



March 8, 2023
(117-7469011.100)

Ms. Cindy Koepke
Hydrogeologist
Wisconsin Department of Natural Resources
Fitchburg Service Center
3911 Fish Hatchery Road
Fitchburg, WI 53711-5367

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

Dear Ms. Koepke:

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.

<u>SITE NAME/ACTIVITY:</u> Contract No. SF-90-02 Delavan Municipal Well #4 Delavan, Wisconsin Source Area Remediation	<u>DATE:</u> March 8, 2023
	<u>PERIOD:</u> January 1 through December 31, 2022

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 2022 and early 2023:

1. The groundwater extraction wells on the Delavan facility were operated and quarterly samples were collected from the storm sewer outfall (SS-1 sample identification) where the groundwater is discharged.
2. The pump in extraction well EX-1 failed on June 11, 2022. Pumping from EX-1 was not resumed because as discussed in the 2021 progress report, the groundwater samples collected from EX-1 since September 2004 indicate it may be appropriate to stop groundwater extraction from EX-1 as none of the site contaminants of concern have been detected above their respective Chapter NR140 enforcement standards (ESs) during that period. The effect the stoppage of pumping from EX-1 has on contaminant concentrations in the on-site plume will be evaluated in 2023 by collecting quarterly groundwater samples from monitor wells TW-1, TW-3, and D-18. The groundwater samples will be submitted for laboratory analysis of

tetrachloroethene (PCE), trichloroethene (TCE), 1,1,1-trichloroethane (TCA), 1,1,2-trichloroethane (1,1,2-TCA), and vinyl chloride.

3. The pump in extraction well EX-7R stopped pumping groundwater on December 14, 2022. The pump in EX-7R was repaired by Pentair Flow Technologies personnel on February 9, 2023 and pumping from EX-7R was re-started the same day.
4. Monthly electronic wastewater discharge monitoring Long Reports documenting the total daily volume of groundwater discharged to the SS-1 storm sewer outfall from the Delavan facility groundwater extraction system were filled out and submitted to the WDNR. Quarterly electronic wastewater discharge monitoring Short Reports documenting the analytical results and field pH measurements for the quarterly samples collected from the SS-1 storm sewer outfall were filled out and submitted to the WDNR.
5. Annual sampling of the wells that are part of the groundwater monitoring program for the Delavan facility was performed in July. Extraction well EX-1 was not sampled because, as noted above, the pump failed on June 11th. All existing site monitor wells were also inspected and any damage to the surface seals, protective casings or well casings were noted. The above-grade steel protector top around monitor well D-15, which was corroded at the ground surface, was replaced by Pentair Flow Technologies personnel with a PVC protective casing. A new well cap was installed on the PVC well casing of monitor well TW-2 and new locks were installed on the protector tops of monitor wells TW-1 and TW-3. All other monitor wells were in good condition.
6. 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.
7. New Badger Meter Dynasonics® U500w ultrasonic meters were purchased for extraction wells EX-1 and EX-6 because the original meters were not recording flow accurately. Pentair Flow Technologies personnel installed the new meter on the EX-1 discharge line on May 20, 2022 and the new meter on the EX-6 discharge line on December 7, 2022.
8. Pumping from extraction well EX-5R was stopped by Pentair Flow Technologies on August 29, 2022 because a leak was detected in the buried discharge line. The discharge line was repaired by Pentair Flow Technologies personnel on September 1, 2022 and pumping from EX-5R was re-started the same day.
9. A new ORION LTE endpoint was purchased for the Badger Meter Dynasonics® U500w ultrasonic meter installed on the discharge line of extraction well EX-7R because the original endpoint stopped uploading flow data from the meter to the Badger Meter AquaCUE website on October 10, 2022. The new endpoint was connected to the EX-7R meter by Tetra Tech personnel on February 24, 2023 after it was received from the vendor.

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

Sincerely,

Tetra Tech

A handwritten signature in black ink, appearing to read "Mark A. Manthey". The signature is fluid and cursive, with a long horizontal stroke at the end.

