comments:					
NAME OF LABORATORY	Test America	Test America	Test America	Test America	Test America
DATE SENT TO LAB					
SAMPLER'S NAME	TMT	TMT	TMT	TMT	TMT

*Measured from top of well casing.

Pentair Delavan Facility Field Water Level Data Sheet

Project Number: 117-7469006.01			Project Name: Pentair Delavan Remedial Action	
Personnel: Todd M Thomson			Instrument: Heron	
Well ID	Date	Time	Depth to Groundwater (feet btoc)	Notes
Plant 1 Wells				
EX-2R	NA	NA	NA	
EX-3R	NA	NA	NA	
EX-4R	NA	NA	NA	
EX-5	NA	NA	NA	
EX-6	NA	NA	NA	
TW-2	7/22/2020	13:45	26.13	
TW-2A	7/22/2020	13:50	26.66	
TW-4	7/23/2020	11:40	32.96	
D-1R	7/23/2020	8:40	27.76	
D-5	NA	NA	NA	ABANDONED
D-6	NA	NA	NA	ABANDONED
D-14R	NA	NA	NA	Not On Figure
D-23	7/23/2020	8:45	27.66	
D-24R	7/23/2020	8:50	25.48	
D-25R	7/22/2020	14:05	27.69	
D-26	7/22/2020	14:00	27.24	Hornet Nest
D-27	7/22/2020	13:55	27.25	
MW-1026	7/23/2020	9:00	26.69	
MW-1027	7/23/2020	10:20	24.98	
Plant 2 Wells				
EX-1	NA	NA	NA	
EX-7R	NA	NA	NA	
TW-1	7/22/2020	10:35	22.39	
TW-1A	7/22/2020	10:30	23.65	New Lock
TW-3	7/22/2020	12:45	27.99	
D-3	NA	NA	NA	ABANDONED
D-4	NA	NA	NA	ABANDONED
D-15	7/22/2020	16:20	27.08	
P-2009	7/22/2020	16:10	26.69	
P-2010	7/22/2020	16:15	26.34	
D-18	7/22/2020	11:25	25.83	
MW-2004	7/22/2020	9:55	22.77	
MW-2005R	7/22/2020	9:15	20.13	
MW-2011	7/22/2020	15:20	21.42	

MONITOR WELL INSPECTION FORM

Project Name: Pentair Industries Location: Delavan

Project No: 117-7469006.01 Personnel: Todd Thomson

Well No.: Site Monitor Wells Inspection Date: 7-22-20 & 7-23-20

ITEM	YES	NO	N/A	COMMENTS
Map Location Accurate?	X			
Adequately Visible in Hard-to-Find Area?			X	
Protective Posts Present? Type?		X		
Protective Posts Necessary?		X		
Is Well Painted?	X			
Located in a Dry Area?	X			
Well Labelled Inside or Outside?	X			
Is Well Flushmount or Protop?				Both Type of Wells on Site.
Protective Casing Diameter? Material?			X	
Is Well Immobile?			X	
Protective Casing Locked? Type of Lock?	X			2121
Protective Casing Secure in Ground?	X			
Rust Inside Protective Casing Cap?		X		
Evidence of Frost Heave?		X		
Weep Hole at Base of Protective Casing?		X		
Well Casing Free of Kinks or Bends?	X			
Well Cap Present, Vented?		X		
Well Diameter and Material			X	
Solvent cement present?		X		
Type of Surface Seal? Is Seal Cracked?		X		
Ground/Seal Sloped to Prevent Ponding?			X	
Well stickup (ft. above grade)			X	
Protective casing stickup (ft. above grade)			X	
Depth to Water Level (below PVC casing)			X	
Measured Well Depth (below PVC casing)			X	
Saturated Thickness (feet)			X	
Constructed Well Depth (from log):			X	
Thickness of Siltation: (ft.)			X	
Bailer easily inserted/removed?	X			
Proximity to drainage ditches:			X	

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ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-185473-1
Client Project/Site: Pentair Delavan - 117-7469006.01

For:
Tetra Tech GEO
175 N Corporate Drive
Suite 100
Brookfield, Wisconsin 53045

Attn: Mr. Mark Manthey

Authorized for release by:
7/31/2020 10:43:25 AM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

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Case Narrative

Client: Tetra Tech GEO
Project/Site: Pentair Delavan - 117-7469006.01

Job ID: 500-185473-1

Job ID: 500-185473-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-185473-1

Comments
No additional comments.

Receipt
The samples were received on 7/25/2020 11:40 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.1º C.

Receipt Exceptions
Received all vials for sample 4 with ID of EX-7R, logged per labels per client.

GC/MS VOA
Method 8260B: The laboratory control sample (LCS) for 554047 recovered outside control limits for the following analyte: Methylene chloride. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

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

Detection Summary

Client: Tetra Tech GEO
Project/Site: Pentair Delavan - 117-7469006.01

Job ID: 500-185473-1

Client Sample ID: EX-1 — Lab Sample ID: 500-185473-1

No Detections.

Client Sample ID: EX-2R — Lab Sample ID: 500-185473-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.4		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: EX-3R — Lab Sample ID: 500-185473-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	5.0		1.0	0.38	ug/L	1		8260B	Total/NA
Trichloroethene	6.3		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: EX-7R — Lab Sample ID: 500-185473-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	5.0		1.0	0.37	ug/L	1		8260B	Total/NA
Trichloroethene	2.6		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 500-185473-5

No Detections.

Client Sample ID: MW-2005R — Lab Sample ID: 500-185473-6

No Detections.

Client Sample ID: MW-2011 — Lab Sample ID: 500-185473-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	2.0		1.0	0.38	ug/L	1		8260B	Total/NA
Trichloroethene	13		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: D-15 — Lab Sample ID: 500-185473-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	13		1.0	0.37	ug/L	1		8260B	Total/NA
Trichloroethene	11		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: TW-3 — Lab Sample ID: 500-185473-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.91	J	1.0	0.37	ug/L	1		8260B	Total/NA

Client Sample ID: MW-2004 — Lab Sample ID: 500-185473-10

No Detections.

Client Sample ID: TW-1 — Lab Sample ID: 500-185473-11

No Detections.

Client Sample ID: D-18 — Lab Sample ID: 500-185473-12

No Detections.

Client Sample ID: D-25R — Lab Sample ID: 500-185473-13

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Tetra Tech GEO
Job ID: 500-185473-1
Project/Site: Pentair Delavan - 117-7469006.01

Client Sample ID: MW-1027 — Lab Sample ID: 500-185473-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	2.5		1.0	0.38	ug/L	1		8260B	Total/NA
Trichloroethene	37		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: TW-4 — Lab Sample ID: 500-185473-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.1		1.0	0.41	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	20		1.0	0.38	ug/L	1		8260B	Total/NA
Trichloroethene	21		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-1026 — Lab Sample ID: 500-185473-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	3.2		1.0	0.38	ug/L	1		8260B	Total/NA
Trichloroethene	1.3		0.50	0.16	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Tetra Tech GEO
Project/Site: Pentair Delavan - 117-7469006.01

Job ID: 500-185473-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI

Protocol References:

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Tetra Tech GEO
Project/Site: Pentair Delavan - 117-7469006.01

Job ID: 500-185473-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-185473-1	EX-1	Water	07/23/20 13:40	07/25/20 11:40	
500-185473-2	EX-2R	Water	07/23/20 13:00	07/25/20 11:40	
500-185473-3	EX-3R	Water	07/23/20 13:20	07/25/20 11:40	
500-185473-4	EX-7R	Water	07/23/20 14:00	07/25/20 11:40	
500-185473-5	Trip Blank	Water	07/22/20 00:00	07/25/20 11:40	
500-185473-6	MW-2005R	Water	07/22/20 09:40	07/25/20 11:40	
500-185473-7	MW-2011	Water	07/22/20 15:50	07/25/20 11:40	
500-185473-8	D-15	Water	07/22/20 16:50	07/25/20 11:40	
500-185473-9	TW-3	Water	07/22/20 13:20	07/25/20 11:40	
500-185473-10	MW-2004	Water	07/22/20 10:20	07/25/20 11:40	
500-185473-11	TW-1	Water	07/22/20 11:10	07/25/20 11:40	
500-185473-12	D-18	Water	07/22/20 12:00	07/25/20 11:40	
500-185473-13	D-25R	Water	07/22/20 14:40	07/25/20 11:40	
500-185473-14	MW-1027	Water	07/23/20 11:10	07/25/20 11:40	
500-185473-15	TW-4	Water	07/23/20 12:20	07/25/20 11:40	
500-185473-16	MW-1026	Water	07/23/20 10:00	07/25/20 11:40	

Client: Tetra Tech GEO
Project/Site: Pentair Delavan - 117-7469006.01

Job ID: 500-185473-1

Client Sample ID: EX-1

Date Collected: 07/23/20 13:40
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185473-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/28/20 11:42	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/28/20 11:42	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/28/20 11:42	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/28/20 11:42	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/28/20 11:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*72 - 124*		*07/28/20 11:42*	*1*
Dibromofluoromethane	*98*		*75 - 120*		*07/28/20 11:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 126*		*07/28/20 11:42*	*1*
Toluene-d8 (Surr)	*107*		*75 - 120*		*07/28/20 11:42*	*1*

Client: Tetra Tech GEO
Project/Site: Pentair Delavan - 117-7469006.01

Job ID: 500-185473-1

Client Sample ID: EX-2R
Date Collected: 07/23/20 13:00
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185473-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/28/20 12:07	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/28/20 12:07	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/28/20 12:07	1
Trichloroethene	**2.4**		0.50	0.16	ug/L			07/28/20 12:07	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/28/20 12:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*72 - 124*		*07/28/20 12:07*	*1*
Dibromofluoromethane	*99*		*75 - 120*		*07/28/20 12:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 126*		*07/28/20 12:07*	*1*
Toluene-d8 (Surr)	*105*		*75 - 120*		*07/28/20 12:07*	*1*

Client: Tetra Tech GEO
Project/Site: Pentair Delavan - 117-7469006.01

Job ID: 500-185473-1

Client Sample ID: EX-3R
Date Collected: 07/23/20 13:20
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185473-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/28/20 12:33	1
1,1,1-Trichloroethane	**5.0**		1.0	0.38	ug/L			07/28/20 12:33	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/28/20 12:33	1
Trichloroethene	**6.3**		0.50	0.16	ug/L			07/28/20 12:33	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/28/20 12:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*72 - 124*		*07/28/20 12:33*	*1*
Dibromofluoromethane	*101*		*75 - 120*		*07/28/20 12:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 126*		*07/28/20 12:33*	*1*
Toluene-d8 (Surr)	*106*		*75 - 120*		*07/28/20 12:33*	*1*

Client Sample Results

Client: Tetra Tech GEO
Project/Site: Pentair Delavan - 117-7469006.01

Job ID: 500-185473-1

Client Sample ID: EX-7R

Date Collected: 07/23/20 14:00
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185473-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**5.0**		1.0	0.37	ug/L			07/28/20 12:58	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/28/20 12:58	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/28/20 12:58	1
Trichloroethene	**2.6**		0.50	0.16	ug/L			07/28/20 12:58	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/28/20 12:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*72 - 124*		*07/28/20 12:58*	*1*
Dibromofluoromethane	*102*		*75 - 120*		*07/28/20 12:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 126*		*07/28/20 12:58*	*1*
Toluene-d8 (Surr)	*107*		*75 - 120*		*07/28/20 12:58*	*1*

Client: Tetra Tech GEO
Project/Site: Pentair Delavan - 117-7469006.01

Job ID: 500-185473-1

Client Sample ID: Trip Blank

Date Collected: 07/22/20 00:00
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185473-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/28/20 17:40	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/28/20 17:40	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/28/20 17:40	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/28/20 17:40	1
Bromoform	<0.48		1.0	0.48	ug/L			07/28/20 17:40	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/28/20 17:40	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/28/20 17:40	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/28/20 17:40	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/28/20 17:40	1
Chloroform	<0.37		2.0	0.37	ug/L			07/28/20 17:40	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/28/20 17:40	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/28/20 17:40	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/28/20 17:40	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/28/20 17:40	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/28/20 17:40	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/28/20 17:40	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/28/20 17:40	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/28/20 17:40	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/28/20 17:40	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/28/20 17:40	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/28/20 17:40	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/28/20 17:40	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/28/20 17:40	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/28/20 17:40	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/28/20 17:40	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/28/20 17:40	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/28/20 17:40	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/28/20 17:40	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/28/20 17:40	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/28/20 17:40	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/28/20 17:40	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/28/20 17:40	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/28/20 17:40	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/28/20 17:40	1
Methylene Chloride	<1.6	*	5.0	1.6	ug/L			07/28/20 17:40	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/28/20 17:40	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/28/20 17:40	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/28/20 17:40	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/28/20 17:40	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/28/20 17:40	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/28/20 17:40	1
Styrene	<0.39		1.0	0.39	ug/L			07/28/20 17:40	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/28/20 17:40	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/28/20 17:40	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/28/20 17:40	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/28/20 17:40	1
Toluene	<0.15		0.50	0.15	ug/L			07/28/20 17:40	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/28/20 17:40	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/28/20 17:40	1

Client: Tetra Tech GEO
Project/Site: Pentair Delavan - 117-7469006.01

Job ID: 500-185473-1

Client Sample ID: Trip Blank

Date Collected: 07/22/20 00:00
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185473-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/28/20 17:40	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/28/20 17:40	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/28/20 17:40	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/28/20 17:40	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/28/20 17:40	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/28/20 17:40	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/28/20 17:40	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/28/20 17:40	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/28/20 17:40	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/28/20 17:40	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/28/20 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*72 - 124*		*07/28/20 17:40*	*1*
Dibromofluoromethane	*103*		*75 - 120*		*07/28/20 17:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 126*		*07/28/20 17:40*	*1*
Toluene-d8 (Surr)	*103*		*75 - 120*		*07/28/20 17:40*	*1*

Client: Tetra Tech GEO
Project/Site: Pentair Delavan - 117-7469006.01

Job ID: 500-185473-1

Client Sample ID: MW-2005R

Date Collected: 07/22/20 09:40
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185473-6

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/28/20 13:24	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/28/20 13:24	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/28/20 13:24	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/28/20 13:24	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/28/20 13:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*72 - 124*		*07/28/20 13:24*	*1*
Dibromofluoromethane	*100*		*75 - 120*		*07/28/20 13:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 126*		*07/28/20 13:24*	*1*
Toluene-d8 (Surr)	*106*		*75 - 120*		*07/28/20 13:24*	*1*

Client: Tetra Tech GEO
Project/Site: Pentair Delavan - 117-7469006.01

Job ID: 500-185473-1

Client Sample ID: MW-2011
Date Collected: 07/22/20 15:50
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185473-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/28/20 13:50	1
1,1,1-Trichloroethane	**2.0**		1.0	0.38	ug/L			07/28/20 13:50	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/28/20 13:50	1
Trichloroethene	**13**		0.50	0.16	ug/L			07/28/20 13:50	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/28/20 13:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*72 - 124*		*07/28/20 13:50*	*1*
Dibromofluoromethane	*100*		*75 - 120*		*07/28/20 13:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 126*		*07/28/20 13:50*	*1*
Toluene-d8 (Surr)	*105*		*75 - 120*		*07/28/20 13:50*	*1*

Client: Tetra Tech GEO
Project/Site: Pentair Delavan - 117-7469006.01

Job ID: 500-185473-1

Client Sample ID: D-15

Date Collected: 07/22/20 16:50
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185473-8

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**13**		1.0	0.37	ug/L			07/28/20 14:16	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/28/20 14:16	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/28/20 14:16	1
Trichloroethene	**11**		0.50	0.16	ug/L			07/28/20 14:16	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/28/20 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*72 - 124*		*07/28/20 14:16*	*1*
Dibromofluoromethane	*102*		*75 - 120*		*07/28/20 14:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 126*		*07/28/20 14:16*	*1*
Toluene-d8 (Surr)	*104*		*75 - 120*		*07/28/20 14:16*	*1*

Client: Tetra Tech GEO
Project/Site: Pentair Delavan - 117-7469006.01

Job ID: 500-185473-1

Client Sample ID: TW-3

Date Collected: 07/22/20 13:20
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185473-9

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	0.91	J	1.0	0.37	ug/L			07/28/20 14:42	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/28/20 14:42	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/28/20 14:42	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/28/20 14:42	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/28/20 14:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*72 - 124*		*07/28/20 14:42*	*1*
Dibromofluoromethane	*101*		*75 - 120*		*07/28/20 14:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 126*		*07/28/20 14:42*	*1*
Toluene-d8 (Surr)	*104*		*75 - 120*		*07/28/20 14:42*	*1*

Client: Tetra Tech GEO
Project/Site: Pentair Delavan - 117-7469006.01

Job ID: 500-185473-1

Client Sample ID: MW-2004

Date Collected: 07/22/20 10:20
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185473-10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/28/20 15:08	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/28/20 15:08	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/28/20 15:08	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/28/20 15:08	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/28/20 15:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*72 - 124*		*07/28/20 15:08*	*1*
Dibromofluoromethane	*100*		*75 - 120*		*07/28/20 15:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 126*		*07/28/20 15:08*	*1*
Toluene-d8 (Surr)	*102*		*75 - 120*		*07/28/20 15:08*	*1*

Client: Tetra Tech GEO
Job ID: 500-185473-1
Project/Site: Pentair Delavan - 117-7469006.01

Client Sample ID: TW-1
Lab Sample ID: 500-185473-11
Date Collected: 07/22/20 11:10
Matrix: Water
Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/28/20 15:33	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/28/20 15:33	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/28/20 15:33	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/28/20 15:33	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/28/20 15:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*72 - 124*		*07/28/20 15:33*	*1*
Dibromofluoromethane	*101*		*75 - 120*		*07/28/20 15:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 126*		*07/28/20 15:33*	*1*
Toluene-d8 (Surr)	*103*		*75 - 120*		*07/28/20 15:33*	*1*

Client: Tetra Tech GEO
Project/Site: Pentair Delavan - 117-7469006.01

Job ID: 500-185473-1

Client Sample ID: D-18

Date Collected: 07/22/20 12:00
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185473-12

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/28/20 15:58	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/28/20 15:58	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/28/20 15:58	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/28/20 15:58	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/28/20 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*72 - 124*		*07/28/20 15:58*	*1*
Dibromofluoromethane	*102*		*75 - 120*		*07/28/20 15:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 126*		*07/28/20 15:58*	*1*
Toluene-d8 (Surr)	*104*		*75 - 120*		*07/28/20 15:58*	*1*

Client: Tetra Tech GEO
Job ID: 500-185473-1
Project/Site: Pentair Delavan - 117-7469006.01

Client Sample ID: D-25R
Lab Sample ID: 500-185473-13
Date Collected: 07/22/20 14:40
Matrix: Water
Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/28/20 16:25	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/28/20 16:25	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/28/20 16:25	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/28/20 16:25	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/28/20 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*72 - 124*		*07/28/20 16:25*	*1*
Dibromofluoromethane	*104*		*75 - 120*		*07/28/20 16:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 126*		*07/28/20 16:25*	*1*
Toluene-d8 (Surr)	*104*		*75 - 120*		*07/28/20 16:25*	*1*

Client: Tetra Tech GEO
Project/Site: Pentair Delavan - 117-7469006.01

Job ID: 500-185473-1

Client Sample ID: MW-1027
Date Collected: 07/23/20 11:10
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185473-14
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/28/20 16:51	1
1,1,1-Trichloroethane	**2.5**		1.0	0.38	ug/L			07/28/20 16:51	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/28/20 16:51	1
Trichloroethene	**37**		0.50	0.16	ug/L			07/28/20 16:51	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/28/20 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*72 - 124*		*07/28/20 16:51*	*1*
Dibromofluoromethane	*104*		*75 - 120*		*07/28/20 16:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 126*		*07/28/20 16:51*	*1*
Toluene-d8 (Surr)	*103*		*75 - 120*		*07/28/20 16:51*	*1*

Client: Tetra Tech GEO
Project/Site: Pentair Delavan - 117-7469006.01

Job ID: 500-185473-1

Client Sample ID: TW-4

Date Collected: 07/23/20 12:20
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185473-15

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/28/20 18:06	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/28/20 18:06	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/28/20 18:06	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/28/20 18:06	1
Bromoform	<0.48		1.0	0.48	ug/L			07/28/20 18:06	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/28/20 18:06	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/28/20 18:06	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/28/20 18:06	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/28/20 18:06	1
Chloroform	<0.37		2.0	0.37	ug/L			07/28/20 18:06	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/28/20 18:06	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/28/20 18:06	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/28/20 18:06	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/28/20 18:06	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/28/20 18:06	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/28/20 18:06	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/28/20 18:06	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/28/20 18:06	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/28/20 18:06	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/28/20 18:06	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/28/20 18:06	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/28/20 18:06	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/28/20 18:06	1
1,1-Dichloroethane	**1.1**		1.0	0.41	ug/L			07/28/20 18:06	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/28/20 18:06	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/28/20 18:06	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/28/20 18:06	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/28/20 18:06	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/28/20 18:06	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/28/20 18:06	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/28/20 18:06	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/28/20 18:06	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/28/20 18:06	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/28/20 18:06	1
Methylene Chloride	<1.6	*	5.0	1.6	ug/L			07/28/20 18:06	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/28/20 18:06	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/28/20 18:06	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/28/20 18:06	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/28/20 18:06	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/28/20 18:06	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/28/20 18:06	1
Styrene	<0.39		1.0	0.39	ug/L			07/28/20 18:06	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/28/20 18:06	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/28/20 18:06	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/28/20 18:06	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/28/20 18:06	1
Toluene	<0.15		0.50	0.15	ug/L			07/28/20 18:06	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/28/20 18:06	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/28/20 18:06	1

Client: Tetra Tech GEO
Project/Site: Pentair Delavan - 117-7469006.01

Job ID: 500-185473-1

Client Sample ID: TW-4
Date Collected: 07/23/20 12:20
Date Received: 07/25/20 11:40

Lab Sample ID: 500-185473-15
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/28/20 18:06	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/28/20 18:06	1
1,1,1-Trichloroethane	**20**		1.0	0.38	ug/L			07/28/20 18:06	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/28/20 18:06	1
Trichloroethene	**21**		0.50	0.16	ug/L			07/28/20 18:06	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/28/20 18:06	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/28/20 18:06	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/28/20 18:06	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/28/20 18:06	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/28/20 18:06	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/28/20 18:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*72 - 124*		*07/28/20 18:06*	*1*
Dibromofluoromethane	*102*		*75 - 120*		*07/28/20 18:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 126*		*07/28/20 18:06*	*1*
Toluene-d8 (Surr)	*103*		*75 - 120*		*07/28/20 18:06*	*1*

Client: Tetra Tech GEO
Job ID: 500-185473-1
Project/Site: Pentair Delavan - 117-7469006.01

Client Sample ID: MW-1026
Lab Sample ID: 500-185473-16
Date Collected: 07/23/20 10:00
Matrix: Water
Date Received: 07/25/20 11:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/28/20 17:16	1
1,1,1-Trichloroethane	**3.2**		1.0	0.38	ug/L			07/28/20 17:16	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/28/20 17:16	1
Trichloroethene	**1.3**		0.50	0.16	ug/L			07/28/20 17:16	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/28/20 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*72 - 124*		*07/28/20 17:16*	*1*
Dibromofluoromethane	*103*		*75 - 120*		*07/28/20 17:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 126*		*07/28/20 17:16*	*1*
Toluene-d8 (Surr)	*104*		*75 - 120*		*07/28/20 17:16*	*1*

Definitions/Glossary

Client: Tetra Tech GEO
Job ID: 500-185473-1
Project/Site: Pentair Delavan - 117-7469006.01

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: Tetra Tech GEO
Project/Site: Pentair Delavan - 117-7469006.01

Job ID: 500-185473-1

GC/MS VOA

Analysis Batch: 554047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-185473-1	EX-1	Total/NA	Water	8260B	
500-185473-2	EX-2R	Total/NA	Water	8260B	
500-185473-3	EX-3R	Total/NA	Water	8260B	
500-185473-4	EX-7R	Total/NA	Water	8260B	
500-185473-5	Trip Blank	Total/NA	Water	8260B	
500-185473-6	MW-2005R	Total/NA	Water	8260B	
500-185473-7	MW-2011	Total/NA	Water	8260B	
500-185473-8	D-15	Total/NA	Water	8260B	
500-185473-9	TW-3	Total/NA	Water	8260B	
500-185473-10	MW-2004	Total/NA	Water	8260B	
500-185473-11	TW-1	Total/NA	Water	8260B	
500-185473-12	D-18	Total/NA	Water	8260B	
500-185473-13	D-25R	Total/NA	Water	8260B	
500-185473-14	MW-1027	Total/NA	Water	8260B	
500-185473-15	TW-4	Total/NA	Water	8260B	
500-185473-16	MW-1026	Total/NA	Water	8260B	
MB 500-554047/6	Method Blank	Total/NA	Water	8260B	
LCS 500-554047/4	Lab Control Sample	Total/NA	Water	8260B	
500-185473-16 MS	MW-1026	Total/NA	Water	8260B	
500-185473-16 MSD	MW-1026	Total/NA	Water	8260B	

Surrogate Summary

Client: Tetra Tech GEO
Project/Site: Pentair Delavan - 117-7469006.01

Job ID: 500-185473-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	BFB (72-124)	DBFM (75-120)	DCA (75-126)	TOL (75-120)
500-185473-1	EX-1	95	98	95	107
500-185473-2	EX-2R	97	99	98	105
500-185473-3	EX-3R	95	101	100	106
500-185473-4	EX-7R	97	102	99	107
500-185473-5	Trip Blank	98	103	97	103
500-185473-6	MW-2005R	96	100	95	106
500-185473-7	MW-2011	95	100	93	105
500-185473-8	D-15	95	102	97	104
500-185473-9	TW-3	96	101	98	104
500-185473-10	MW-2004	97	100	98	102
500-185473-11	TW-1	94	101	99	103
500-185473-12	D-18	98	102	100	104
500-185473-13	D-25R	98	104	102	104
500-185473-14	MW-1027	97	104	103	103
500-185473-15	TW-4	95	102	100	103
500-185473-16	MW-1026	95	103	97	104
500-185473-16 MS	MW-1026	97	104	99	103
500-185473-16 MSD	MW-1026	100	105	101	103
LCS 500-554047/4	Lab Control Sample	99	100	96	104
MB 500-554047/6	Method Blank	96	94	90	106

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-554047/6
Matrix: Water
Analysis Batch: 554047

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/28/20 10:47	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/28/20 10:47	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/28/20 10:47	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/28/20 10:47	1
Bromoform	<0.48		1.0	0.48	ug/L			07/28/20 10:47	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/28/20 10:47	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/28/20 10:47	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/28/20 10:47	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/28/20 10:47	1
Chloroform	<0.37		2.0	0.37	ug/L			07/28/20 10:47	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/28/20 10:47	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/28/20 10:47	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/28/20 10:47	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/28/20 10:47	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/28/20 10:47	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/28/20 10:47	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/28/20 10:47	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/28/20 10:47	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/28/20 10:47	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/28/20 10:47	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/28/20 10:47	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/28/20 10:47	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/28/20 10:47	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/28/20 10:47	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/28/20 10:47	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/28/20 10:47	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/28/20 10:47	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/28/20 10:47	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/28/20 10:47	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/28/20 10:47	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/28/20 10:47	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/28/20 10:47	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/28/20 10:47	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/28/20 10:47	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/28/20 10:47	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/28/20 10:47	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/28/20 10:47	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/28/20 10:47	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/28/20 10:47	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/28/20 10:47	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/28/20 10:47	1
Styrene	<0.39		1.0	0.39	ug/L			07/28/20 10:47	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/28/20 10:47	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/28/20 10:47	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/28/20 10:47	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/28/20 10:47	1
Toluene	<0.15		0.50	0.15	ug/L			07/28/20 10:47	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/28/20 10:47	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-554047/6
Matrix: Water
Analysis Batch: 554047

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/28/20 10:47	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/28/20 10:47	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/28/20 10:47	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/28/20 10:47	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/28/20 10:47	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/28/20 10:47	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/28/20 10:47	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/28/20 10:47	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/28/20 10:47	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/28/20 10:47	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/28/20 10:47	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/28/20 10:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*72 - 124*		*07/28/20 10:47*	*1*
Dibromofluoromethane	*94*		*75 - 120*		*07/28/20 10:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 126*		*07/28/20 10:47*	*1*
Toluene-d8 (Surr)	*106*		*75 - 120*		*07/28/20 10:47*	*1*

Lab Sample ID: LCS 500-554047/4
Matrix: Water
Analysis Batch: 554047

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	47.7		ug/L		95	70 - 120
Bromobenzene	50.0	41.2		ug/L		82	70 - 122
Bromochloromethane	50.0	43.9		ug/L		88	65 - 122
Bromodichloromethane	50.0	42.4		ug/L		85	69 - 120
Bromoform	50.0	41.3		ug/L		83	56 - 132
Bromomethane	50.0	50.6		ug/L		101	40 - 152
Carbon tetrachloride	50.0	41.7		ug/L		83	59 - 133
Chlorobenzene	50.0	45.8		ug/L		92	70 - 120
Chloroethane	50.0	45.0		ug/L		90	48 - 136
Chloroform	50.0	43.5		ug/L		87	70 - 120
Chloromethane	50.0	42.7		ug/L		85	56 - 152
2-Chlorotoluene	50.0	46.0		ug/L		92	70 - 125
4-Chlorotoluene	50.0	44.9		ug/L		90	68 - 124
cis-1,2-Dichloroethene	50.0	45.7		ug/L		91	70 - 125
cis-1,3-Dichloropropene	50.0	45.2		ug/L		90	64 - 127
Dibromochloromethane	50.0	42.0		ug/L		84	68 - 125
1,2-Dibromo-3-Chloropropane	50.0	42.1		ug/L		84	56 - 123
1,2-Dibromoethane	50.0	44.6		ug/L		89	70 - 125
Dibromomethane	50.0	43.6		ug/L		87	70 - 120
1,2-Dichlorobenzene	50.0	43.5		ug/L		87	70 - 125
1,3-Dichlorobenzene	50.0	43.2		ug/L		86	70 - 125
1,4-Dichlorobenzene	50.0	42.3		ug/L		85	70 - 120
Dichlorodifluoromethane	50.0	39.9		ug/L		80	40 - 159
1,1-Dichloroethane	50.0	45.6		ug/L		91	70 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-554047/4
Matrix: Water
Analysis Batch: 554047

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	42.7		ug/L		85	68 - 127
1,1-Dichloroethene	50.0	47.4		ug/L		95	67 - 122
1,2-Dichloropropane	50.0	45.8		ug/L		92	67 - 130
1,3-Dichloropropane	50.0	45.5		ug/L		91	62 - 136
2,2-Dichloropropane	50.0	41.8		ug/L		84	58 - 139
1,1-Dichloropropene	50.0	47.3		ug/L		95	70 - 121
Ethylbenzene	50.0	46.4		ug/L		93	70 - 123
Hexachlorobutadiene	50.0	43.6		ug/L		87	51 - 150
Isopropylbenzene	50.0	45.6		ug/L		91	70 - 126
Methylene Chloride	50.0	68.4	*	ug/L		137	69 - 125
Methyl tert-butyl ether	50.0	43.7		ug/L		87	55 - 123
Naphthalene	50.0	42.8		ug/L		86	53 - 144
n-Butylbenzene	50.0	47.2		ug/L		94	68 - 125
N-Propylbenzene	50.0	46.6		ug/L		93	69 - 127
p-Isopropyltoluene	50.0	45.2		ug/L		90	70 - 125
sec-Butylbenzene	50.0	46.2		ug/L		92	70 - 123
Styrene	50.0	45.5		ug/L		91	70 - 120
tert-Butylbenzene	50.0	44.9		ug/L		90	70 - 121
1,1,1,2-Tetrachloroethane	50.0	42.8		ug/L		86	70 - 125
1,1,2,2-Tetrachloroethane	50.0	44.4		ug/L		89	62 - 140
Tetrachloroethene	50.0	43.9		ug/L		88	70 - 128
Toluene	50.0	47.0		ug/L		94	70 - 125
trans-1,2-Dichloroethene	50.0	46.8		ug/L		94	70 - 125
trans-1,3-Dichloropropene	50.0	43.0		ug/L		86	62 - 128
1,2,3-Trichlorobenzene	50.0	44.5		ug/L		89	51 - 145
1,2,4-Trichlorobenzene	50.0	45.9		ug/L		92	57 - 137
1,1,1-Trichloroethane	50.0	43.3		ug/L		87	70 - 125
1,1,2-Trichloroethane	50.0	43.9		ug/L		88	71 - 130
Trichloroethene	50.0	45.9		ug/L		92	70 - 125
Trichlorofluoromethane	50.0	43.3		ug/L		87	55 - 128
1,2,3-Trichloropropane	50.0	40.9		ug/L		82	50 - 133
1,2,4-Trimethylbenzene	50.0	44.8		ug/L		90	70 - 123
1,3,5-Trimethylbenzene	50.0	45.4		ug/L		91	70 - 123
Vinyl chloride	50.0	45.0		ug/L		90	64 - 126
Xylenes, Total	100	92.1		ug/L		92	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*72 - 124*
Dibromofluoromethane	*100*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 126*
Toluene-d8 (Surr)	*104*		*75 - 120*

Lab Sample ID: 500-185473-16 MS
Matrix: Water
Analysis Batch: 554047

Client Sample ID: MW-1026
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	<0.37		50.0	43.4		ug/L		87	70 - 128

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-185473-16 MS
Matrix: Water
Analysis Batch: 554047

Client Sample ID: MW-1026
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	3.2		50.0	46.5		ug/L		87	70 - 125
1,1,2-Trichloroethane	<0.35		50.0	49.7		ug/L		99	71 - 130
Trichloroethene	1.3		50.0	48.3		ug/L		94	70 - 125
Vinyl chloride	<0.20		50.0	44.1		ug/L		88	64 - 126

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*72 - 124*
Dibromofluoromethane	*104*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 126*
Toluene-d8 (Surr)	*103*		*75 - 120*

Lab Sample ID: 500-185473-16 MSD
Matrix: Water
Analysis Batch: 554047

Client Sample ID: MW-1026
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Tetrachloroethene	<0.37		50.0	43.8		ug/L		88	70 - 128	1	20
1,1,1-Trichloroethane	3.2		50.0	47.4		ug/L		88	70 - 125	2	20
1,1,2-Trichloroethane	<0.35		50.0	51.0		ug/L		102	71 - 130	3	20
Trichloroethene	1.3		50.0	48.7		ug/L		95	70 - 125	1	20
Vinyl chloride	<0.20		50.0	44.1		ug/L		88	64 - 126	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*72 - 124*
Dibromofluoromethane	*105*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 126*
Toluene-d8 (Surr)	*103*		*75 - 120*

Lab Chronicle

Client: Tetra Tech GEO
Job ID: 500-185473-1
Project/Site: Pentair Delavan - 117-7469006.01

Client Sample ID: EX-1
Lab Sample ID: 500-185473-1
Date Collected: 07/23/20 13:40
Matrix: Water
Date Received: 07/25/20 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554047	07/28/20 11:42	JDD	TAL CHI

Client Sample ID: EX-2R
Lab Sample ID: 500-185473-2
Date Collected: 07/23/20 13:00
Matrix: Water
Date Received: 07/25/20 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554047	07/28/20 12:07	JDD	TAL CHI

Client Sample ID: EX-3R
Lab Sample ID: 500-185473-3
Date Collected: 07/23/20 13:20
Matrix: Water
Date Received: 07/25/20 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554047	07/28/20 12:33	JDD	TAL CHI

Client Sample ID: EX-7R
Lab Sample ID: 500-185473-4
Date Collected: 07/23/20 14:00
Matrix: Water
Date Received: 07/25/20 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554047	07/28/20 12:58	JDD	TAL CHI

Client Sample ID: Trip Blank
Lab Sample ID: 500-185473-5
Date Collected: 07/22/20 00:00
Matrix: Water
Date Received: 07/25/20 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554047	07/28/20 17:40	JDD	TAL CHI

Client Sample ID: MW-2005R
Lab Sample ID: 500-185473-6
Date Collected: 07/22/20 09:40
Matrix: Water
Date Received: 07/25/20 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554047	07/28/20 13:24	JDD	TAL CHI

Client Sample ID: MW-2011
Lab Sample ID: 500-185473-7
Date Collected: 07/22/20 15:50
Matrix: Water
Date Received: 07/25/20 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554047	07/28/20 13:50	JDD	TAL CHI

Lab Chronicle

Client: Tetra Tech GEO
Job ID: 500-185473-1
Project/Site: Pentair Delavan - 117-7469006.01

Client Sample ID: D-15
Lab Sample ID: 500-185473-8
Date Collected: 07/22/20 16:50
Matrix: Water
Date Received: 07/25/20 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554047	07/28/20 14:16	JDD	TAL CHI

Client Sample ID: TW-3
Lab Sample ID: 500-185473-9
Date Collected: 07/22/20 13:20
Matrix: Water
Date Received: 07/25/20 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554047	07/28/20 14:42	JDD	TAL CHI

Client Sample ID: MW-2004
Lab Sample ID: 500-185473-10
Date Collected: 07/22/20 10:20
Matrix: Water
Date Received: 07/25/20 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554047	07/28/20 15:08	JDD	TAL CHI

Client Sample ID: TW-1
Lab Sample ID: 500-185473-11
Date Collected: 07/22/20 11:10
Matrix: Water
Date Received: 07/25/20 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554047	07/28/20 15:33	JDD	TAL CHI

Client Sample ID: D-18
Lab Sample ID: 500-185473-12
Date Collected: 07/22/20 12:00
Matrix: Water
Date Received: 07/25/20 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554047	07/28/20 15:58	JDD	TAL CHI

Client Sample ID: D-25R
Lab Sample ID: 500-185473-13
Date Collected: 07/22/20 14:40
Matrix: Water
Date Received: 07/25/20 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554047	07/28/20 16:25	JDD	TAL CHI

Client Sample ID: MW-1027
Lab Sample ID: 500-185473-14
Date Collected: 07/23/20 11:10
Matrix: Water
Date Received: 07/25/20 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554047	07/28/20 16:51	JDD	TAL CHI

Lab Chronicle

Client: Tetra Tech GEO
Job ID: 500-185473-1
Project/Site: Pentair Delavan - 117-7469006.01

Client Sample ID: TW-4
Lab Sample ID: 500-185473-15
Date Collected: 07/23/20 12:20
Matrix: Water
Date Received: 07/25/20 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554047	07/28/20 18:06	JDD	TAL CHI