Mark A. Manthey, P.G.
Associate Hydrogeologist
mark.mantry@tetrattech.com

Encs.

cc: Thomas Samuel, Pentair Flow Technologies, LLC (Electronic copy via email.)
Curtis Hedman, Ph. D., Toxicologist, Wisconsin Department of Health Services (Electronic copy via email.)
Karen Cibulskis, EPA (Electronic copy via email.)

TETRA TECH



**2022 ANNUAL
PROGRESS REPORT
PENTAIR FLOW TECHNOLOGIES, LLC
DELANAN, WISCONSIN FACILITY
SOURCE AREA REMEDIATION**

**BRRTS# 02-65-529579
FACILITY ID# 265091640**

March 8, 2023

Prepared For:

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

Prepared By:

Tetra Tech
13555 Bishops Court, Suite 201
Brookfield, Wisconsin 53005

Project No. 117-7469010



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



SUMMARY OF PROGRESS MADE THIS REPORTING PERIOD

The following remedial action activities took place in 2022 and early 2023:

1. The groundwater extraction wells on the Delavan facility were operated and quarterly samples were collected from the storm sewer outfall (SS-1 sample identification) where the groundwater is discharged.
2. The pump in extraction well EX-1 failed on June 11, 2022. It was decided to not re-start pumping from EX-1 because as discussed in the 2021 progress report, the groundwater samples collected from EX-1 since September 2004 indicate it may be appropriate to stop groundwater extraction from EX-1 as none of the site contaminants of concern have been detected above their respective Chapter NR140 enforcement standards (ESs) during that period. The effect the stoppage of pumping from EX-1 has on contaminant concentrations in the on-site plume will be evaluated in 2023 by collecting quarterly groundwater samples from monitor wells TW-1, TW-3, and D-18, which are located upgradient and downgradient of EX-1.
3. The pump in EX-7R, which stopped pumping groundwater on December 14, 2022, was repaired by Pentair Flow Technologies personnel on February 9, 2023. Pumping from EX-7R was also re-started on February 9th.
4. One round of groundwater samples was collected from the monitor wells that are part of the groundwater monitoring program for the Delavan facility and from extraction wells EX-2R, EX-3R, and EX-7R July 20th and July 21st. A groundwater sample was not collected from extraction well EX-1, which is part of the Delavan facility groundwater monitoring program, because, as noted above, the pump in the extraction well failed on June 11, 2022.

The analytical results from 2022 showed stable to slight decreases in the concentrations or no detections of the volatile organic compounds (VOCs) analyzed in eight of the 14 wells

sampled. VOC concentrations exhibited stable to moderate increases in concentration in four monitor wells and one extraction well. One VOC increased from 2021 to 2022 and one VOC decreased from 2021 to 2022 in monitor well MW-1027. The analytical results from the 2022 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 quarterly discharge monitoring Short Reports containing the analytical results collected at the SS-1 storm sewer outfall where the groundwater pumped from the Delavan facility groundwater extraction system extraction wells discharges are provided in Appendix C.

5. 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 trichloroethene (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.

The site monitor wells were also inspected. The above-grade steel protector top around monitoring well D-15 was corroded at the ground surface. The corroded protector top around monitoring well D-15 was replaced by Pentair Flow Technologies personnel later in 2022 with a PVC protective casing. All other monitor wells were in good condition; however, the locks securing the protector tops of monitor wells TW-1 and TW-3 were not functioning and there was no well cap on monitor well TW-2. Tetra Tech personnel installed new locks on the protector tops of TW-1 and TW-3 and a new well cap on monitor well TW-2 during the annual groundwater sampling event in July.

6. New Badger Meter Dynasonics® U500w ultrasonic meters were purchased for extraction wells EX-1 and EX-6 because the original meters were not recording flow accurately. Pentair Flow Technologies personnel installed the new meter on the EX-1 discharge line on May 20, 2022 and the new meter on the EX-6 discharge line on December 7, 2022.
7. Pumping from extraction well EX-5R was temporarily stopped by Pentair Flow Technologies on August 29, 2022 because a leak was detected in the buried discharge line. The discharge line was repaired by Pentair Flow Technologies personnel on September 1, 2022 and pumping from EX-5R was re-started the same day.
8. A new ORION LTE endpoint was purchased for the Badger Meter Dynasonics® U500w ultrasonic meter installed on the discharge line of extraction well EX-7R because the original endpoint stopped uploading flow data from the meter to the Badger Meter AquaCUE website

on October 10, 2022. The new endpoint was connected to the EX-7R meter by Tetra Tech personnel on February 24, 2023 after it was received from the vendor.