Client Sample ID: MW-1026
Lab Sample ID: 500-185473-16
Date Collected: 07/23/20 10:00
Matrix: Water
Date Received: 07/25/20 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554047	07/28/20 17:16	JDD	TAL CHI

Laboratory References:
TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Tetra Tech GEO
Job ID: 500-185473-1
Project/Site: Pentair Delavan - 117-7469006.01

Laboratory: Eurofins TestAmerica, Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-20

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Phone 708-534-5200 Fax 708-534-5211

Chain of Custody Record

eurofins

500-185473

Client Information	Sampler: Todd M. Thompson	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-83163-27960 2
Client Contact: Mr. Mark Manthey	Phone: (262) 792-1282	E-Mail: sandie.fredrick@testamericainc.com		Page: Page 2 of 2
Company: Tetra Tech GEO			Analysis Requested	Job #: 117-7469 coc.01
Address: 175 N Corporate Drive Suite 100	Due Date Requested: STANDARD			Preservation Codes:
City: Brookfield	TAT Requested (days):			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)
State, Zip: WI, 53045				
Phone: 262-792-1282(Tel)	PO #:			Other:
Email: mark.manthey@tetratech.com	WO #:			
Project Name: Pentair Delavan	Project #: 50006640			
Site: 117-7469 coc.01	SSOW#:			

500-185473 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOCs - Wisconsin: PCE, TCE, VINYL CHLORIDE	Total Number of containers	Special Instructions/Note:
	2020								
	Preservation Code:						A		
1 EX-1	7-23	13:40	GRAB	Water			3		
2 EX-2R	7-23	13:00		Water			3		
3 EX-3R	7-23	13:20		Water			3		
4 EX-7	7-23	14:00		Water			3		
5 TRIP BLANK	—	—		Water			2		LAB PRESERVED
				Water					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	7-24-20 08:00	TT/GEO		7-24-20 8:00	TA
Relinquished by	7-24-20 17:00	TA	Received by	7/25/20 1140	TT-GEO
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.1

Ver: 01/16/2019

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

eurofins

500-185473

Client Information	Sampler: Tom Thompson	Lab PM: Fredrick Sandie	Carrier Tracking No(s):	COC No: 500-83166-27960.1
Client Contact: Mr Mark Manthey	Phone: (262) 792-1282	E-Mail: sandie.fredrick@testamericainc.com		Page: Page 1 of 2
Company: Tetra Tech GEO		Analysis Requested		Job #: 117-7469.06.01
Address: 175 N Corporate Drive Suite 100	Due Date Requested: STANDARD			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Brookfield	TAT Requested (days):			
State, Zip: WI 53045	PO #			
Phone: 262-792-1282(Tel)	WO #			Other:
Email: mark.manthey@tetratech.com	Project #: 50006640			
Project Name: Pentair Delavan	SSOW#:			
Site: 117-7469.06.01				

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, Waste/Oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOCs - Wisconsin	Total Number of containers	Special Instructions/Note:
	2020		Preservation Code				A		
6 MW-2005R	7-22	09:40	GRAB	Water			3		
7 MW-2011	7-22	15:50		Water			3		
8 D-15	7-22	16:50		Water			3		
9 TW-3	7-22	13:20		Water			3		
10 MW-2004	7-22	10:20		Water			3		
11 TW-1	7-22	11:10		Water			3		
12 D-18	7-22	12:00		Water			3		
13 D-25R	7-22	14:40		Water			3		
14 MW-1027	7-23	11:10		Water			3		
15 TW-4	7-23	12:20		Water			3		
16 MW-1026	7-23	10:00		Water			3		

PCE, TCE, VINYL CHLORIDE

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

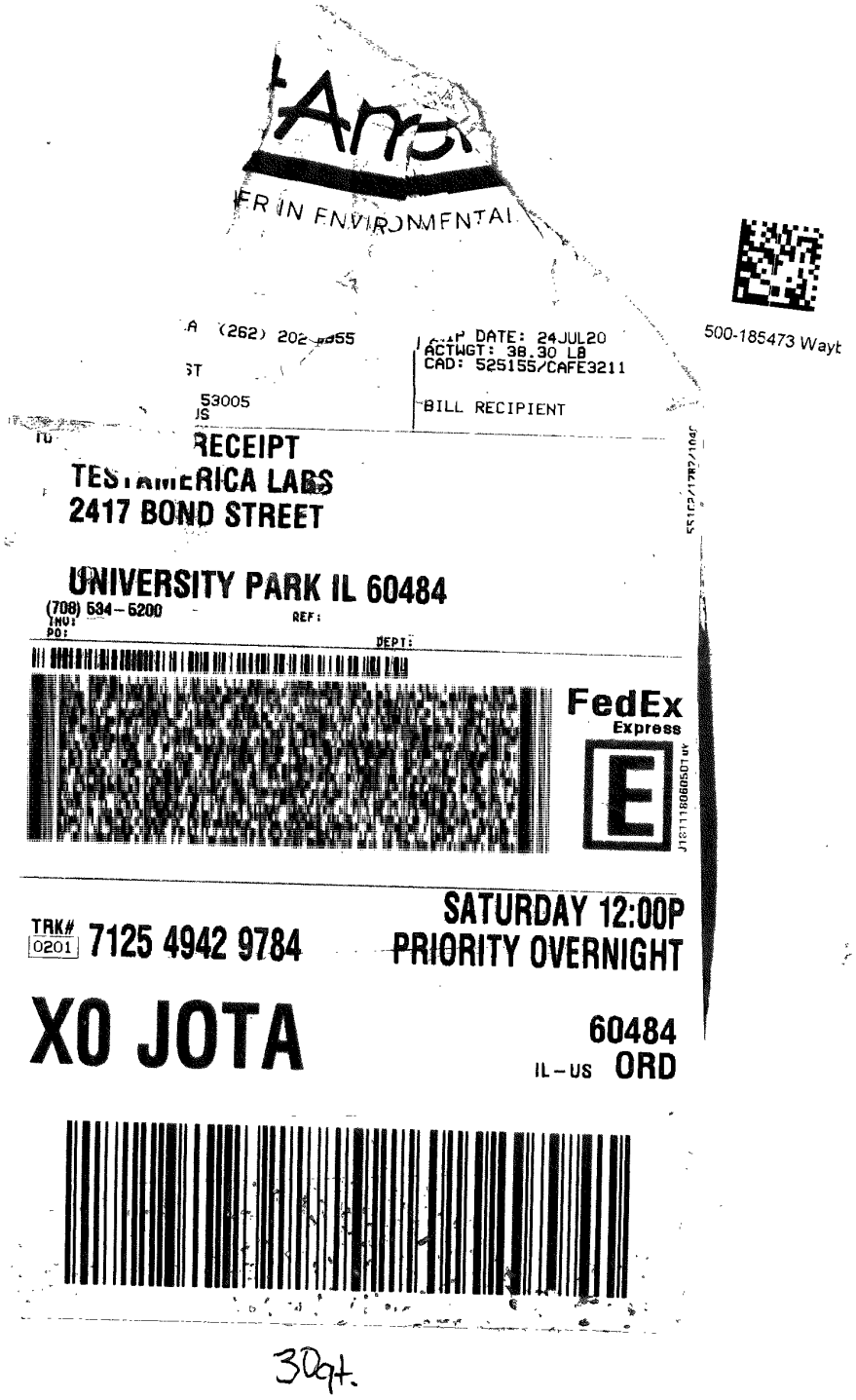
Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 7-24-20 08:00	Company: TetraTech	Received by: Date/Time: 7-24-20 8:00 Company: TA
Relinquished by:	Date/Time:	Company:	Received by: Date/Time: 7/25/20 1140 Company: TA CHE
Relinquished by:	Date/Time:	Company:	Received by: Date/Time: Company:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks

Ver: 01/16/2019



500-185473 Wayt

Login Sample Receipt Checklist

Client: Tetra Tech GEO

Job Number: 500-185473-1

Login Number: 185473
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX C
WASTEWATER DISCHARGE MONITORING REPORTS AND STORM SEWER OUTFALL SS-1 ANALYTICAL RESULTS

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: PENTAIR FLOW TECHNOLOGIES LLC
Contact Address: 293 S. Wright St
Delavan, WI 53115
Facility Contact: Dennis Schwind, Env. Tech
Phone Number: 262-728-7225
Reporting Period: 01/01/2020 - 01/31/2020
Form Due Date: 02/21/2020
Permit Number: 0055816

Date Received:	
DOC:	441145
FIN:	7072
FID:	265010900
Region:	Southeast Region
Permit Drafter:	Lisa J Creegan
Reviewer:	Nicholas M Lent
Office:	Milwaukee

	Sample Point	001	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	211	487	457	388	388
	Description	Flow Rate	Temperature	Suspended Solids, Total	Phosphorus, Total	Phosphorus, Total
	Units	MGD	degF	mg/L	mg/L	lbs/day
	Sample Type	TOT DAILY	GRAB	GRAB	GRAB	CALCULATED
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	Day 1	0.359708				
	2	0.359408				
	3	0.359415				
	4	0.359389				
	5	0.359414				
	6	0.359145				
	7	0.359119				
	8	0.359069				
	9	0.358981				
	10	0.358882				
	11	0.358937				
	12	0.358877				
	13	0.358744				
	14	0.358712				
	15	0.358592				
	16	0.358563				
	17	0.358587				
	18	0.358532				
	19	0.358513				
	20	0.358202				
	21	0.358198				
	22	0.358188	51.44	<1.9	0.047	0.141
	23	0.358098				
	24	0.357926				
	25	0.357961				
	26	0.357838				
	27	0.364865				
	28	0.367371				
	29	0.367411				
	30	0.367292				
	31	0.367331				

	Sample Point	001	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	211	487	457	388	388
	Description	Flow Rate	Temperature	Suspended Solids, Total	Phosphorus, Total	Phosphorus, Total
	Units	MGD	degF	mg/L	mg/L	lbs/day
Summary Values	**Monthly Avg**	0.360040903	51.44	0	0.047	0.141
	Daily Max	0.367411	51.44	<1.9	0.047	0.141
	Daily Min	0.357838	51.44	<1.9	0.047	0.141
Limit(s) in Effect	**Monthly Avg**				0.24 0	
QA/QC Information	**LOD**			1.9	0.024	
	LOQ			5	0.05	
	QC Exceedance	N	N	N	Y	N
	Lab Certification			999580010	999580010	

	Sample Point	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	490	508	561	517
	Description	Tetrachloroethylene	Trichloro- ethylene	1,1,1-Trichloro- ethane	Vinyl chloride
	Units	ug/L	ug/L	ug/L	ug/L
	Sample Type	GRAB	GRAB	GRAB	GRAB
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	**Day 1**				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				
	21				
	22	<0.37	0.51	<0.38	<0.20
	23				
	24				
	25				
	26				
	27				
	28				
	29				
	30				
	31				

	Sample Point	001		001		001		001	
	Description	Storm sewer manhole		Storm sewer manhole		Storm sewer manhole		Storm sewer manhole	
	Parameter	490		508		561		517	
	Description	Tetrachloroethylene		Trichloro- ethylene		1,1,1-Trichloro- ethane		Vinyl chloride	
	Units	ug/L		ug/L		ug/L		ug/L	
Summary Values	**Monthly Avg**	0		0.51		0		0	
	Daily Max	<0.37		0.51		<0.38		<0.2	
	Daily Min	<0.37		0.51		<0.38		<0.2	
Limit(s) in Effect	**Monthly Avg**	50	0	50	0	50	0	10	0
QA/QC Information	**LOD**	0.37		0.16		0.38		0.2	
	LOQ	1		0.5		1		1	
	QC Exceedance	N		N		N		N	
	Lab Certification	999580010		999580010		999580010		999580010	

Footnotes (DNR Use Only; Instructions for completing this form that are unique for your facility may be displayed here.)

General Remarks

The total flow rates were calculated from daily flow readings recorded by the Badger U500w ultrasonic meters installed on the discharge lines of the Delavan facility extraction wells.

Laboratory Quality Control Comments

J = Result is less than the LOQ but greater than the LOD and the concentration is an approximate value.

GEOTRANS, INC. FIELD WATER QUALITY SAMPLING AND ANALYSIS FORM

PROJECT INFORMATION		INSTRUMENTS	
PROJECT	Delavan Facility Remedial Action	Temp. & pH	HI98129
PROJECT NO.	Delavan Well #4 WPDES	Conductivity	HI98129
LOCATION	Delavan, WI	ORP	
PERSONNEL	Dennis	DO	

SAMPLE POINT		SS-1	SS-1	SS-1	SS-1	SS-1
WATER TYPE		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
DATE (month/day/year)		01/22/2020				
CLOCK TIME (Military)		0949				
DEPTH TO WATER (ft)*		NA	NA	NA	NA	NA
MEASURED WELL DEPTH (ft)*		NA	NA	NA	NA	NA
CASING VOLUME (gallons)		NA	NA	NA	NA	NA
PURGE VOLUME (gallons)		NA	NA	NA	NA	NA
DEPTH SAMPLE TAKEN (ft)*		NA	NA	NA	NA	NA
SAMPLING DEVICE		HI98129				
FIELD TEMPERATURE (°C)		10.8				
pH		7.60				
ELEC. COND. (uS/cm)	Measured	1319				
	at 25° C					
ORP (mV)		NA	NA	NA	NA	NA
DISSOLVED OXYGEN (ppm)		NA	NA	NA	NA	NA
DISSOLVED OXYGEN (% Sat.)		NA	NA	NA	NA	NA
COLOR		CLEAR				
ODOR		NONE				
CLARITY		CLEAR				

SAMPLING PARAMETERS	# OF CONTAINERS & VOLUME; CONTAINER TYPE (A = AMBER GLASS; G = GLASS; P = PLASTIC); PRESERVATIVE TYPE (L = LAB ADDED; F = FIELD ADDED) OR NEUTRAL; FILTERED (YES or NO)				
TCE, 1,1,1-TCA, 1,1,2-TCA, PCE, Vinyl Chloride (EPA Method SW 8260B)	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.

Comments: TCE = Trichloroethene. TCA = Trichloroethane. PCE = Tetrachloroethene.

NAME OF LABORATORY	Test America	Test America	Test America	Test America	Test America
DATE SENT TO LAB	1-22-2020				
SAMPLER'S NAME	Dennis				

*Measured from top of well casing.

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ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-176749-1
Client Project/Site: Delavan Well #4 WPDES

For:
Pentair Water
293 Wright Street
Delavan, Wisconsin 53115

Attn: Dennis Schwind

Authorized for release by:
2/7/2020 3:57:04 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

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Lab Chronicle 6
Certification Summary 7
Method Summary 8
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Definitions/Glossary

Client: Pentair Water
Job ID: 500-176749-1
Project/Site: Delavan Well #4 WPDES

Qualifiers

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Case Narrative

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-176749-1

Job ID: 500-176749-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-176749-1

Comments
No additional comments.

Receipt
The samples were received on 1/23/2020 9:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.8º C.

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

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

Client Sample Results

Client: Pentair Water
Job ID: 500-176749-1
Project/Site: Delavan Well #4 WPDES

Client Sample ID: SS1
Lab Sample ID: 500-176749-1
Date Collected: 01/22/20 09:49
Matrix: Water
Date Received: 01/23/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/29/20 10:46	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/29/20 10:46	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/29/20 10:46	1
Trichloroethene	**0.51**		0.50	0.16	ug/L			01/29/20 10:46	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/29/20 10:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 126*		*01/29/20 10:46*	*1*
4-Bromofluorobenzene (Surr)	*88*		*72 - 124*		*01/29/20 10:46*	*1*
Dibromofluoromethane	*94*		*75 - 120*		*01/29/20 10:46*	*1*
Toluene-d8 (Surr)	*96*		*75 - 120*		*01/29/20 10:46*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<1.9		5.0	1.9	mg/L			01/29/20 11:18	1
Chloride	**190**		10	5.0	mg/L			01/25/20 14:57	5
Phosphorus as P	**0.047**	**J B**	0.050	0.024	mg/L		01/30/20 09:45	02/07/20 12:22	1

Client Sample ID: Test Blank
Lab Sample ID: 500-176749-2
Date Collected: 01/22/20 00:00
Matrix: Water
Date Received: 01/23/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/29/20 10:20	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/29/20 10:20	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/29/20 10:20	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/29/20 10:20	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			01/29/20 10:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 126*		*01/29/20 10:20*	*1*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*		*01/29/20 10:20*	*1*
Dibromofluoromethane	*92*		*75 - 120*		*01/29/20 10:20*	*1*
Toluene-d8 (Surr)	*97*		*75 - 120*		*01/29/20 10:20*	*1*

Lab Chronicle

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-176749-1

Client Sample ID: SS1

Lab Sample ID: 500-176749-1

Date Collected: 01/22/20 09:49

Matrix: Water

Date Received: 01/23/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	526883	01/29/20 10:46	JLC	TAL CHI
Total/NA	Analysis	SM 2540D		1	527001		SMO	TAL CHI
					(Start)	01/29/20 11:18		
					(End)	01/29/20 11:19		
Total/NA	Analysis	SM 4500 Cl- E		5	526394	01/25/20 14:57	EAT	TAL CHI
Total/NA	Prep	SM 4500 P B			527214	01/30/20 09:45	PFK	TAL CHI
Total/NA	Analysis	SM 4500 P E		1	528573	02/07/20 12:22	JMP	TAL CHI

Client Sample ID: Test Blank

Lab Sample ID: 500-176749-2

Date Collected: 01/22/20 00:00

Matrix: Water

Date Received: 01/23/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	526883	01/29/20 10:20	JLC	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Pentair Water
Job ID: 500-176749-1
Project/Site: Delavan Well #4 WPDES

Laboratory: Eurofins TestAmerica, Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State Program	999580010	08-31-20

Method Summary

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-176749-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL CHI
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 4500 P E	Phosphorus	SM	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI
SM 4500 P B	Phosphorous, Total and Ortho	SM	TAL CHI

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-176749-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-176749-1	SS1	Water	01/22/20 09:49	01/23/20 09:25	
500-176749-2	Test Blank	Water	01/22/20 00:00	01/23/20 09:25	

Chain of Custody Record

378430

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ress: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager:	Site Contact:	Date: 1-22-2020	COC No:
pany Name: Pentair Flow Technologies LLC	Tel/Email:	Lab Contact:	Carrier:	_____ of _____ COCs
ess: 293 Wright St.	Analysis Turnaround Time			Sampler:
State/Zip: Delavan WI 53115	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
e: 262-728-5551	TAT if different from Below _____			Walk-in Client:
ct Name: Delavan Well #4 OPDES	☐ 2 weeks			Lab Sampling:
Delavan WI	☐ 1 week			Job / SDG No.: 500-176749
	☐ 2 days			
	☐ 1 day			

500-176749 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCE	TCA	PCE	Vinyl Chloride	Phosphorus	TSS	Chloride	Sample Specific Notes:
BS 1	1/22/2020	0949	G	W	5	N	N	X	X	X	X	X	X	X	
Trip Blank					1										

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

2 2 2 2 3

Possible Hazard Identification:
Any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 1.8 Corr'd: 2.8 | Therm ID No.:

	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Pentair	1/22/19 1040			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time: 1/23/20 0925


ORIGIN ID:JVLA (888) 472-0884
CUSTOMER SERVICE
PENTAIR FLOW TECHNOLOGIES
293 SOUTH WRIGHT STREET
DELAVAN, WI 53115
UNITED STATES US
SHIP DATE: 22JAN20
ACTWGT: 11.50 LB MAN
CAD: 0802244/CAFE3311
BILL SENDER
TO
TEST AMERICA
2417 BOND ST
UNIVERSITY PARK IL 60484
DEPT: 631100-2901
500-176749 Waybill
FedEx
Express
THU - 23 JAN 10:30A
PRIORITY OVERNIGHT
TRK# 0201 1335 6528 0330
79 JOTA
60484
IL-US ORD

16 qt.