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). Monthly flow data for the extraction wells is provided in Table 3. Quarterly wastewater discharge monitoring short reports documenting the 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 19th and July 20th. The monitor wells and groundwater extraction wells that are part of the Delavan facility groundwater monitoring program are listed on Table 4. As noted above, a groundwater sample was not collected from extraction well EX-1 because the pump in EX-1 failed on June 11, 2022. 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), TCE, 1,1,2-trichloroethane (1,1,2-TCA), 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 five CVOCs that all samples are tested for from 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 the four 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 2021 TCA results to the 2022 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 from 5.6 ug/L to 11 ug/L. TCA concentrations in MW-1026 have exhibited an overall declining trend since the July 2006 sampling event. TCA concentrations in MW-1026 have not exceeded its PAL since the July 2007 sampling event.
- The TCA concentration in MW-1027 increased from 4.3 ug/L in 2021 to 5.4 ug/L in 2022. TCA concentrations in MW-1027 have exhibited a declining trend since the 2005 sampling event and 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 concentration in TW-4 increased from 19 ug/L in 2021 to 24 ug/L in 2022. TCA concentrations in TW-4 have been below its PAL since the July 2013 sampling round and the 2011 through 2022 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 increased slightly from not detected above the detection limit of 0.38 ug/L in 2021 to 0.62 ug/L in 2022. 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 slightly from 0.47 ug/L in 2021 to no detection (detection limit = 0.38 ug/L) in 2022. TCA concentration in EX-2R have not exceeded the PAL since 1997.
- The TCA concentration in extraction well EX-3R decreased slightly from 4.2 ug/L in 2021 to 3.9 ug/L in 2022. 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 and EX-3R 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 wells MW-1026 and D-25R and extraction well EX-2R exceeded the PAL of 0.50 ug/L. Comparison of the 2021 TCE results to the 2022 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 from 1.6 ug/L to 3.5 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 slightly from 46 ug/L to 44 ug/L. The reported TCE concentration in the 2019 groundwater sample collected from MW-1027 was 41 ug/L and 27 ug/L in 2018. The 27 ug/L concentration reported for the 2018 sample is the lowest historical TCE concentration for a MW-1027 sample. TCE concentrations at MW-1027 are exhibiting an overall declining trend since 1999.
- The TCE concentration in monitor well TW-4 increased from 14 ug/L to 20 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 an overall declining trend since 1993.
- At monitor well D-25R, the TCE concentration increased slightly from 0.46 ug/L in 2021 to 0.54 ug/L in 2022. 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 from 2.1 ug/L to 0.67 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 slightly from 5.6 ug/L to 5.7 ug/L. TCE concentrations are exhibiting a decreasing trend at EX-3/EX-3R.

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

PCE: PCE was detected above its PAL of 0.5 ug/L in the groundwater samples collected from monitor wells D-15 and D-18, and extraction well EX-7R. No PCE was detected in the groundwater samples collected from monitor wells MW-2004, MW-2005R, MW-2011, and TW-1. A comparison of the 2021 PCE results to the 2022 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 MW-2004, MW-2005R, MW-2011, and TW-1 in 2021 and 2022. PCE was last detected in 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.
- The PCE concentration in monitor well D-15 decreased slightly from

4.0 ug/L to 3.0 ug/L. The PCE concentrations in D-15 have ranged from 4.0 ug/L to 47 ug/L since the July 2010 sampling event. The PCE concentrations for the 2014, 2015, 2021, and 2022 samples are the lowest reported PCE concentration for samples collected from D-15 between the November 1991 sampling round and the 2022 sampling round. The 2022 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 D-18 increased from not detected (0.37 ug/L detection limit) in 2021 to 0.93 ug/L in 2022. PCE was last detected in a sample collected from D-18 in 2009 at a concentration of 1.4 ug/L. PCE concentrations in samples collected from D-18 have been below the ES since the June 2003 sampling event.
- The PCE concentration in monitor well TW-3 decreased from 0.85 ug/L in 2021 to 0.43 ug/L in 2022. PCE impacts in TW-3 have been below the 5.0 ug/L ES since the April 2002 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, increased slightly from 3.2 ug/L in 2021 to 4.8 ug/L in 2022. The PCE results from EX-7 and EX-7R from the 2010 to 2022 sampling rounds suggest an overall declining trend in PCE impacts in the former sump source area.