Login Sample Receipt Checklist

Client: Pentair Water

Job Number: 500-176749-1

Login Number: 176749
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: PENTAIR FLOW TECHNOLOGIES LLC
Contact Address: 293 S. Wright St
Delavan, WI 53115
Facility Contact: Dennis Schwind, Env. Tech
Phone Number: 262-728-7225
Reporting Period: 02/01/2020 - 02/29/2020
Form Due Date: 03/21/2020
Permit Number: 0055816

Date Received:	
DOC:	441146
FIN:	7072
FID:	265010900
Region:	Southeast Region
Permit Drafter:	Lisa J Creegan
Reviewer:	Nicholas M Lent
Office:	Milwaukee

	Sample Point	001	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	211	487	457	388	388
	Description	Flow Rate	Temperature	Suspended Solids, Total	Phosphorus, Total	Phosphorus, Total
	Units	MGD	degF	mg/L	mg/L	lbs/day
	Sample Type	TOT DAILY	GRAB	GRAB	GRAB	CALCULATED
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	Day 1	0.367391				
	2	0.367306				
	3	0.367145				
	4	0.367117				
	5	0.367013				
	6	0.367045				
	7	0.366938				
	8	0.366932				
	9	0.366897				
	10	0.366786				
	11	0.366711				
	12	0.366582				
	13	0.366533				
	14	0.366530				
	15	0.366538				
	16	0.366410				
	17	0.366389				
	18	0.366207				
	19	0.366055				
	20	0.366028				
	21	0.365957				
	22	0.365888				
	23	0.366040				
	24	0.365730	51.08	2.0	0.089	0.272
	25	0.365649				
	26	0.365615				
	27	0.365465				
	28	0.365265				
	29	0.365310				
	30					
	31					

	Sample Point	001	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	211	487	457	388	388
	Description	Flow Rate	Temperature	Suspended Solids, Total	Phosphorus, Total	Phosphorus, Total
	Units	MGD	degF	mg/L	mg/L	lbs/day
Summary Values	**Monthly Avg**	0.366395586	51.08	2	0.089	0.272
	Daily Max	0.367391	51.08	2	0.089	0.272
	Daily Min	0.365265	51.08	2	0.089	0.272
Limit(s) in Effect	**Monthly Avg**				0.24 0	
QA/QC Information	**LOD**			1.9	0.024	
	LOQ			5	0.05	
	QC Exceedance	N	N	Y	N	N
	Lab Certification			999580010	999580010	

	Sample Point	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	490	508	561	517
	Description	Tetrachloroethylene	Trichloro- ethylene	1,1,1-Trichloro- ethane	Vinyl chloride
	Units	ug/L	ug/L	ug/L	ug/L
	Sample Type	GRAB	GRAB	GRAB	GRAB
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	**Day 1**				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				
	21				
	22				
	23				
	24	<0.37	0.58	0.41	<0.20
	25				
	26				
	27				
	28				
	29				
	30				
	31				

	Sample Point	001		001		001		001	
	Description	Storm sewer manhole		Storm sewer manhole		Storm sewer manhole		Storm sewer manhole	
	Parameter	490		508		561		517	
	Description	Tetrachloroethylene		Trichloro- ethylene		1,1,1-Trichloro- ethane		Vinyl chloride	
	Units	ug/L		ug/L		ug/L		ug/L	
Summary Values	**Monthly Avg**	0		0.58		0.41		0	
	Daily Max	<0.37		0.58		0.41		<0.2	
	Daily Min	<0.37		0.58		0.41		<0.2	
Limit(s) in Effect	**Monthly Avg**	50	0	50	0	50	0	10	0
QA/QC Information	**LOD**	0.37		0.16		0.38		0.2	
	LOQ	1		0.5		1		1	
	QC Exceedance	N		N		Y		N	
	Lab Certification	999580010		999580010		999580010		999580010	

Footnotes (DNR Use Only; Instructions for completing this form that are unique for your facility may be displayed here.)

General Remarks

The total flow rates were calculated from daily flow readings recorded by the Badger U500w ultrasonic meters installed on the discharge lines of the Delavan facility extraction wells.

Laboratory Quality Control Comments

J = Result is less than the LOQ but greater than the LOD and the concentration is an approximate value.

GEOTRANS, INC. FIELD WATER QUALITY SAMPLING AND ANALYSIS FORM

PROJECT INFORMATION		INSTRUMENTS	
PROJECT	Delavan Facility Remedial Action	Temp. & pH	HI 98129
PROJECT NO.	Delavan Well #4 WPDES	Conductivity	HI 98129
LOCATION	Delavan, WI	ORP	
PERSONNEL	Dennis	DO	

SAMPLE POINT		SS-1	SS-1	SS-1	SS-1	SS-1
WATER TYPE		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
DATE (month/day/year)		2/24/2020				
CLOCK TIME (Military)		0809				
DEPTH TO WATER (ft)*		NA	NA	NA	NA	NA
MEASURED WELL DEPTH (ft)*		NA	NA	NA	NA	NA
CASING VOLUME (gallons)		NA	NA	NA	NA	NA
PURGE VOLUME (gallons)		NA	NA	NA	NA	NA
DEPTH SAMPLE TAKEN (ft)*		NA	NA	NA	NA	NA
SAMPLING DEVICE		HI98129				
FIELD TEMPERATURE (°C)		10.6				
pH		5.36				
ELEC. COND. (uS/cm)	Measured	1322				
	at 25° C					
ORP (mV)		NA	NA	NA	NA	NA
DISSOLVED OXYGEN (ppm)		NA	NA	NA	NA	NA
DISSOLVED OXYGEN (% Sat.)		NA	NA	NA	NA	NA
COLOR		CLEAR				
ODOR		NONE				
CLARITY		CLEAR				

SAMPLING PARAMETERS	# OF CONTAINERS & VOLUME; CONTAINER TYPE (A = AMBER GLASS; G = GLASS; P = PLASTIC); PRESERVATIVE TYPE (L = LAB ADDED; F = FIELD ADDED) OR NEUTRAL; FILTERED (YES or NO)				
TCE, 1,1,1-TCA, 1,1,2-TCA, PCE, Vinyl Chloride (EPA Method SW 8260B)	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.

Comments: TCE = Trichloroethene. TCA = Trichloroethane. PCE = Tetrachloroethene.

NAME OF LABORATORY	Test America	Test America	Test America	Test America	Test America
DATE SENT TO LAB	2/24/2020				
SAMPLER'S NAME	Dennis				

*Measured from top of well casing.

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-178348-1
Client Project/Site: Delavan Well #4 WPDES

For:
Pentair Water
293 Wright Street
Delavan, Wisconsin 53115

Attn: Dennis Schwind

Authorized for release by:
3/9/2020 3:00:29 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

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Definitions/Glossary

Client: Pentair Water
Job ID: 500-178348-1
Project/Site: Delavan Well #4 WPDES

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Case Narrative

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-178348-1

Job ID: 500-178348-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-178348-1

Comments
No additional comments.

Receipt
The samples were received on 2/25/2020 9:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.1° C.

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

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

Client Sample Results

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-178348-1

Client Sample ID: SS1

Lab Sample ID: 500-178348-1
Date Collected: 02/24/20 08:09
Matrix: Water
Date Received: 02/25/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.41**	**J**	1.0	0.38	ug/L			03/06/20 17:18	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			03/06/20 17:18	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			03/06/20 17:18	1
Trichloroethene	**0.58**		0.50	0.16	ug/L			03/06/20 17:18	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			03/06/20 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*75 - 126*		*03/06/20 17:18*	*1*
4-Bromofluorobenzene (Surr)	*109*		*72 - 124*		*03/06/20 17:18*	*1*
Dibromofluoromethane	*109*		*75 - 120*		*03/06/20 17:18*	*1*
Toluene-d8 (Surr)	*102*		*75 - 120*		*03/06/20 17:18*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**2.0**	**J**	5.0	1.9	mg/L			03/02/20 10:20	1
Chloride	**220**		10	5.0	mg/L			03/02/20 17:58	5
Phosphorus as P	**0.089**		0.050	0.024	mg/L		02/26/20 10:10	02/27/20 12:56	1

Client Sample ID: Trip Blank

Lab Sample ID: 500-178348-2
Date Collected: 02/24/20 00:00
Matrix: Water
Date Received: 02/25/20 09:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			03/06/20 12:38	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			03/06/20 12:38	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			03/06/20 12:38	1
Trichloroethene	<0.16		0.50	0.16	ug/L			03/06/20 12:38	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			03/06/20 12:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*75 - 126*		*03/06/20 12:38*	*1*
4-Bromofluorobenzene (Surr)	*105*		*72 - 124*		*03/06/20 12:38*	*1*
Dibromofluoromethane	*107*		*75 - 120*		*03/06/20 12:38*	*1*
Toluene-d8 (Surr)	*105*		*75 - 120*		*03/06/20 12:38*	*1*

Lab Chronicle

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-178348-1

Client Sample ID: SS1

Lab Sample ID: 500-178348-1

Date Collected: 02/24/20 08:09

Matrix: Water

Date Received: 02/25/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	532788	03/06/20 17:18	JDD	TAL CHI
Total/NA	Analysis	SM 2540D		1	532143		SMO	TAL CHI
					(Start)	03/02/20 10:20		
					(End)	03/02/20 10:21		
Total/NA	Analysis	SM 4500 Cl- E		5	532212	03/02/20 17:58	EAT	TAL CHI
Total/NA	Prep	SM 4500 P B			531518	02/26/20 10:10	PFK	TAL CHI
Total/NA	Analysis	SM 4500 P E		1	531765	02/27/20 12:56	JMP	TAL CHI

Client Sample ID: Trip Blank

Lab Sample ID: 500-178348-2

Date Collected: 02/24/20 00:00

Matrix: Water

Date Received: 02/25/20 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	532788	03/06/20 12:38	JDD	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Pentair Water
Job ID: 500-178348-1
Project/Site: Delavan Well #4 WPDES

Laboratory: Eurofins TestAmerica, Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-20

Method Summary

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-178348-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL CHI
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 4500 P E	Phosphorus	SM	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI
SM 4500 P B	Phosphorous, Total and Ortho	SM	TAL CHI

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-178348-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-178348-1	SS1	Water	02/24/20 08:09	02/25/20 09:25	
500-178348-2	Trip Blank	Water	02/24/20 00:00	02/25/20 09:25	

Chain of Custody Record

404367 eurofins | Environment Testing TestAmerica

Address: 2417 Bond St University Park IL 60484

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager: Max Geyer	Site Contact: Dennis Schwirk	Date: 2/24/2020	COC No:
Company Name: Pentair Flow Technologies LLC	Tel/Email:	Lab Contact:	Carrier:	____ of ____ COCs
Address: 293 Wright St	Analysis Turnaround Time			Sampler:
City/State/Zip: Delavan WI 53115	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 262 728 5551	TAT if different from Below ____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Delavan Well #4 WPDES	☐ 1 week			
Site: Delavan WI 53115	☐ 2 days			Job / SDG No.: 500-178348
P O #	☐ 1 day			

500-178348 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCE	TCA	PCE	Vinyl Chloride	Phosphorus	TSS	Chloride	Sample Specific Notes:
1 SS 1	2/24/2020	0809	G	W	5	N	N	X	X	X	X	X	X	X	
2 Trip Blank															

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☑ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 3.1 Corr'd: 3.1 | Therm ID No.:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Dennis Schwirk	Pentair	2/24/2020			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
			Received in Laboratory by:	TA	2/25/20 0925

Login Sample Receipt Checklist

Client: Pentair Water

Job Number: 500-178348-1

Login Number: 178348
List Number: 1
Creator: James, Jeff A

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: PENTAIR FLOW TECHNOLOGIES LLC
Contact Address: 293 S. Wright St
Delavan, WI 53115
Facility Contact: Dennis Schwind, Env. Tech
Phone Number: 262-728-7225
Reporting Period: 03/01/2020 - 03/31/2020
Form Due Date: 04/21/2020
Permit Number: 0055816

Date Received:	
DOC:	441147
FIN:	7072
FID:	265010900
Region:	Southeast Region
Permit Drafter:	Lisa J Creegan
Reviewer:	Nicholas M Lent
Office:	Milwaukee

	Sample Point	001	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	211	487	457	388	388
	Description	Flow Rate	Temperature	Suspended Solids, Total	Phosphorus, Total	Phosphorus, Total
	Units	MGD	degF	mg/L	mg/L	lbs/day
	Sample Type	TOT DAILY	GRAB	GRAB	GRAB	CALCULATED
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	Day 1	0.365313				
	2	0.365106				
	3	0.365085				
	4	0.364864				
	5	0.364842				
	6	0.364741				
	7	0.364797				
	8	0.349550				
	9	0.364629				
	10	0.364463				
	11	0.364416				
	12	0.364400				
	13	0.364323				
	14	0.364334				
	15	0.364337				
	16	0.364250				
	17	0.364144				
	18	0.364128	53.96	4.0	0.036	0.109
	19	0.364140				
	20	0.363928				
	21	0.364105				
	22	0.364004				
	23	0.363958				
	24	0.363847				
	25	0.363898				
	26	0.363824				
	27	0.363761				
	28	0.363627				
	29	0.363595				
	30	0.363499				
	31	0.363437				

	Sample Point	001	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	211	487	457	388	388
	Description	Flow Rate	Temperature	Suspended Solids, Total	Phosphorus, Total	Phosphorus, Total
	Units	MGD	degF	mg/L	mg/L	lbs/day
Summary Values	**Monthly Avg**	0.363785323	53.96	4	0.036	0.109
	Daily Max	0.365313	53.96	4	0.036	0.109
	Daily Min	0.34955	53.96	4	0.036	0.109
Limit(s) in Effect	**Monthly Avg**				0.24 0	
QA/QC Information	**LOD**			1.9	0.024	
	LOQ			5	0.05	
	QC Exceedance	N	N	Y	Y	N
	Lab Certification			999580010	999580010	

	Sample Point	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	490	508	561	517
	Description	Tetrachloroethylene	Trichloro- ethylene	1,1,1-Trichloro- ethane	Vinyl chloride
	Units	ug/L	ug/L	ug/L	ug/L
	Sample Type	GRAB	GRAB	GRAB	GRAB
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	**Day 1**				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18	<0.37	0.63	<0.38	<0.20
	19				
	20				
	21				
	22				
	23				
	24				
	25				
	26				
	27				
	28				
	29				
	30				
	31				

	Sample Point	001		001		001		001	
	Description	Storm sewer manhole		Storm sewer manhole		Storm sewer manhole		Storm sewer manhole	
	Parameter	490		508		561		517	
	Description	Tetrachloroethylene		Trichloro- ethylene		1,1,1-Trichloro- ethane		Vinyl chloride	
	Units	ug/L		ug/L		ug/L		ug/L	
Summary Values	**Monthly Avg**	0		0.63		0		0	
	Daily Max	<0.37		0.63		<0.38		<0.2	
	Daily Min	<0.37		0.63		<0.38		<0.2	
Limit(s) in Effect	**Monthly Avg**	50	0	50	0	50	0	10	0
QA/QC Information	**LOD**	0.37		0.16		0.38		0.2	
	LOQ	1		0.5		1		1	
	QC Exceedance	N		N		N		N	
	Lab Certification	999580010		999580010		999580010		999580010	

Footnotes (DNR Use Only; Instructions for completing this form that are unique for your facility may be displayed here.)

General Remarks

The total flow rates were calculated from daily flow readings recorded by the Badger U500w ultrasonic meters installed on the discharge lines of the Delavan facility extraction wells.

Laboratory Quality Control Comments

B = Compound was found in the blank and sample.
J = Result is less than the LOQ but greater than the LOD and the concentration is an approximate value.
F1 = MS and/or MSD recovery is outside acceptance limits.

GEOTRANS, INC. FIELD WATER QUALITY SAMPLING AND ANALYSIS FORM

PROJECT INFORMATION		INSTRUMENTS	
PROJECT	Delavan Facility Remedial Action	Temp. & pH	
PROJECT NO.	Delavan Well #4 WP.	Conductivity	
LOCATION	Delavan, WI	ORP	
PERSONNEL	Denny	DO	

SAMPLE POINT		SS-1	SS-1	SS-1	SS-1	SS-1
WATER TYPE		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
DATE (month/day/year)		3/18/2020				
CLOCK TIME (Military)		0940				
DEPTH TO WATER (ft)*		NA	NA	NA	NA	NA
MEASURED WELL DEPTH (ft)*		NA	NA	NA	NA	NA
CASING VOLUME (gallons)		NA	NA	NA	NA	NA
PURGE VOLUME (gallons)		NA	NA	NA	NA	NA
DEPTH SAMPLE TAKEN (ft)*		NA	NA	NA	NA	NA
SAMPLING DEVICE						
FIELD TEMPERATURE (°C)		12.2				
pH		7.55				
ELEC. COND. (uS/cm)	Measured	1326				
	at 25° C					
ORP (mV)		NA	NA	NA	NA	NA
DISSOLVED OXYGEN (ppm)		NA	NA	NA	NA	NA
DISSOLVED OXYGEN (% Sat.)		NA	NA	NA	NA	NA
COLOR		Clear				
ODOR		None				
CLARITY		Clear				

SAMPLING PARAMETERS	# OF CONTAINERS & VOLUME; CONTAINER TYPE (A = AMBER GLASS; G = GLASS; P = PLASTIC); PRESERVATIVE TYPE (L = LAB ADDED; F = FIELD ADDED) OR NEUTRAL; FILTERED (YES or NO)				
TCE, 1,1,1-TCA, 1,1,2-TCA, PCE, Vinyl Chloride (EPA Method SW 8260B)	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.

Comments: TCE = Trichloroethene. TCA = Trichloroethane. PCE = Tetrachloroethene.

NAME OF LABORATORY	Test America	Test America	Test America	Test America	Test America
DATE SENT TO LAB	3-18-2020				
SAMPLER'S NAME	Denny				

*Measured from top of well casing.

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-179611-1
Client Project/Site: Delavan Well #4 WPDES

For:
Pentair Water
293 Wright Street
Delavan, Wisconsin 53115

Attn: Dennis Schwind

Authorized for release by:
3/31/2020 11:08:29 AM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

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Definitions/Glossary

Client: Pentair Water
Job ID: 500-179611-1
Project/Site: Delavan Well #4 WPDES

Qualifiers

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Case Narrative

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-179611-1

Job ID: 500-179611-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-179611-1

Comments
No additional comments.

Receipt
The samples were received on 3/19/2020 9:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.7º C.

Receipt Exceptions
A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC). Added to COC and logged in.