TCA: TCA was not detected in any of the 2022 samples collected from the Plant 2 wells and was only detected in the 2021 groundwater sample collected from monitor well MW-2011 at a concentration of 2.0 ug/L. All the reported TCA detections in samples collected from MW-2011 are below the NR140 PAL pf 40 ug/L.

TCE: None of the samples collected from the Plant 2 wells in 2022 had reported TCE concentration that exceeded its Chapter NR140 ES of 5.0 ug/L. The PAL for TCE (0.50 ug/L) was exceeded in the groundwater samples collected from monitor wells D-15, D-18, and MW-2011, and replacement extraction well EX-7R. No TCE was detected in the groundwater samples collected from monitor wells MW-2004, MW-2005R, and TW-1. TCE was detected in the groundwater sample collected from monitor well TW-3 but at concentrations below the PAL. A comparison of the 2021 TCE results to the 2022 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 2021 and 2022 groundwater samples collected from monitor wells MW-2004, MW-2005R, and TW-1. 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.
- The TCE concentration in monitor well MW-2011 decreased from 14 ug/L in 2021 to 0.69 ug/L in 2022, which is the lowest reported TCE concentration for a sample collected from MW-2011. TCE concentrations in MW-2011 are on an overall decreasing trend since the 2012 sampling event.

- The TCE concentration in monitor well D-15 decreased slightly from 4.6 ug/L in 2021 to 4.4 ug/L in 2022. Review of the TCE data presented on Figure 5 shows TCE concentrations in D-15 are exhibiting an overall decreasing trend since the April 2001 sampling event.
- The TCE concentration in monitor well D-18 increased from not detected (0.16 ug/L detection limit) in 2021 to 0.71 ug/L in 2022. 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.
- The TCE concentration in monitor well TW-3 decreased slightly from 0.26 ug/L in 2021 to 0.23 in 2022. Prior to the 2021 sampling event, 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.
- The reported TCE concentration in extraction well EX-7R increased slightly from 1.8 ug/L in 2021 to 2.1 ug/L in 2022. The TCE results from EX-7 and EX-7R from the 2010 to 2022 sampling rounds suggest an overall declining trend in TCE impacts in the former sump source area.

Extraction Wells Maintenance and Meter Readings

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 original ultrasonic meters installed on the discharge lines of extraction wells EX-1 and EX-6 were replaced with new ultrasonic meters by Pentair Flow Technologies personnel during this reporting because the original meters were not recording flow accurately. The new ultrasonic meter was installed on the EX-1 discharge line on May 20, 2022 and the new meter was installed on the EX-6 discharge line on December 7, 2022.

The original ORION LTE endpoint connected to the Badger Meter Dynasonics® U500w ultrasonic meter installed on the discharge line of extraction well EX-7R stopped uploading flow data from the meter to the Badger Meter AquaCUE Flow Management website on October 10, 2022. After consultation with Badger Meter technicians a new ORION LTE endpoint was purchased as the original endpoint was out of warranty. The new endpoint was connected to the EX-7R meter by Tetra Tech personnel on February 24, 2023 after it was received from the vendor.