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

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

Client Sample Results

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-179611-1

Client Sample ID: SS1

Lab Sample ID: 500-179611-1

Date Collected: 03/18/20 09:40
Date Received: 03/19/20 09:50

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			03/28/20 06:06	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			03/28/20 06:06	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			03/28/20 06:06	1
Trichloroethene	**0.63**		0.50	0.16	ug/L			03/28/20 06:06	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			03/28/20 06:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 126*		*03/28/20 06:06*	*1*
4-Bromofluorobenzene (Surr)	*93*		*72 - 124*		*03/28/20 06:06*	*1*
Dibromofluoromethane	*96*		*75 - 120*		*03/28/20 06:06*	*1*
Toluene-d8 (Surr)	*93*		*75 - 120*		*03/28/20 06:06*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**4.0**	**J**	5.0	1.9	mg/L			03/20/20 15:08	1
Chloride	**200**	**F1**	10	5.0	mg/L			03/30/20 21:53	5
Phosphorus as P	**0.036**	**J B**	0.050	0.024	mg/L		03/25/20 05:05	03/26/20 14:48	1

Client Sample ID: Trip Blank

Lab Sample ID: 500-179611-2

Date Collected: 03/18/20 00:00
Date Received: 03/19/20 09:50

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			03/28/20 06:33	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			03/28/20 06:33	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			03/28/20 06:33	1
Trichloroethene	<0.16		0.50	0.16	ug/L			03/28/20 06:33	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			03/28/20 06:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 126*		*03/28/20 06:33*	*1*
4-Bromofluorobenzene (Surr)	*93*		*72 - 124*		*03/28/20 06:33*	*1*
Dibromofluoromethane	*97*		*75 - 120*		*03/28/20 06:33*	*1*
Toluene-d8 (Surr)	*93*		*75 - 120*		*03/28/20 06:33*	*1*

Lab Chronicle

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-179611-1

Client Sample ID: SS1

Lab Sample ID: 500-179611-1

Date Collected: 03/18/20 09:40

Matrix: Water

Date Received: 03/19/20 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	535817	03/28/20 06:06	PMF	TAL CHI
Total/NA	Analysis	SM 2540D		1	534802		SMO	TAL CHI
					(Start)	03/20/20 15:08		
					(End)	03/20/20 15:09		
Total/NA	Analysis	SM 4500 Cl- E		5	536052	03/30/20 21:53	EAT	TAL CHI
Total/NA	Prep	SM 4500 P B			535275	03/25/20 05:05	TT	TAL CHI
Total/NA	Analysis	SM 4500 P E		1	535585	03/26/20 14:48	JMP	TAL CHI

Client Sample ID: Trip Blank

Lab Sample ID: 500-179611-2

Date Collected: 03/18/20 00:00

Matrix: Water

Date Received: 03/19/20 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	535817	03/28/20 06:33	PMF	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Pentair Water
Job ID: 500-179611-1
Project/Site: Delavan Well #4 WPDES

Laboratory: Eurofins TestAmerica, Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-20

Method Summary

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-179611-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL CHI
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 4500 P E	Phosphorus	SM	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI
SM 4500 P B	Phosphorous, Total and Ortho	SM	TAL CHI

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-179611-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-179611-1	SS1	Water	03/18/20 09:40	03/19/20 09:50	
500-179611-2	Trip Blank	Water	03/18/20 00:00	03/19/20 09:50	

EuroFins/TestAmerica
2417 Bond St
Address: University Park IL 60484

Chain of Custody Record

417686 eurofins | Environment Testing TestAmerica

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

UPS NDA 1kpt

TAL-8210

Client Contact	Project Manager: Max Geyer	Site Contact: Dennis Schwin	Date: 3-18-2020	COC No:
Company Name: Pentair Flow Technologies LLC	Tel/Email:	Lab Contact:	Carrier:	_____ of _____ COCs
Address: 293 Wright St	Analysis Turnaround Time			Sampler:
City/State/Zip: Delavan WI 53115	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 262-728-5651	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Delavan Well #4 WPDES	☐ 1 week			Job / SDG No.: 500-179611
Site: Delavan WI	☐ 2 days			
PO#	☐ 1 day			

500-179611 COC

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCE	TCA	PCE	Vinyl Chloride	Phosphorous	TSS	Chloride	Sample Specific Notes:
1	SS1	3/18/2020	0940	G	W	5	N	N	X	X	X	X	X	X	X	
2	Trip Blank															Added by TA

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

4.7

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.: _____
Relinquished by: [signature]	Company: Pentair	Date/Time: 3/18/20	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Company: TA-CHI	Date/Time: 3/19/20 0950

Login Sample Receipt Checklist

Client: Pentair Water

Job Number: 500-179611-1

Login Number: 179611
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Received Trip Blank(s) not listed on COC.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: PENTAIR FLOW TECHNOLOGIES LLC
Contact Address: 293 S. Wright St
Delavan, WI 53115
Facility Contact: Dennis Schwind, Env. Tech
Phone Number: 262-728-7225
Reporting Period: 04/01/2020 - 04/30/2020
Form Due Date: 05/21/2020
Permit Number: 0055816

Date Received:	
DOC:	445419
FIN:	7072
FID:	265010900
Region:	Southeast Region
Permit Drafter:	Lisa J Creegan
Reviewer:	Nicholas M Lent
Office:	Milwaukee

	Sample Point	001	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	211	487	457	388	388
	Description	Flow Rate	Temperature	Suspended Solids, Total	Phosphorus, Total	Phosphorus, Total
	Units	MGD	degF	mg/L	mg/L	lbs/day
	Sample Type	TOT DAILY	GRAB	GRAB	GRAB	CALCULATED
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	Day 1	0.389397				
	2	0.425202				
	3	0.425070				
	4	0.424766				
	5	0.424376				
	6	0.424519				
	7	0.424375				
	8	0.424429				
	9	0.424425				
	10	0.424380				
	11	0.424419				
	12	0.424446				
	13	0.424231				
	14	0.424088				
	15	0.424135				
	16	0.424093				
	17	0.424006				
	18	0.424056				
	19	0.424082				
	20	0.423980				
	21	0.423826				
	22	0.423787				
	23	0.423763				
	24	0.423578				
	25	0.423570				
	26	0.423585				
	27	0.423585	54.50	2.0	0.073	0.257
	28	0.423460				
	29	0.423419				
	30	0.423349				
	31					

	Sample Point	001	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	211	487	457	388	388
	Description	Flow Rate	Temperature	Suspended Solids, Total	Phosphorus, Total	Phosphorus, Total
	Units	MGD	degF	mg/L	mg/L	lbs/day
Summary Values	**Monthly Avg**	0.422946567	54.5	2	0.073	0.257
	Daily Max	0.425202	54.5	2	0.073	0.257
	Daily Min	0.389397	54.5	2	0.073	0.257
Limit(s) in Effect	**Monthly Avg**				0.24 0	
QA/QC Information	**LOD**			1.9	0.024	
	LOQ			5	0.05	
	QC Exceedance	N	N	Y	Y	Y
	Lab Certification			999580010	999580010	

	Sample Point	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	490	508	561	517
	Description	Tetrachloroethylene	Trichloro- ethylene	1,1,1-Trichloro- ethane	Vinyl chloride
	Units	ug/L	ug/L	ug/L	ug/L
	Sample Type	GRAB	GRAB	GRAB	GRAB
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	**Day 1**				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				
	21				
	22				
	23				
	24				
	25				
	26				
	27	<0.37	0.52	<0.38	<0.20
	28				
	29				
	30				
	31				

	Sample Point	001		001		001		001	
	Description	Storm sewer manhole		Storm sewer manhole		Storm sewer manhole		Storm sewer manhole	
	Parameter	490		508		561		517	
	Description	Tetrachloroethylene		Trichloro- ethylene		1,1,1-Trichloro- ethane		Vinyl chloride	
	Units	ug/L		ug/L		ug/L		ug/L	
Summary Values	**Monthly Avg**	0		0.52		0		0	
	Daily Max	<0.37		0.52		<0.38		<0.2	
	Daily Min	<0.37		0.52		<0.38		<0.2	
Limit(s) in Effect	**Monthly Avg**	50	0	50	0	50	0	10	0
QA/QC Information	**LOD**	0.37		0.16		0.38		0.2	
	LOQ	1		0.5		1		1	
	QC Exceedance	N		N		N		N	
	Lab Certification	999580010		999580010		999580010		999580010	

Footnotes (DNR Use Only; Instructions for completing this form that are unique for your facility may be displayed here.)

General Remarks

The total flow rates were calculated from daily flow readings recorded by the Badger U500w ultrasonic meters installed on the discharge lines of the Delavan facility extraction wells.

Laboratory Quality Control Comments

Phosphorus (B) = Compound was found in the blank and sample.
Total Suspended Solids (J) = Result is less than the LOQ but greater than the LOD and the concentration is an approximate value.

GEOTRANS, INC. FIELD WATER QUALITY SAMPLING AND ANALYSIS FORM

PROJECT INFORMATION		INSTRUMENTS	
PROJECT	Delavan Facility Remedial Action	Temp. & pH	HI 98129
PROJECT NO.	Delavan Well #4 WPDES	Conductivity	HI 98129
LOCATION	Delavan, WI	ORP	
PERSONNEL	Dennis	DO	

SAMPLE POINT	SS-1	SS-1	SS-1	SS-1	SS-1
WATER TYPE	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
DATE (month/day/year)	4/27/2020				
CLOCK TIME (Military)	0900				
DEPTH TO WATER (ft)*	NA	NA	NA	NA	NA
MEASURED WELL DEPTH (ft)*	NA	NA	NA	NA	NA
CASING VOLUME (gallons)	NA	NA	NA	NA	NA
PURGE VOLUME (gallons)	NA	NA	NA	NA	NA
DEPTH SAMPLE TAKEN (ft)*	NA	NA	NA	NA	NA
SAMPLING DEVICE	HI 98129				
FIELD TEMPERATURE (°C)	12.5				
pH	7.55				
ELEC. COND. (uS/cm) Measured at 25° C	1305				
ORP (mV)	NA	NA	NA	NA	NA
DISSOLVED OXYGEN (ppm)	NA	NA	NA	NA	NA
DISSOLVED OXYGEN (% Sat.)	NA	NA	NA	NA	NA
COLOR	Clear				
ODOR	None				
CLARITY	Clear				

SAMPLING PARAMETERS	# OF CONTAINERS & VOLUME; CONTAINER TYPE (A = AMBER GLASS; G = GLASS; P = PLASTIC); PRESERVATIVE TYPE (L = LAB ADDED; F = FIELD ADDED) OR NEUTRAL; FILTERED (YES or NO)				
TCE, 1,1,1-TCA, 1,1,2-TCA, PCE, Vinyl Chloride (EPA Method SW 8260B)	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.

Comments: TCE = Trichloroethene. TCA = Trichloroethane. PCE = Tetrachloroethene.

NAME OF LABORATORY	Test America	Test America	Test America	Test America	Test America
DATE SENT TO LAB	4/27/2020				
SAMPLER'S NAME	Dennis				

*Measured from top of well casing.

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-181242-1
Client Project/Site: Delavan Well #4 WPDES

For:
Pentair Water
293 Wright Street
Delavan, Wisconsin 53115

Attn: Dennis Schwind

Authorized for release by:
5/11/2020 9:38:42 AM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

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Definitions/Glossary

Client: Pentair Water
Job ID: 500-181242-1
Project/Site: Delavan Well #4 WPDES

Qualifiers

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Case Narrative

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-181242-1

Job ID: 500-181242-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-181242-1

Comments
No additional comments.

Receipt
The samples were received on 4/28/2020 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 8.9º C.

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

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

Client Sample Results

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-181242-1

Client Sample ID: SS1

Lab Sample ID: 500-181242-1
Date Collected: 04/27/20 09:00
Matrix: Water
Date Received: 04/28/20 09:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			05/08/20 19:16	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			05/08/20 19:16	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			05/08/20 19:16	1
Trichloroethene	**0.52**		0.50	0.16	ug/L			05/08/20 19:16	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			05/08/20 19:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 126*		*05/08/20 19:16*	*1*
4-Bromofluorobenzene (Surr)	*102*		*72 - 124*		*05/08/20 19:16*	*1*
Dibromofluoromethane	*98*		*75 - 120*		*05/08/20 19:16*	*1*
Toluene-d8 (Surr)	*103*		*75 - 120*		*05/08/20 19:16*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**2.0**	**J**	5.0	1.9	mg/L			04/30/20 12:34	1
Chloride	**200**		10	5.0	mg/L			05/02/20 12:55	5
Phosphorus as P	**0.073**	**B**	0.050	0.024	mg/L		05/04/20 07:08	05/05/20 14:05	1

Client Sample ID: Trip Blank

Lab Sample ID: 500-181242-2
Date Collected: 04/27/20 00:00
Matrix: Water
Date Received: 04/28/20 09:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			05/08/20 16:14	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			05/08/20 16:14	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			05/08/20 16:14	1
Trichloroethene	<0.16		0.50	0.16	ug/L			05/08/20 16:14	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			05/08/20 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 126*		*05/08/20 16:14*	*1*
4-Bromofluorobenzene (Surr)	*102*		*72 - 124*		*05/08/20 16:14*	*1*
Dibromofluoromethane	*99*		*75 - 120*		*05/08/20 16:14*	*1*
Toluene-d8 (Surr)	*101*		*75 - 120*		*05/08/20 16:14*	*1*

Lab Chronicle

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-181242-1

Client Sample ID: SS1

Lab Sample ID: 500-181242-1

Date Collected: 04/27/20 09:00

Matrix: Water

Date Received: 04/28/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	541627	05/08/20 19:16	JDD	TAL CHI
Total/NA	Analysis	SM 2540D		1	540528		SMO	TAL CHI
					(Start)	04/30/20 12:34		
					(End)	04/30/20 12:35		
Total/NA	Analysis	SM 4500 Cl- E		5	540788	05/02/20 12:55	EAT	TAL CHI
Total/NA	Prep	SM 4500 P B			540722	05/04/20 07:08	TT	TAL CHI
Total/NA	Analysis	SM 4500 P E		1	541119	05/05/20 14:05	JMP	TAL CHI

Client Sample ID: Trip Blank

Lab Sample ID: 500-181242-2

Date Collected: 04/27/20 00:00

Matrix: Water

Date Received: 04/28/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	541627	05/08/20 16:14	JDD	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Pentair Water
Job ID: 500-181242-1
Project/Site: Delavan Well #4 WPDES

Laboratory: Eurofins TestAmerica, Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-20

Method Summary

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-181242-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL CHI
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 4500 P E	Phosphorus	SM	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI
SM 4500 P B	Phosphorous, Total and Ortho	SM	TAL CHI

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-181242-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-181242-1	SS1	Water	04/27/20 09:00	04/28/20 09:20	
500-181242-2	Trip Blank	Water	04/27/20 00:00	04/28/20 09:20	

2417 Bond St.
University Park IL 60484

Address:

Chain of Custody Record

420833 eurofins | Environment Testing TestAmerica

UPS NDA 16qt.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager: Max Geyer	Site Contact: Dennis Schwind	Date: 4/27/2020	COC No:
Company Name: Pentair Flow Technologies LLC	Tel/Email:	Lab Contact:	Carrier:	_____ of _____ COCs
Address: 293 Wright St	Analysis Turnaround Time			Sampler:
City/State/Zip: Delavan WI 53115	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 262 728 5551	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Delavan Well #4 WPDES	☐ 1 week			Job / SDG No.:
Site: Delavan WI	☐ 2 days			
PO #	☐ 1 day			

500-181242 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCE	TCA	PCE	Vinyl Chloride	Phosphorus	TSS	Chloride	Sample Specific Notes:
1 SS1	4/27/2020	0900	G	W	5	N	N	X	X	X	X	X	X	X	
2 Trip Blank					1										

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 8.9 Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Dennis Schwind	Pentair	4/27/20 0930			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			Paula Bulkley	TA	4/28/20 0920

Login Sample Receipt Checklist

Client: Pentair Water

Job Number: 500-181242-1

Login Number: 181242
List Number: 1
Creator: Buckley, Paula M

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	Water present in cooler; indicates evidence of melted ice.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	8.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: PENTAIR FLOW TECHNOLOGIES LLC
Contact Address: 293 S. Wright St
Delavan, WI 53115
Facility Contact: Dennis Schwind, Env. Tech
Phone Number: 262-728-7225
Reporting Period: 05/01/2020 - 05/31/2020
Form Due Date: 06/21/2020
Permit Number: 0055816

Date Received:	
DOC:	445420
FIN:	7072
FID:	265010900
Region:	Southeast Region
Permit Drafter:	Lisa J Creegan
Reviewer:	Nicholas M Lent
Office:	Milwaukee

	Sample Point	001	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	211	487	457	388	388
	Description	Flow Rate	Temperature	Suspended Solids, Total	Phosphorus, Total	Phosphorus, Total
	Units	MGD	degF	mg/L	mg/L	lbs/day
	Sample Type	TOT DAILY	GRAB	GRAB	GRAB	CALCULATED
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	Day 1	0.423282				
	2	0.423398				
	3	0.423391				
	4	0.423277				
	5	0.423265				
	6	0.423324				
	7	0.423378				
	8	0.423212				
	9	0.423352				
	10	0.423234				
	11	0.423075				
	12	0.423023				
	13	0.401289				
	14	0.422537				
	15	0.422578				
	16	0.422616				
	17	0.422590				
	18	0.422585				
	19	0.422450				
	20	0.422589				
	21	0.422540	59.54	3.0	0.064	0.225
	22	0.422703				
	23	0.422709				
	24	0.422639				
	25	0.422662				
	26	0.422521				
	27	0.422579				
	28	0.422468				
	29	0.422582				
	30	0.422667				
	31	0.422592				

	Sample Point	001	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	211	487	457	388	388
	Description	Flow Rate	Temperature	Suspended Solids, Total	Phosphorus, Total	Phosphorus, Total
	Units	MGD	degF	mg/L	mg/L	lbs/day
Summary Values	**Monthly Avg**	0.422164742	59.54	3	0.064	0.225
	Daily Max	0.423398	59.54	3	0.064	0.225
	Daily Min	0.401289	59.54	3	0.064	0.225
Limit(s) in Effect	**Monthly Avg**				0.24 | 0	
QA/QC Information	**LOD**			1.9	0.024	
	LOQ			5	0.05	
	QC Exceedance	N	N	Y	N	N
	Lab Certification			999580010	999580010	

	Sample Point	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	490	508	561	517
	Description	Tetrachloroethylene	Trichloro- ethylene	1,1,1-Trichloro- ethane	Vinyl chloride
	Units	ug/L	ug/L	ug/L	ug/L
	Sample Type	GRAB	GRAB	GRAB	GRAB
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	**Day 1**				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				
	21	<0.37	<0.16	<0.38	<0.20
	22				
	23				
	24				
	25				
	26				
	27				
	28				
	29				
	30				
	31				

	Sample Point	001		001		001		001	
	Description	Storm sewer manhole		Storm sewer manhole		Storm sewer manhole		Storm sewer manhole	
	Parameter	490		508		561		517	
	Description	Tetrachloroethylene		Trichloro- ethylene		1,1,1-Trichloro- ethane		Vinyl chloride	
	Units	ug/L		ug/L		ug/L		ug/L	
Summary Values	**Monthly Avg**	0		0		0		0	
	Daily Max	<0.37		<0.16		<0.38		<0.2	
	Daily Min	<0.37		<0.16		<0.38		<0.2	
Limit(s) in Effect	**Monthly Avg**	50	0	50	0	50	0	10	0
QA/QC Information	**LOD**	0.37		0.16		0.38		0.2	
	LOQ	1		0.5		1		1	
	QC Exceedance	N		N		N		N	
	Lab Certification	999580010		999580010		999580010		999580010	

Footnotes (DNR Use Only; Instructions for completing this form that are unique for your facility may be displayed here.)