The monthly flow data from the U500w ultrasonic meters downloaded from the AquaCUE® Flow Measurement Manager website is summarized on Table 3. Pumping from extraction well EX-1 stopped on June 11, 2022 due to the failure of the pump. It was decided to not re-start pumping from EX-1 because as discussed in the 2021 progress report, the groundwater samples collected from EX-1 since September 2004 indicate it may be appropriate to stop groundwater extraction from EX-1 as none of the site contaminants of concern were detected above their respective Chapter NR140 ESs during that period. The effect the stoppage of pumping from EX-1 has on contaminant concentrations in the on-site plume will be evaluated in 2023 by collecting quarterly groundwater samples from monitor wells TW-1, TW-3, and D-18, which are located upgradient and downgradient of EX-1. The quarterly samples will be analyzed for PCE, 1,1,1-TCA, 1,1,2-TCA, TCE, and vinyl chloride.

The low flow of less than 5 gallons per minute (gpm) for extraction well EX-6 since July 2022 is not believed to be accurate because manual measurements of the pumping rate from EX-6 taken

by Pentair Flow Technologies personnel indicate EX-6 is pumping at a rate of approximately 49 gpm. As discussed above, a new ultrasonic meter was installed on the discharge line of EX-6 by Pentair Flow Technologies personnel on December 7, 2022. The new meter also indicated a low flow rate in December for EX-6. The cause for the discrepancy in the flow rate measured by the meter and the manual measurements may be due to cavitation causing air bubbles to form in the water discharged by the pump. The existing pump in EX-6 is a 70 gpm pump. A 30 gpm pump will be installed in EX-6 by Pentair Flow Technologies personnel in 2023 to prevent pump cavitation. Additional troubleshooting may also be done if the replacement of the pump with a smaller pump does not resolve the problem with the ultrasonic meter not recording flow accurately in EX-6.

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 six of the seven groundwater extraction wells located on the Delavan facility property (EX-2R, EX-3R, EX-4R, EX-5R, EX-6 and EX-7R). Pumping from Plant 2 extraction well EX-1 was stopped on June 11, 2022 because the pump failed.

Recommendations

1. Pumping from extraction wells EX-2R, EX-3R, EX-4R, EX-5R, EX-6 and EX-7R will continue.
2. As discussed above, EX-1 will remain shut down in 2023 and quarterly samples will be collected from Plant 2 monitor wells TW-1, TW-3, and D-18, which are located upgradient

and downgradient of EX-1. The quarterly samples will be analyzed for PCE, 1,1,1-TCA, 1,1,2-TCA, TCE, and vinyl chloride. The analytical data from the quarterly samples will be used to determine if EX-1 can remain shut down or if pumping from EX-1 should be resumed. If it is determined that pumping from EX-1 is not necessary, 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. Pentair Flow Technologies personnel will install a new 30 gpm pump in extraction well EX-6 to replace the 60 gpm currently in the well. The smaller pump should eliminate cavitation caused by the higher pumping rate of the 70 gpm pump and address the issue of the ultrasonic meter on the EX-6 discharge line not recording flow accurately.
4. Annual sampling of the monitor wells that are part of the groundwater monitoring program for the Delavan facility will continue. Annual samples will also be collected from extraction wells EX-2R, EX-3R, and EX-7R. The 2023 monitoring plan is summarized on Table 5.
5. All the site monitor wells will be inspected as part of the annual groundwater sampling event.
6. 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