General Remarks

The total flow rates were calculated from daily flow readings recorded by the Badger U500w ultrasonic meters installed on the discharge lines of the Delavan facility extraction wells.

Laboratory Quality Control Comments

J = Result is less than the LOQ but greater than the LOD and the concentration is an approximate value.

GEOTRANS, INC. FIELD WATER QUALITY SAMPLING AND ANALYSIS FORM

PROJECT INFORMATION		INSTRUMENTS	
PROJECT	Delavan Facility Remedial Action	Temp. & pH	HI 98129
PROJECT NO.	Delavan Well #4 WPDES	Conductivity	HI 98129
LOCATION	Delavan, WI	ORP	
PERSONNEL	Dennis	DO	

SAMPLE POINT		SS-1	SS-1	SS-1	SS-1	SS-1
WATER TYPE		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
DATE (month/day/year)		5/21/2020				
CLOCK TIME (Military)		0838				
DEPTH TO WATER (ft)*		NA	NA	NA	NA	NA
MEASURED WELL DEPTH (ft)*		NA	NA	NA	NA	NA
CASING VOLUME (gallons)		NA	NA	NA	NA	NA
PURGE VOLUME (gallons)		NA	NA	NA	NA	NA
DEPTH SAMPLE TAKEN (ft)*		NA	NA	NA	NA	NA
SAMPLING DEVICE		HI 98129				
FIELD TEMPERATURE (°C)		15.3				
pH		7.61				
ELEC. COND. (uS/cm)	Measured	770				
	at 25° C					
ORP (mV)		NA	NA	NA	NA	NA
DISSOLVED OXYGEN (ppm)		NA	NA	NA	NA	NA
DISSOLVED OXYGEN (% Sat.)		NA	NA	NA	NA	NA
COLOR		CLEAR				
ODOR		NONE				
CLARITY		CLEAR				

SAMPLING PARAMETERS	# OF CONTAINERS & VOLUME; CONTAINER TYPE (A = AMBER GLASS; G = GLASS; P = PLASTIC); PRESERVATIVE TYPE (L = LAB ADDED; F = FIELD ADDED) OR NEUTRAL; FILTERED (YES or NO)				
TCE, 1,1,1-TCA, 1,1,2-TCA, PCE, Vinyl Chloride (EPA Method SW 8260B)	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.

Comments: TCE = Trichloroethene. TCA = Trichloroethane. PCE = Tetrachloroethene.

NAME OF LABORATORY	Test America	Test America	Test America	Test America	Test America
DATE SENT TO LAB	5/21/2020				
SAMPLER'S NAME	Dennis				

*Measured from top of well casing.

GeoTrans

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-182478-1
Client Project/Site: Delavan Well #4 WPDES

For:
Pentair Water
293 Wright Street
Delavan, Wisconsin 53115

Attn: Dennis Schwind

Authorized for release by:
6/8/2020 11:45:07 AM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

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Definitions/Glossary

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-182478-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Case Narrative

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-182478-1

Job ID: 500-182478-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-182478-1

Comments
No additional comments.

Receipt
The samples were received on 5/22/2020 8:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 11.6º C.

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

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

Client: Pentair Water
Job ID: 500-182478-1
Project/Site: Delavan Well #4 WPDES

Client Sample ID: Trip Blank
Lab Sample ID: 500-182478-1
Date Collected: 05/21/20 00:00
Matrix: Water
Date Received: 05/22/20 13:49

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			06/03/20 00:22	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			06/03/20 00:22	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			06/03/20 00:22	1
Trichloroethene	<0.16		0.50	0.16	ug/L			06/03/20 00:22	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			06/03/20 00:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 126*		*06/03/20 00:22*	*1*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*		*06/03/20 00:22*	*1*
Dibromofluoromethane	*106*		*75 - 120*		*06/03/20 00:22*	*1*
Toluene-d8 (Surr)	*97*		*75 - 120*		*06/03/20 00:22*	*1*

Client Sample ID: SS1
Lab Sample ID: 500-182478-2
Date Collected: 05/21/20 08:41
Matrix: Water
Date Received: 05/22/20 13:49

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			06/03/20 00:46	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			06/03/20 00:46	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			06/03/20 00:46	1
Trichloroethene	<0.16		0.50	0.16	ug/L			06/03/20 00:46	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			06/03/20 00:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*75 - 126*		*06/03/20 00:46*	*1*
4-Bromofluorobenzene (Surr)	*88*		*72 - 124*		*06/03/20 00:46*	*1*
Dibromofluoromethane	*109*		*75 - 120*		*06/03/20 00:46*	*1*
Toluene-d8 (Surr)	*100*		*75 - 120*		*06/03/20 00:46*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**3.0**	**J**	5.0	1.9	mg/L			05/28/20 11:40	1
Chloride	**140**		10	5.0	mg/L			06/05/20 16:16	5
Phosphorus as P	**0.064**		0.050	0.024	mg/L		06/04/20 06:45	06/05/20 07:46	1

Lab Chronicle

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-182478-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-182478-1
Matrix: Water
Date Collected: 05/21/20 00:00
Date Received: 05/22/20 13:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	545561	06/03/20 00:22	JDD	TAL CHI

Client Sample ID: SS1

Lab Sample ID: 500-182478-2
Matrix: Water
Date Collected: 05/21/20 08:41
Date Received: 05/22/20 13:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	545561	06/03/20 00:46	JDD	TAL CHI
Total/NA	Analysis	SM 2540D		1	544792		SMO	TAL CHI
					(Start)	05/28/20 11:40		
					(End)	05/28/20 11:41		
Total/NA	Analysis	SM 4500 Cl- E		5	546379	06/05/20 16:16	RES	TAL CHI
Total/NA	Prep	SM 4500 P B			545909	06/04/20 06:45	PFK	TAL CHI
Total/NA	Analysis	SM 4500 P E		1	546144	06/05/20 07:46	JMP	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Pentair Water
Job ID: 500-182478-1
Project/Site: Delavan Well #4 WPDES

Laboratory: Eurofins TestAmerica, Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-20

Method Summary

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-182478-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL CHI
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 4500 P E	Phosphorus	SM	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI
SM 4500 P B	Phosphorous, Total and Ortho	SM	TAL CHI

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-182478-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-182478-1	Trip Blank	Water	05/21/20 00:00	05/22/20 13:49	
500-182478-2	SS1	Water	05/21/20 08:41	05/22/20 13:49	

2417 Bond Street
Address: University Park, IL 60484

Chain of Custody Record

422123 eurofins | Environment Testing TestAmerica

UPS NDA 30pt.

Regulatory Program: ☐ DW ☑ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager: Max Geyer	Site Contact:	Date: 5-21-2020	COC No:
Company Name: Pentair Flow Technologies LLC	TEL/Email:	Lab Contact:	Carrier:	____ of ____ COCs
Address: 293 Wright St.	Analysis Turnaround Time			Sampler:
City/State/Zip: Delavan WI 53115	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 262-728-5551	TAT if different from Below ____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Delavan Well #4 WPDES	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.: 500-182478
P O #	☐ 1 day			

500-182478 COC

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCE	TCA	PCE	Vinyl Chloride	Phosphorus	TSS	Chloride	Sample Specific Notes:
1	Trip Blank					1										
2	SS1	5/21/2020	0841	G	W	5			X	X	X	X	X	X	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 293

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☑ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 11.6 Corr'd: ____ Therm ID No.: ____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Dennis Lahm	Pentair	0855			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			Paula Blakely	TA	5/22/20 0950

Login Sample Receipt Checklist

Client: Pentair Water

Job Number: 500-182478-1

Login Number: 182478
List Number: 1
Creator: Buckley, Paula M

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	
Cooler Temperature is recorded.	True	11.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: PENTAIR FLOW TECHNOLOGIES LLC
Contact Address: 293 S. Wright St
Delavan, WI 53115
Facility Contact: Dennis Schwind, Env. Tech
Phone Number: 262-728-7225
Reporting Period: 06/01/2020 - 06/30/2020
Form Due Date: 07/21/2020
Permit Number: 0055816

Date Received:	
DOC:	445421
FIN:	7072
FID:	265010900
Region:	Southeast Region
Permit Drafter:	Lisa J Creegan
Reviewer:	Nicholas M Lent
Office:	Milwaukee

	Sample Point	001	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	211	487	457	388	388
	Description	Flow Rate	Temperature	Suspended Solids, Total	Phosphorus, Total	Phosphorus, Total
	Units	MGD	degF	mg/L	mg/L	lbs/day
	Sample Type	TOT DAILY	GRAB	GRAB	GRAB	CALCULATED
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	Day 1	0.422565				
	2	0.422554				
	3	0.422483				
	4	0.422485				
	5	0.419393				
	6	0.415382				
	7	0.415022				
	8	0.414937				
	9	0.414903				
	10	0.414906				
	11	0.414909				
	12	0.414918				
	13	0.414863				
	14	0.414838				
	15	0.414786				
	16	0.414727				
	17	0.414718				
	18	0.414803				
	19	0.414841				
	20	0.414841				
	21	0.414744				
	22	0.414574				
	23	0.414488				
	24	0.414462				
	25	0.414319				
	26	0.414234				
	27	0.414335				
	28	0.414250				
	29	0.414087	60.08			
	30	0.414171				
	31					

	Sample Point	001	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	211	487	457	388	388
	Description	Flow Rate	Temperature	Suspended Solids, Total	Phosphorus, Total	Phosphorus, Total
	Units	MGD	degF	mg/L	mg/L	lbs/day
Summary Values	**Monthly Avg**	0.4158846	60.08			
	Daily Max	0.422565	60.08			
	Daily Min	0.414087	60.08			
Limit(s) in Effect	**Monthly Avg**				0.24	
QA/QC Information	**LOD**					
	LOQ					
	QC Exceedance	N	N	N	N	N
	Lab Certification					

	Sample Point	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	490	508	561	517
	Description	Tetrachloroethylene	Trichloro- ethylene	1,1,1-Trichloro- ethane	Vinyl chloride
	Units	ug/L	ug/L	ug/L	ug/L
	Sample Type	GRAB	GRAB	GRAB	GRAB
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	**Day 1**				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				
	21				
	22				
	23				
	24				
	25				
	26				
	27				
	28				
	29				
	30				
	31				

	Sample Point	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	490	508	561	517
	Description	Tetrachloroethylene	Trichloro- ethylene	1,1,1-Trichloro- ethane	Vinyl chloride
	Units	ug/L	ug/L	ug/L	ug/L
Summary Values	**Monthly Avg**				
	Daily Max				
	Daily Min				
Limit(s) in Effect	**Monthly Avg**	50	50	50	10
QA/QC Information	**LOD**				
	LOQ				
	QC Exceedance				
	Lab Certification				

Footnotes (DNR Use Only; Instructions for completing this form that are unique for your facility may be displayed here.)

General Remarks

The storm sewer outfall sample (SS-1) collected in June was not analyzed by the laboratory (Eurofins TestAmerica) because the sample arrived out of temperature range. The laboratory did this without consulting Pentair personnel.

Laboratory Quality Control Comments

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: PENTAIR FLOW TECHNOLOGIES LLC
Contact Address: 293 S. Wright St
Delavan, WI 53115
Facility Contact: Dennis Schwind, Env. Tech
Phone Number: 262-728-7225
Reporting Period: 07/01/2020 - 07/31/2020
Form Due Date: 08/21/2020
Permit Number: 0055816

Date Received:	
DOC:	452562
FIN:	7072
FID:	265010900
Region:	Southeast Region
Permit Drafter:	Lisa J Creegan
Reviewer:	Nicholas M Lent
Office:	Milwaukee

	Sample Point	001	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	211	487	457	388	388
	Description	Flow Rate	Temperature	Suspended Solids, Total	Phosphorus, Total	Phosphorus, Total
	Units	MGD	degF	mg/L	mg/L	lbs/day
	Sample Type	TOT DAILY	GRAB	GRAB	GRAB	CALCULATED
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	Day 1	0.414143				
	2	0.414163				
	3	0.392050				
	4	0.298234				
	5	0.298177				
	6	0.298056				
	7	0.297962				
	8	0.316245				
	9	0.357216				
	10	0.357171				
	11	0.357216				
	12	0.357188				
	13	0.357039				
	14	0.356876				
	15	0.356944				
	16	0.356808				
	17	0.356860				
	18	0.356879				
	19	0.356896				
	20	0.356783				
	21	0.380485				
	22	0.412395				
	23	0.412122	60.08	<1.9	0.068	0.211
	24	0.412044				
	25	0.411991				
	26	0.411980				
	27	0.411864				
	28	0.411904				
	29	0.411856				
	30	0.411803				
	31	0.411888				

	Sample Point	001	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	211	487	457	388	388
	Description	Flow Rate	Temperature	Suspended Solids, Total	Phosphorus, Total	Phosphorus, Total
	Units	MGD	degF	mg/L	mg/L	lbs/day
Summary Values	**Monthly Avg**	0.371394774	60.08	0	0.068	0.211
	Daily Max	0.414163	60.08	<1.9	0.068	0.211
	Daily Min	0.297962	60.08	<1.9	0.068	0.211
Limit(s) in Effect	**Monthly Avg**				0.24 | 0	
QA/QC Information	**LOD**			1.9	0.024	
	LOQ			5	0.05	
	QC Exceedance	N	N	N	Y	N
	Lab Certification			999580010	999580010	

	Sample Point	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	490	508	561	517
	Description	Tetrachloroethylene	Trichloro- ethylene	1,1,1-Trichloro- ethane	Vinyl chloride
	Units	ug/L	ug/L	ug/L	ug/L
	Sample Type	GRAB	GRAB	GRAB	GRAB
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	**Day 1**				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				
	21				
	22				
	23	<0.37	0.55	<0.38	<0.20
	24				
	25				
	26				
	27				
	28				
	29				
	30				
	31				

	Sample Point	001		001		001		001	
	Description	Storm sewer manhole		Storm sewer manhole		Storm sewer manhole		Storm sewer manhole	
	Parameter	490		508		561		517	
	Description	Tetrachloroethylene		Trichloro- ethylene		1,1,1-Trichloro- ethane		Vinyl chloride	
	Units	ug/L		ug/L		ug/L		ug/L	
Summary Values	**Monthly Avg**	0		0.55		0		0	
	Daily Max	<0.37		0.55		<0.38		<0.2	
	Daily Min	<0.37		0.55		<0.38		<0.2	
Limit(s) in Effect	**Monthly Avg**	50	0	50	0	50	0	10	0
QA/QC Information	**LOD**	0.37		0.5		0.38		0.2	
	LOQ	1		1		1		1	
	QC Exceedance	N		N		N		N	
	Lab Certification	999580010		999580010		999580010		999580010	

Footnotes (DNR Use Only; Instructions for completing this form that are unique for your facility may be displayed here.)

General Remarks

The total flow rates were calculated from daily flow readings recorded by the Badger U500w ultrasonic meters installed on the discharge lines of the Delavan facility extraction wells.

Laboratory Quality Control Comments

B = Compound was found in the blank and sample.

GEOTRANS, INC. FIELD WATER QUALITY SAMPLING AND ANALYSIS FORM

PROJECT INFORMATION		INSTRUMENTS	
PROJECT	Delavan Facility Remedial Action	Temp. & pH	HI98129
PROJECT NO.	Delavan Well #4 WPDES	Conductivity	HI98129
LOCATION	Delavan, WI	ORP	
PERSONNEL	Dennis	DO	

SAMPLE POINT		SS-1	SS-1	SS-1	SS-1	SS-1
WATER TYPE		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
DATE (month/day/year)		7-23-2020				
CLOCK TIME (Military)		0906				
DEPTH TO WATER (ft)*		NA	NA	NA	NA	NA
MEASURED WELL DEPTH (ft)*		NA	NA	NA	NA	NA
CASING VOLUME (gallons)		NA	NA	NA	NA	NA
PURGE VOLUME (gallons)		NA	NA	NA	NA	NA
DEPTH SAMPLE TAKEN (ft)*		NA	NA	NA	NA	NA
SAMPLING DEVICE		HI98129				
FIELD TEMPERATURE (°C)		15.6				
pH		7.41				
ELEC. COND. (uS/cm)	Measured	1417				
	at 25° C					
ORP (mV)		NA	NA	NA	NA	NA
DISSOLVED OXYGEN (ppm)		NA	NA	NA	NA	NA
DISSOLVED OXYGEN (% Sat.)		NA	NA	NA	NA	NA
COLOR		CLEAR				
ODOR		NONE				
CLARITY		CLEAR				

SAMPLING PARAMETERS	# OF CONTAINERS & VOLUME; CONTAINER TYPE (A = AMBER GLASS; G = GLASS; P = PLASTIC); PRESERVATIVE TYPE (L = LAB ADDED; F = FIELD ADDED) OR NEUTRAL; FILTERED (YES or NO)				
TCE, 1,1,1-TCA, 1,1,2-TCA, PCE, Vinyl Chloride (EPA Method SW 8260B)	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.

Comments: TCE = Trichloroethene. TCA = Trichloroethane. PCE = Tetrachloroethene.

NAME OF LABORATORY	Test America	Test America	Test America	Test America	Test America
DATE SENT TO LAB	7-23-2020				
SAMPLER'S NAME	Dennis				

*Measured from top of well casing.

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-185462-1
Client Project/Site: Delavan Well #4 WPDES

For:
Pentair Water
293 Wright Street
Delavan, Wisconsin 53115

Attn: Dennis Schwind

Authorized for release by:
8/10/2020 2:55:25 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

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Definitions/Glossary

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-185462-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-185462-1

Job ID: 500-185462-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-185462-1

Comments
No additional comments.

Receipt
The samples were received on 7/24/2020 9:05 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 14.8º C.

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

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

Client Sample ID: Trip Blank

Lab Sample ID: 500-185462-1
Matrix: Water
Date Collected: 07/23/20 00:00
Date Received: 07/24/20 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/29/20 11:01	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/29/20 11:01	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/29/20 11:01	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/29/20 11:01	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/29/20 11:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 126*		*07/29/20 11:01*	*1*
4-Bromofluorobenzene (Surr)	*92*		*72 - 124*		*07/29/20 11:01*	*1*
Dibromofluoromethane	*98*		*75 - 120*		*07/29/20 11:01*	*1*
Toluene-d8 (Surr)	*98*		*75 - 120*		*07/29/20 11:01*	*1*

Client Sample ID: SS1

Lab Sample ID: 500-185462-2
Matrix: Water
Date Collected: 07/23/20 00:00
Date Received: 07/24/20 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/29/20 17:47	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/29/20 17:47	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/29/20 17:47	1
Trichloroethene	**0.55**		0.50	0.16	ug/L			07/29/20 17:47	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/29/20 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*75 - 126*		*07/29/20 17:47*	*1*
4-Bromofluorobenzene (Surr)	*92*		*72 - 124*		*07/29/20 17:47*	*1*
Dibromofluoromethane	*104*		*75 - 120*		*07/29/20 17:47*	*1*
Toluene-d8 (Surr)	*97*		*75 - 120*		*07/29/20 17:47*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<1.9		5.0	1.9	mg/L			07/29/20 15:15	1
Chloride	**230**		10	5.0	mg/L			08/07/20 19:06	5
Phosphorus as P	**0.068**	**B**	0.050	0.024	mg/L		08/07/20 10:30	08/08/20 14:39	1

Lab Chronicle

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-185462-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-185462-1

Date Collected: 07/23/20 00:00

Matrix: Water

Date Received: 07/24/20 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554237	07/29/20 11:01	JDD	TAL CHI

Client Sample ID: SS1

Lab Sample ID: 500-185462-2

Date Collected: 07/23/20 00:00

Matrix: Water

Date Received: 07/24/20 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	554237	07/29/20 17:47	JDD	TAL CHI
Total/NA	Analysis	SM 2540D		1	554356		SMO	TAL CHI
					(Start)	07/29/20 15:15		
					(End)	07/29/20 15:16		
Total/NA	Analysis	SM 4500 Cl- E		5	555939	08/07/20 19:06	EAT	TAL CHI
Total/NA	Prep	SM 4500 P B			555888	08/07/20 10:30	PFK	TAL CHI
Total/NA	Analysis	SM 4500 P E		1	556007	08/08/20 14:39	JMP	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Pentair Water
Job ID: 500-185462-1
Project/Site: Delavan Well #4 WPDES

Laboratory: Eurofins TestAmerica, Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-20

Method Summary

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-185462-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL CHI
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 4500 P E	Phosphorus	SM	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI
SM 4500 P B	Phosphorous, Total and Ortho	SM	TAL CHI

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-185462-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-185462-1	Trip Blank	Water	07/23/20 00:00	07/24/20 09:05	
500-185462-2	SS1	Water	07/23/20 00:00	07/24/20 09:05	

Test America
2417 Bond St.
Address: University Park IL 60484

Chain of Custody Record

376804

eurofins | Environment Testing TestAmerica

Regulatory Program: ☐ DW ☑ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager: Max Beyer	Site Contact: Max	Date:	COC No:
Company Name: Pentair Flow Technologies	Tel/Email: 2.6	Lab Contact:	Carrier:	____ of ____ COCs
Address: 293 Wright St.	Analysis Turnaround Time			Sampler:
City/State/Zip: Delavan WI 53115	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 262-728-5551	TAT if different from Below ____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Delavan Well #4 WPDES	☐ 1 week			
Site: Delavan WI	☐ 2 days			Job / SDG No.: 500-185462
P O #	☐ 1 day			

500-185462 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCE	TCA	PCE	Vinyl Chloride	Phosphorus	TSS	Chloride	Sample Specific Notes:
1 Trip Blank	7-23-20		G	W	1										
2 551	7-23-20		G	W	5			Y	Y	X	X	X	X	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 14.8 Corr'd: 14.8 | Therm ID No.:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA	Date/Time: 7/24/20 0905

8/10/2020

Login Sample Receipt Checklist

Client: Pentair Water

Job Number: 500-185462-1

Login Number: 185462
List Number: 1
Creator: James, Jeff A

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	14.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: PENTAIR FLOW TECHNOLOGIES LLC
Contact Address: 293 S. Wright St
Delavan, WI 53115
Facility Contact: Dennis Schwind, Env. Tech
Phone Number: 262-728-7225
Reporting Period: 08/01/2020 - 08/31/2020
Form Due Date: 09/21/2020
Permit Number: 0055816

Date Received:	
DOC:	452563
FIN:	7072
FID:	265010900
Region:	Southeast Region
Permit Drafter:	Lisa J Creegan
Reviewer:	Nicholas M Lent
Office:	Milwaukee

	Sample Point	001	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	211	487	457	388	388
	Description	Flow Rate	Temperature	Suspended Solids, Total	Phosphorus, Total	Phosphorus, Total
	Units	MGD	degF	mg/L	mg/L	lbs/day
	Sample Type	TOT DAILY	GRAB	GRAB	GRAB	CALCULATED
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	Day 1	0.411893				
	2	0.411795				
	3	0.411654				
	4	0.411662				
	5	0.411591				
	6	0.411712				
	7	0.411684				
	8	0.411768				
	9	0.411738				
	10	0.411660				
	11	0.411783				
	12	0.411677				
	13	0.411681				
	14	0.411636				
	15	0.411808				
	16	0.411821				
	17	0.411756				
	18	0.411649				
	19	0.411721				
	20	0.411693				
	21	0.411656	72.14	19	0.12	0.412
	22	0.411673				
	23	0.411644				
	24	0.411424				
	25	0.411573				
	26	0.411604				
	27	0.411511				
	28	0.411551				
	29	0.411560				
	30	0.411504				
	31	0.411353				

	Sample Point	001	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	211	487	457	388	388
	Description	Flow Rate	Temperature	Suspended Solids, Total	Phosphorus, Total	Phosphorus, Total
	Units	MGD	degF	mg/L	mg/L	lbs/day
Summary Values	**Monthly Avg**	0.411659194	72.14	19	0.12	0.412
	Daily Max	0.411893	72.14	19	0.12	0.412
	Daily Min	0.411353	72.14	19	0.12	0.412
Limit(s) in Effect	**Monthly Avg**				0.24 0	
QA/QC Information	**LOD**			1.9	0.024	
	LOQ			5	0.05	
	QC Exceedance	N	N	N	N	N
	Lab Certification			999580010	999580010	

	Sample Point	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	490	508	561	517
	Description	Tetrachloroethylene	Trichloro- ethylene	1,1,1-Trichloro- ethane	Vinyl chloride
	Units	ug/L	ug/L	ug/L	ug/L
	Sample Type	GRAB	GRAB	GRAB	GRAB
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	**Day 1**				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				
	21	<0.37	<0.16	<0.38	<0.20
	22				
	23				
	24				
	25				
	26				
	27				
	28				
	29				
	30				
	31				

	Sample Point	001		001		001		001	
	Description	Storm sewer manhole		Storm sewer manhole		Storm sewer manhole		Storm sewer manhole	
	Parameter	490		508		561		517	
	Description	Tetrachloroethylene		Trichloro- ethylene		1,1,1-Trichloro- ethane		Vinyl chloride	
	Units	ug/L		ug/L		ug/L		ug/L	
Summary Values	**Monthly Avg**	0		0		0		0	
	Daily Max	<0.37		<0.16		<0.38		<0.2	
	Daily Min	<0.37		<0.16		<0.38		<0.2	
Limit(s) in Effect	**Monthly Avg**	50	0	50	0	50	0	10	0
QA/QC Information	**LOD**	0.37		0.16		0.38		0.2	
	LOQ	1		0.5		1		1	
	QC Exceedance	N		N		N		N	
	Lab Certification	999580010		999580010		999580010		999580010	

Footnotes (DNR Use Only; Instructions for completing this form that are unique for your facility may be displayed here.)

General Remarks

The total flow rates were calculated from daily flow readings recorded by the Badger U500w ultrasonic meters installed on the discharge lines of the Delavan facility extraction wells.

Laboratory Quality Control Comments

GEOTRANS, INC. FIELD WATER QUALITY SAMPLING AND ANALYSIS FORM

PROJECT INFORMATION		INSTRUMENTS	
PROJECT	Delavan Facility Remedial Action	Temp. & pH	HI 98129
PROJECT NO.	Delavan WI: 41078ES	Conductivity	HI 98129
LOCATION	Delavan, WI	ORP	
PERSONNEL	Dennis Schwind	DO	

SAMPLE POINT		SS-1	SS-1	SS-1	SS-1	SS-1
WATER TYPE		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
DATE (month/day/year)		08/21/2020				
CLOCK TIME (Military)		0833				
DEPTH TO WATER (ft)*		NA	NA	NA	NA	NA
MEASURED WELL DEPTH (ft)*		NA	NA	NA	NA	NA
CASING VOLUME (gallons)		NA	NA	NA	NA	NA
PURGE VOLUME (gallons)		NA	NA	NA	NA	NA
DEPTH SAMPLE TAKEN (ft)*		NA	NA	NA	NA	NA
SAMPLING DEVICE		HI 98129				
FIELD TEMPERATURE (°C)		22.3				
pH		8.53				
ELEC. COND. (uS/cm)	Measured	542				
	at 25° C					
ORP (mV)		NA	NA	NA	NA	NA
DISSOLVED OXYGEN (ppm)		NA	NA	NA	NA	NA
DISSOLVED OXYGEN (% Sat.)		NA	NA	NA	NA	NA
COLOR						
ODOR						
CLARITY						

SAMPLING PARAMETERS	# OF CONTAINERS & VOLUME; CONTAINER TYPE (A = AMBER GLASS; G = GLASS; P = PLASTIC); PRESERVATIVE TYPE (L = LAB ADDED; F = FIELD ADDED) OR NEUTRAL; FILTERED (YES or NO)				
TCE, 1,1,1-TCA, 1,1,2-TCA, PCE, Vinyl Chloride (EPA Method SW 8260B)	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.

Comments: TCE = Trichloroethene. TCA = Trichloroethane. PCE = Tetrachloroethene.

NAME OF LABORATORY	Test America	Test America	Test America	Test America	Test America
DATE SENT TO LAB	8/21/2020				
SAMPLER'S NAME	Dennis				

*Measured from top of well casing.

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ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-186779-1
Client Project/Site: Delavan Well #4 WPDES

For:
Pentair Water
293 Wright Street
Delavan, Wisconsin 53115

Attn: Dennis Schwind

Authorized for release by:
9/8/2020 2:45:36 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

Table of Contents

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Definitions/Glossary

Client: Pentair Water
Job ID: 500-186779-1
Project/Site: Delavan Well #4 WPDES

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-186779-1

Job ID: 500-186779-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-186779-1

Comments
No additional comments.

Receipt
The samples were received on 8/22/2020 11:35 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.4º C.

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

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

Client Sample Results

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-186779-1

Client Sample ID: SS1

Lab Sample ID: 500-186779-1

Date Collected: 08/21/20 08:33
Matrix: Water
Date Received: 08/22/20 11:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			08/26/20 17:39	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			08/26/20 17:39	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			08/26/20 17:39	1
Trichloroethene	<0.16		0.50	0.16	ug/L			08/26/20 17:39	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			08/26/20 17:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 126*		*08/26/20 17:39*	*1*
4-Bromofluorobenzene (Surr)	*106*		*72 - 124*		*08/26/20 17:39*	*1*
Dibromofluoromethane	*96*		*75 - 120*		*08/26/20 17:39*	*1*
Toluene-d8 (Surr)	*99*		*75 - 120*		*08/26/20 17:39*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**19**		5.0	1.9	mg/L			08/28/20 12:38	1
Chloride	**100**		10	5.0	mg/L			08/26/20 01:27	5
Phosphorus as P	**0.12**		0.050	0.024	mg/L		09/02/20 10:30	09/07/20 09:43	1

Client Sample ID: Trip Blank

Lab Sample ID: 500-186779-2

Date Collected: 08/21/20 00:00
Matrix: Water
Date Received: 08/22/20 11:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			08/26/20 13:31	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			08/26/20 13:31	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			08/26/20 13:31	1
Trichloroethene	<0.16		0.50	0.16	ug/L			08/26/20 13:31	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			08/26/20 13:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*75 - 126*		*08/26/20 13:31*	*1*
4-Bromofluorobenzene (Surr)	*104*		*72 - 124*		*08/26/20 13:31*	*1*
Dibromofluoromethane	*95*		*75 - 120*		*08/26/20 13:31*	*1*
Toluene-d8 (Surr)	*98*		*75 - 120*		*08/26/20 13:31*	*1*

Lab Chronicle

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-186779-1

Client Sample ID: SS1

Lab Sample ID: 500-186779-1

Date Collected: 08/21/20 08:33

Matrix: Water

Date Received: 08/22/20 11:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	558549	08/26/20 17:39	STW	TAL CHI
Total/NA	Analysis	SM 2540D		1	559025		SMO	TAL CHI
					(Start)	08/28/20 12:38		
					(End)	08/28/20 12:39		
Total/NA	Analysis	SM 4500 Cl- E		5	558521	08/26/20 01:27	EAT	TAL CHI
Total/NA	Prep	SM 4500 P B			559689	09/02/20 10:30	JMP	TAL CHI
Total/NA	Analysis	SM 4500 P E		1	560276	09/07/20 09:43	JMP	TAL CHI

Client Sample ID: Trip Blank

Lab Sample ID: 500-186779-2

Date Collected: 08/21/20 00:00

Matrix: Water

Date Received: 08/22/20 11:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	558549	08/26/20 13:31	STW	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Pentair Water
Job ID: 500-186779-1
Project/Site: Delavan Well #4 WPDES

Laboratory: Eurofins TestAmerica, Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-21

Method Summary

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-186779-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL CHI
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 4500 P E	Phosphorus	SM	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI
SM 4500 P B	Phosphorous, Total and Ortho	SM	TAL CHI

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-186779-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-186779-1	SS1	Water	08/21/20 08:33	08/22/20 11:35	
500-186779-2	Trip Blank	Water	08/21/20 00:00	08/22/20 11:35	

2417 Bond St
University Park IL 60484

Chain of Custody Record

397018

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Regulatory Program: ☐ DW ☑ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager: Max Beyer	Site Contact: Dennis Schwind	Date: 8-21-2020	COC No:
Company Name: Pentair Flow Technologies LLC	Tel/Email:	Lab Contact:	Carrier:	____ of ____ COCs
Address: 2933 Wright St.	Analysis Turnaround Time: ☐ CALENDAR DAYS ☐ WORKING DAYS			Sampler:
City/State/Zip: Delavan WI 53115	TAT if different from Below ____			For Lab Use Only:
Phone: 262-728-5551	☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day			Walk-in Client:
Project Name: Delavan Well #4 WPDES				Lab Sampling:
Site: Delavan WI 53115				Job / SDG No.: 500-186779

500-186779 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCE	TCA	PCE	Vinyl Chloride	Phosphorus	TSS	Chloride	Sample Specific Notes:
S1	8/21/20	0833	G	W	5			X	X	X	X	X	X	X	
rst Blank															

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

Cooler Temp. (°C): Obs'd: 3.4 Corr'd: ____ Therm ID No.: ____

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
(name) Schwind	Pentair	8/21/20 0900			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Paula Buckley	Company: TA	Date/Time: 8/22/20 1135

Login Sample Receipt Checklist

Client: Pentair Water

Job Number: 500-186779-1

Login Number: 186779
List Number: 1
Creator: Buckley, Paula M

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: PENTAIR FLOW TECHNOLOGIES LLC
Contact Address: 293 S. Wright St
Delavan, WI 53115
Facility Contact: Dennis Schwind, Env. Tech
Phone Number: 262-728-7225
Reporting Period: 09/01/2020 - 09/30/2020
Form Due Date: 10/21/2020
Permit Number: 0055816

Date Received:	
DOC:	452564
FIN:	7072
FID:	265010900
Region:	Southeast Region
Permit Drafter:	Lisa J Creegan
Reviewer:	Nicholas M Lent
Office:	Milwaukee

	Sample Point	001	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	211	487	457	388	388
	Description	Flow Rate	Temperature	Suspended Solids, Total	Phosphorus, Total	Phosphorus, Total
	Units	MGD	degF	mg/L	mg/L	lbs/day
	Sample Type	TOT DAILY	GRAB	GRAB	GRAB	CALCULATED
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	Day 1	0.411277				
	2	0.411252				
	3	0.411106				
	4	0.411169				
	5	0.411200				
	6	0.274638				
	7	0.408392				
	8	0.408251				
	9	0.408280				
	10	0.408342				
	11	0.408451				
	12	0.408554				
	13	0.408509				
	14	0.408534				
	15	0.408586				
	16	0.408598	57.74	<1.9	<0.024	0
	17	0.408606				
	18	0.408613				
	19	0.408731				
	20	0.408774				
	21	0.408619				
	22	0.408677				
	23	0.408681				
	24	0.408656				
	25	0.408687				
	26	0.408614				
	27	0.408831				
	28	0.411035				
	29	0.415967				
	30	0.415885				
	31					

	Sample Point	001	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	211	487	457	388	388
	Description	Flow Rate	Temperature	Suspended Solids, Total	Phosphorus, Total	Phosphorus, Total
	Units	MGD	degF	mg/L	mg/L	lbs/day
Summary Values	**Monthly Avg**	0.405117167	57.74	0	0	0
	Daily Max	0.415967	57.74	<1.9	<0.024	0
	Daily Min	0.274638	57.74	<1.9	<0.024	0
Limit(s) in Effect	**Monthly Avg**				0.24 0	
QA/QC Information	**LOD**			1.9	0.024	
	LOQ			5	0.05	
	QC Exceedance	N	N	N	N	N
	Lab Certification			999580010	999580010	

	Sample Point	001	001	001	001
	Description	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole	Storm sewer manhole
	Parameter	490	508	561	517
	Description	Tetrachloroethylene	Trichloro- ethylene	1,1,1-Trichloro- ethane	Vinyl chloride
	Units	ug/L	ug/L	ug/L	ug/L
	Sample Type	GRAB	GRAB	GRAB	GRAB
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	**Day 1**				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16	<0.37	0.56	<0.38	<0.20
	17				
	18				
	19				
	20				
	21				
	22				
	23				
	24				
	25				
	26				
	27				
	28				
	29				
	30				
	31				

	Sample Point	001		001		001		001	
	Description	Storm sewer manhole		Storm sewer manhole		Storm sewer manhole		Storm sewer manhole	
	Parameter	490		508		561		517	
	Description	Tetrachloroethylene		Trichloro- ethylene		1,1,1-Trichloro- ethane		Vinyl chloride	
	Units	ug/L		ug/L		ug/L		ug/L	
Summary Values	**Monthly Avg**	0		0.56		0		0	
	Daily Max	<0.37		0.56		<0.38		<0.2	
	Daily Min	<0.37		0.56		<0.38		<0.2	
Limit(s) in Effect	**Monthly Avg**	50	0	50	0	50	0	10	0
QA/QC Information	**LOD**	0.37		0.16		0.38		0.2	
	LOQ	1		0.5		1		1	
	QC Exceedance	N		N		N		N	
	Lab Certification	999580010		999580010		999580010		999580010	

Footnotes (DNR Use Only; Instructions for completing this form that are unique for your facility may be displayed here.)

General Remarks

The total flow rates were calculated from daily flow readings recorded by the Badger U500w ultrasonic meters installed on the discharge lines of the Delavan facility extraction wells.

Laboratory Quality Control Comments

GEOTRANS, INC. FIELD WATER QUALITY SAMPLING AND ANALYSIS FORM

PROJECT INFORMATION		INSTRUMENTS	
PROJECT	Delavan Facility Remedial Action	Temp. & pH	HI98129
PROJECT NO.	Delavan Well #4 WPDES	Conductivity	HI98129
LOCATION	Delavan, WI	ORP	
PERSONNEL	Dennis	DO	

SAMPLE POINT	SS-1	SS-1	SS-1	SS-1	SS-1
WATER TYPE	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
DATE (month/day/year)	09/16/2020				
CLOCK TIME (Military)	1033				
DEPTH TO WATER (ft)*	NA	NA	NA	NA	NA
MEASURED WELL DEPTH (ft)*	NA	NA	NA	NA	NA
CASING VOLUME (gallons)	NA	NA	NA	NA	NA
PURGE VOLUME (gallons)	NA	NA	NA	NA	NA
DEPTH SAMPLE TAKEN (ft)*	NA	NA	NA	NA	NA
SAMPLING DEVICE	HI98129				
FIELD TEMPERATURE (°C)	14.3				
pH	7.40				
ELEC. COND. (uS/cm) Measured	1330				
ELEC. COND. (uS/cm) at 25° C					
ORP (mV)	NA	NA	NA	NA	NA
DISSOLVED OXYGEN (ppm)	NA	NA	NA	NA	NA
DISSOLVED OXYGEN (% Sat.)	NA	NA	NA	NA	NA
COLOR	Clear				
ODOR	None				
CLARITY	Clear				

SAMPLING PARAMETERS	# OF CONTAINERS & VOLUME; CONTAINER TYPE (A = AMBER GLASS; G = GLASS; P = PLASTIC); PRESERVATIVE TYPE (L = LAB ADDED; F = FIELD ADDED) OR NEUTRAL; FILTERED (YES or NO)				
TCE, 1,1,1-TCA, 1,1,2-TCA, PCE, Vinyl Chloride (EPA Method SW 8260B)	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.

Comments: TCE = Trichloroethene. TCA = Trichloroethane. PCE = Tetrachloroethene.

NAME OF LABORATORY	Test America	Test America	Test America	Test America	Test America
DATE SENT TO LAB	9/16/2020				
SAMPLER'S NAME	[illegible]				

*Measured from top of well casing.

GeoTrans ...

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-187926-1
Client Project/Site: Delavan Well #4 WPDES

For:
Pentair Water
293 Wright Street
Delavan, Wisconsin 53115

Attn: Dennis Schwind

Authorized for release by:
9/25/2020 5:44:13 PM
Jim Knapp, Project Manager II
(630)758-0262
Jim.Knapp@Eurofinset.com

Designee for

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

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Definitions/Glossary

Client: Pentair Water
Job ID: 500-187926-1
Project/Site: Delavan Well #4 WPDES

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-187926-1

Job ID: 500-187926-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-187926-1

Comments
No additional comments.

Receipt
The samples were received on 9/17/2020 8:00 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.4° C.

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

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

Client Sample ID: SS1

Lab Sample ID: 500-187926-1
Date Collected: 09/16/20 10:33
Matrix: Water
Date Received: 09/17/20 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/22/20 18:40	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/22/20 18:40	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			09/22/20 18:40	1
Trichloroethene	**0.56**		0.50	0.16	ug/L			09/22/20 18:40	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/22/20 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 126*		*09/22/20 18:40*	*1*
4-Bromofluorobenzene (Surr)	*116*		*72 - 124*		*09/22/20 18:40*	*1*
Dibromofluoromethane	*94*		*75 - 120*		*09/22/20 18:40*	*1*
Toluene-d8 (Surr)	*107*		*75 - 120*		*09/22/20 18:40*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<1.9		5.0	1.9	mg/L			09/22/20 12:54	1
Chloride	**220**		10	5.0	mg/L			09/19/20 00:25	5
Phosphorus as P	<0.024		0.050	0.024	mg/L		09/22/20 09:16	09/24/20 17:00	1

Client Sample ID: Trip Blank

Lab Sample ID: 500-187926-2
Date Collected: 09/16/20 00:00
Matrix: Water
Date Received: 09/17/20 08:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			09/22/20 12:38	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			09/22/20 12:38	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			09/22/20 12:38	1
Trichloroethene	<0.16		0.50	0.16	ug/L			09/22/20 12:38	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/22/20 12:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 126*		*09/22/20 12:38*	*1*
4-Bromofluorobenzene (Surr)	*112*		*72 - 124*		*09/22/20 12:38*	*1*
Dibromofluoromethane	*91*		*75 - 120*		*09/22/20 12:38*	*1*
Toluene-d8 (Surr)	*106*		*75 - 120*		*09/22/20 12:38*	*1*

Lab Chronicle

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-187926-1

Client Sample ID: SS1

Lab Sample ID: 500-187926-1

Date Collected: 09/16/20 10:33

Matrix: Water

Date Received: 09/17/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	562652	09/22/20 18:40	PMF	TAL CHI
Total/NA	Analysis	SM 2540D		1	562736		SMO	TAL CHI
					(Start)	09/22/20 12:54		
					(End)	09/22/20 12:55		
Total/NA	Analysis	SM 4500 Cl- E		5	562304	09/19/20 00:25	EAT	TAL CHI
Total/NA	Prep	SM 4500 P B			562682	09/22/20 09:16	JMP	TAL CHI
Total/NA	Analysis	SM 4500 P E		1	563267	09/24/20 17:00	JMP	TAL CHI

Client Sample ID: Trip Blank

Lab Sample ID: 500-187926-2

Date Collected: 09/16/20 00:00

Matrix: Water

Date Received: 09/17/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	562652	09/22/20 12:38	PMF	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Pentair Water
Job ID: 500-187926-1
Project/Site: Delavan Well #4 WPDES

Laboratory: Eurofins TestAmerica, Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-21

Method Summary

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-187926-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL CHI
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 4500 P E	Phosphorus	SM	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI
SM 4500 P B	Phosphorous, Total and Ortho	SM	TAL CHI

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-187926-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-187926-1	SS1	Water	09/16/20 10:33	09/17/20 08:00	
500-187926-2	Trip Blank	Water	09/16/20 00:00	09/17/20 08:00	

Chain of Custody Record

435008 eurofins | Environment Testing TestAmerica

Address: 2417 Bond Street University Park IL 60484

Regulatory Program: ☐ DW ☒ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager: Max Geyer	Site Contact: Dennis Schuyler	COC No:
Company Name: Pentair Flow Technologies	Tel/Email:	Lab Contact:	Carrier:	of COCs
Address: 293 Wright St	Analysis Turnaround Time			Sampler:
City/State/Zip: Delavan WI 53115	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 262-728-5551	TAT if different from Below ____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Delavan Well #4 WPDES	☐ 1 week			Job / SDG No.: 500-187926
Site: Delavan WI	☐ 2 days			
P O #	☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCE	TCA	PCE	Vinyl Chloride	Phosphorus	TSS	Chloride
1	SS1	9/16/20	1033	G	W	5	N	N	X	X	X	X	X	X	X
2	Trip Blank					1									

500-187926 COC

Sample Specific Notes:

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 1.4 Corr'd: 2.4 | Therm ID No.:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Pentair	9/16/20 1050			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TA CHI	9/17/20 0800

Login Sample Receipt Checklist

Client: Pentair Water

Job Number: 500-187926-1

Login Number: 187926
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: PENTAIR FLOW TECHNOLOGIES LLC
Contact Address: 293 S Wright St
Delavan, WI 53115
Facility Contact: Maxwell Geyer, EH&S Specialist
Phone Number: 262-728-7408
Reporting Period: 11/01/2020 - 11/30/2020
Form Due Date: 12/21/2020
Permit Number: 0046566

Date Received:		
DOC:	459670	
FIN:	7072	
FID:	265010900	
Region:	Southeast Region	
Permit Drafter:	Drafter not set	
Reviewer:	David J Haas	
Office:	Green Bay	

	Sample Point	001
	Description	Swan Creek via Storm Sewer
	Parameter	211
	Description	Flow Rate
	Units	gpd
	Sample Type	ESTIMATED
	Frequency	DAILY
Sample Results	**Day 1**	0.376871
	2	0.361804
	3	0.361236
	4	0.361394
	5	0.361419
	6	0.393193
	7	0.420478
	8	0.420595
	9	0.420491
	10	0.420415
	11	0.420273
	12	0.420218
	13	0.420249
	14	0.420220
	15	0.420147
	16	0.420031
	17	0.419993
	18	0.420098
	19	0.419333
	20	0.418586
	21	0.419700
	22	0.418142
	23	0.413492
	24	0.415503
	25	0.412879
	26	0.400789
	27	0.389016
	28	0.366168
	29	0.369455
	30	0.364766
	31	

	Sample Point	001
	Description	Swan Creek via Storm Sewer
	Parameter	211
	Description	Flow Rate
	Units	gpd
Summary Values	**Monthly Avg**	0.4022318
	Daily Max	0.420595
	Daily Min	0.361236
QA/QC Information	**LOD**	
	LOQ	
	QC Exceedance	N
	Lab Certification	

Footnotes (DNR Use Only; Instructions for completing this form that are unique for your facility may be displayed here.)

General Remarks

Laboratory Quality Control Comments

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: PENTAIR FLOW TECHNOLOGIES LLC
Contact Address: 293 S Wright St
Delavan, WI 53115
Facility Contact: Maxwell Geyer, EH&S Specialist
Phone Number: 262-728-7408
Reporting Period: 12/01/2020 - 12/31/2020
Form Due Date: 01/21/2021
Permit Number: 0046566

Date Received:	
DOC:	459671
FIN:	7072
FID:	265010900
Region:	Southeast Region
Permit Drafter:	Drafter not set
Reviewer:	David J Haas
Office:	Green Bay

	Sample Point	001
	Description	Swan Creek via Storm Sewer
	Parameter	211
	Description	Flow Rate
	Units	gpd
	Sample Type	ESTIMATED
	Frequency	DAILY
Sample Results	**Day 1**	349789
	2	348884
	3	355858
	4	340505
	5	340921
	6	338931
	7	337946
	8	338418
	9	336845
	10	336640
	11	321948
	12	316007
	13	334515
	14	335138
	15	340033
	16	332095
	17	324202
	18	349856
	19	372794
	20	373943
	21	372696
	22	371628
	23	371838
	24	375663
	25	375652
	26	373570
	27	367308
	28	364973
	29	367041
	30	364998
	31	365474

	Sample Point	001
	Description	Swan Creek via Storm Sewer
	Parameter	211
	Description	Flow Rate
	Units	gpd
Summary Values	**Monthly Avg**	351487.387096774
	Daily Max	375663
	Daily Min	316007
QA/QC Information	**LOD**	
	LOQ	
	QC Exceedance	N
	Lab Certification	

Footnotes (DNR Use Only; Instructions for completing this form that are unique for your facility may be displayed here.)

General Remarks

The total flow rates were calculated from daily flow readings recorded by the Badger U500w ultrasonic meters installed on the discharge lines of the Delavan facility extraction wells.

Laboratory Quality Control Comments

Wastewater Discharge Monitoring Short Report

For DNR Use Only

Facility Name : PENTAIR FLOW TECHNOLOGIES LLC
Contact Address : 293 S Wright St
Delavan, WI 53115
Facility Contact : Maxwell Geyer, EH&S Specialist
Phone Number : 262-728-7408
Reporting Period : 10/01/2020 - 12/31/2020
Form Due Date : 01/21/2021
Permit Number : **0046566**

Date Received:	
DOC:	459672
FIN:	7072
FID:	265010900
Region:	Southeast Region
Permit Drafter:	Drafter not set
Reviewer:	David J Haas
Office:	Green Bay

Sample Point	Parameter #	Parameter	Date Sample	Sample Type	Sample Results	Units	Limit Type	Limit	LOD	LOQ	QC Exceed?	Lab Certification
001	377	pH Field	10/28/2020	GRAB	7.6	su	Daily Max Daily Min	9(0) 6(0)			N	
001	457	Suspended Solids, Total	10/28/2020	GRAB	2.0	mg/L	Daily Max	40(0)	1.9	5.0	Y	999580010
001	490	Tetrachloroethylene	10/28/2020	GRAB	<0.37	ug/L	Monthly Avg	50(0)	0.37	1.0	N	999580010
001	561	1,1,1-Trichloro- ethane	10/28/2020	GRAB	<0.38	ug/L	Monthly Avg	50(0)	0.38	1.0	N	999580010
001	508	Trichloro- ethylene	10/28/2020	GRAB	0.49	ug/L	Monthly Avg	50(0)	0.16	0.50	Y	999580010
001	517	Vinyl chloride	10/28/2020	GRAB	<0.20	ug/L	Monthly Avg	10(0)	0.20	1.0	N	999580010

Wastewater Discharge Monitoring Short Report

Footnotes (DNR Use Only; Instructions for completing this form that are unique for your facility may be displayed here.)

General Remarks

Laboratory Quality Control Comments

J: Result is less than the LOQ but greater than or equal to the LOD and the concentration is an approximate value.

GEOTRANS, INC. FIELD WATER QUALITY SAMPLING AND ANALYSIS FORM

PROJECT INFORMATION		INSTRUMENTS	
PROJECT	Delavan Facility Remedial Action	Temp. & pH	HI98129
PROJECT NO.	Delavan Well #4 WPDES	Conductivity	HI98129
LOCATION	Delavan, WI	ORP	
PERSONNEL	Dennis	DO	

SAMPLE POINT		SS-1	SS-1	SS-1	SS-1	SS-1
WATER TYPE		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
DATE (month/day/year)		10/28/2020				
CLOCK TIME (Military)		0950				
DEPTH TO WATER (ft)*		NA	NA	NA	NA	NA
MEASURED WELL DEPTH (ft)*		NA	NA	NA	NA	NA
CASING VOLUME (gallons)		NA	NA	NA	NA	NA
PURGE VOLUME (gallons)		NA	NA	NA	NA	NA
DEPTH SAMPLE TAKEN (ft)*		NA	NA	NA	NA	NA
SAMPLING DEVICE		HI98129				
FIELD TEMPERATURE (°C)		12.3				
pH		7.60				
ELEC. COND. (uS/cm)	Measured	1290				
	at 25° C					
ORP (mV)		NA	NA	NA	NA	NA
DISSOLVED OXYGEN (ppm)		NA	NA	NA	NA	NA
DISSOLVED OXYGEN (% Sat.)		NA	NA	NA	NA	NA
COLOR		Clear				
ODOR		None				
CLARITY		Clear				

SAMPLING PARAMETERS	# OF CONTAINERS & VOLUME; CONTAINER TYPE (A = AMBER GLASS; G = GLASS; P = PLASTIC); PRESERVATIVE TYPE (L = LAB ADDED; F = FIELD ADDED) OR NEUTRAL; FILTERED (YES or NO)				
TCE, 1,1,1-TCA, 1,1,2-TCA, PCE, Vinyl Chloride (EPA Method SW 8260B)	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.	3 – 40 ml; G; HCl – L; No.

Comments: TCE = Trichloroethene. TCA = Trichloroethane. PCE = Tetrachloroethene.

NAME OF LABORATORY	Test America	Test America	Test America	Test America	Test America
DATE SENT TO LAB	10-28-2020				
SAMPLER'S NAME	Dennis				

*Measured from top of well casing.

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-190253-1
Client Project/Site: Delavan Well #4 WPDES

For:
Pentair Water
293 Wright Street
Delavan, Wisconsin 53115

Attn: Dennis Schwind

Authorized for release by:
11/12/2020 1:04:48 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

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Definitions/Glossary

Client: Pentair Water
Job ID: 500-190253-1
Project/Site: Delavan Well #4 WPDES

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-190253-1

Job ID: 500-190253-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-190253-1

Comments
No additional comments.

Receipt
The samples were received on 10/29/2020 9:35 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.1º C.

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

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

Client: Pentair Water
Job ID: 500-190253-1
Project/Site: Delavan Well #4 WPDES

Client Sample ID: SS1
Lab Sample ID: 500-190253-1
Date Collected: 10/28/20 09:50
Matrix: Water
Date Received: 10/29/20 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			11/11/20 00:17	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			11/11/20 00:17	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			11/11/20 00:17	1
Trichloroethene	**0.49**	**J**	0.50	0.16	ug/L			11/11/20 00:17	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			11/11/20 00:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*75 - 126*		*11/11/20 00:17*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 124*		*11/11/20 00:17*	*1*
Dibromofluoromethane	*98*		*75 - 120*		*11/11/20 00:17*	*1*
Toluene-d8 (Surr)	*98*		*75 - 120*		*11/11/20 00:17*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**2.0**	**J**	5.0	1.9	mg/L			11/03/20 13:32	1
Chloride	**210**		10	5.0	mg/L			11/09/20 12:53	5
Phosphorus as P	**0.062**		0.050	0.024	mg/L		11/08/20 13:15	11/11/20 16:54	1

Client Sample ID: Test Blank
Lab Sample ID: 500-190253-2
Date Collected: 10/28/20 00:00
Matrix: Water
Date Received: 10/29/20 09:35

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			11/10/20 23:51	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			11/10/20 23:51	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			11/10/20 23:51	1
Trichloroethene	<0.16		0.50	0.16	ug/L			11/10/20 23:51	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			11/10/20 23:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*75 - 126*		*11/10/20 23:51*	*1*
4-Bromofluorobenzene (Surr)	*104*		*72 - 124*		*11/10/20 23:51*	*1*
Dibromofluoromethane	*96*		*75 - 120*		*11/10/20 23:51*	*1*
Toluene-d8 (Surr)	*98*		*75 - 120*		*11/10/20 23:51*	*1*

Lab Chronicle

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-190253-1

Client Sample ID: SS1

Lab Sample ID: 500-190253-1

Date Collected: 10/28/20 09:50

Matrix: Water

Date Received: 10/29/20 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	571325	11/11/20 00:17	PMF	TAL CHI
Total/NA	Analysis	SM 2540D		1	570091		SMO	TAL CHI
					(Start)	11/03/20 13:32		
					(End)	11/03/20 13:33		
Total/NA	Analysis	SM 4500 Cl- E		5	571096	11/09/20 12:53	EAT	TAL CHI
Total/NA	Prep	SM 4500 P B			570891	11/08/20 13:15	JMP	TAL CHI
Total/NA	Analysis	SM 4500 P E		1	571635	11/11/20 16:54	JMP	TAL CHI

Client Sample ID: Test Blank

Lab Sample ID: 500-190253-2

Date Collected: 10/28/20 00:00

Matrix: Water

Date Received: 10/29/20 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	571325	11/10/20 23:51	PMF	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Pentair Water
Job ID: 500-190253-1
Project/Site: Delavan Well #4 WPDES

Laboratory: Eurofins TestAmerica, Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-21

Method Summary

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-190253-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL CHI
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 4500 P E	Phosphorus	SM	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI
SM 4500 P B	Phosphorous, Total and Ortho	SM	TAL CHI

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Pentair Water
Project/Site: Delavan Well #4 WPDES

Job ID: 500-190253-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-190253-1	SS1	Water	10/28/20 09:50	10/29/20 09:35	
500-190253-2	Test Blank	Water	10/28/20 00:00	10/29/20 09:35	

Eurofins Test America
2417 Bond St.
University Park IL 60484

Chain of Custody Record 440306

eurofins | Environment Testing TestAmerica

Address:

Regulatory Program: ☐ DW ☑ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager: Max Gerecci	Site Contact: Dennis Schwind	Date: 10-28-2020	COC No:
Company Name: Pentair Flow Technologies LLC	Tel/Email:	Lab Contact:	Carrier:	_____ of _____ COCs
Address: 293 Wright St.	Analysis Turnaround Time			Sampler:
City/State/Zip: Delavan WI 53115	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 262 728 5551	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Delavan Well #4 WPDES	☐ 1 week			
Site: Delavan WI 53115	☐ 2 days			Job / SDG No.: 500-190253
P O #	☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCE	TCA	PCE	Vinyl Chloride	Phosphorus	TSS	Chloride	500-190253 COC	Sample Specific Notes:
1	SS1	10-28-20	0950	G	W	5			X	X	X	X	X	X	X		
2	Test Blank	-				1											

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 3.7 Corr'd: 4.1 | Therm ID No.:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Pentair	10/29/20 1015			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Stephanie Hernandez	Company: ETA-CHI	Date/Time: 10/29/20 0935

Login Sample Receipt Checklist

Client: Pentair Water

Job Number: 500-190253-1

Login Number: 190253
List Number: 1
Creator: Hernandez, Stephanie

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	