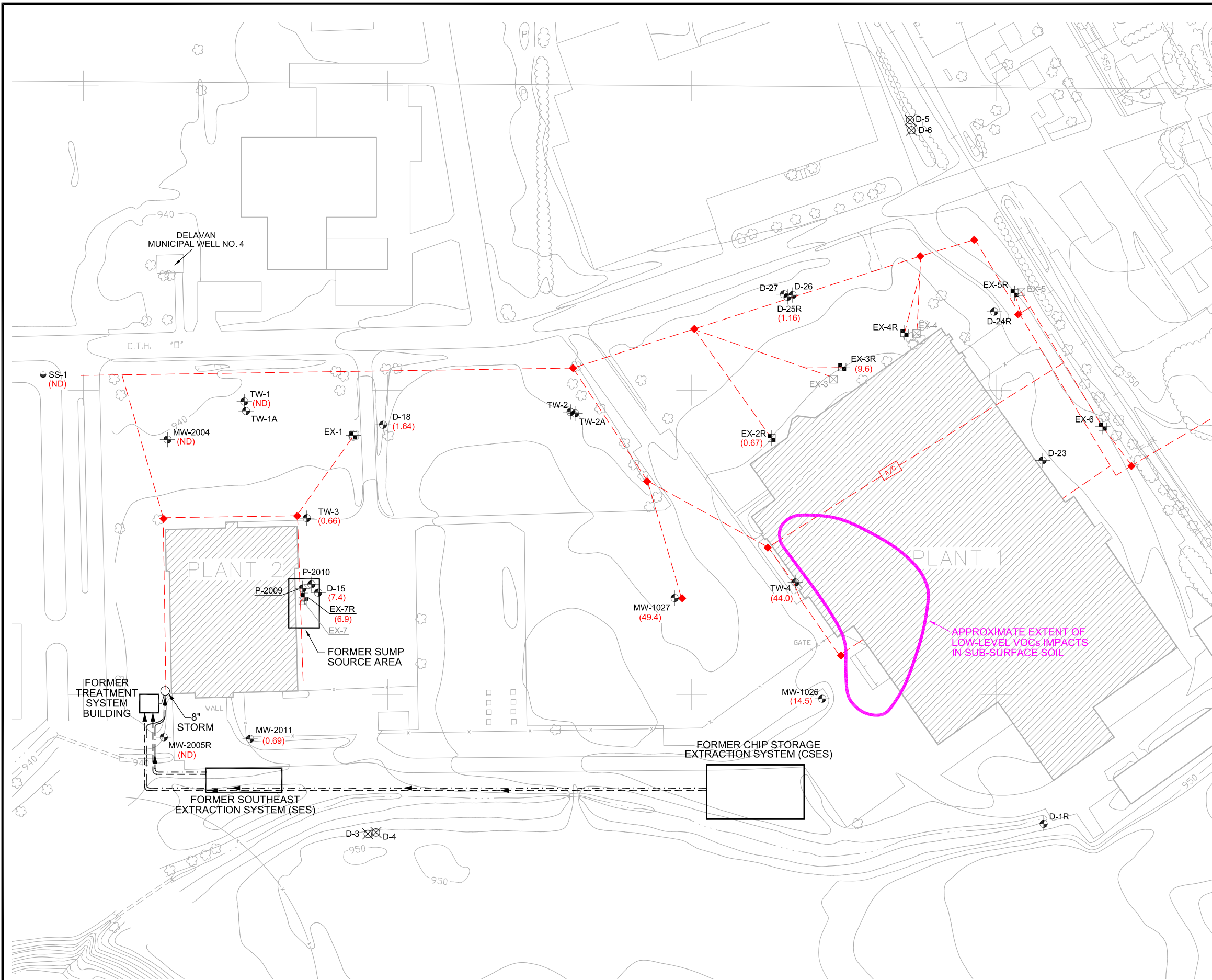
TABLES

- 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 2022 Groundwater Monitoring Program
- Table 5. Delavan Facility 2023 Groundwater Monitoring Program

APPENDICES

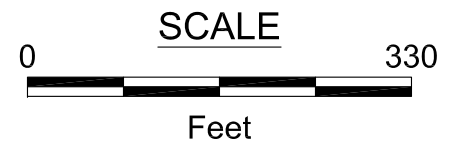
- Appendix A. Site Inspection Photographs
- Appendix B. Groundwater Monitoring Analytical Results and Field Data Sheets.
- Appendix C. Wastewater Discharge Monitoring Short Reports and Storm Sewer Outfall SS-1 Analytical Results

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
- (49.4) TOTAL VOCs CONCENTRATION (ug/L) FROM 2022 SAMPLING ROUND
- (ND) NO VOCs DETECTED



STA-RITE INDUSTRIES, INC. DELAVAN, WISCONSIN	DATE: 03/01/23 DESIGNED: CMP
SITE LAYOUT AND TOTAL VOCs CONCENTRATIONS FOR GROUNDWATER MONITORING POINTS	CHECKED: MAM APPROVED: MAM DRAWN: CMP PROJ.: 117-7469011



Figure 1

Base map from Areo-Metric Engineering, 4/16/88.
 S:\STA-RITE\DELAVAN\MARCH 2023\7469011\FIG1_03-01-23.DWG

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

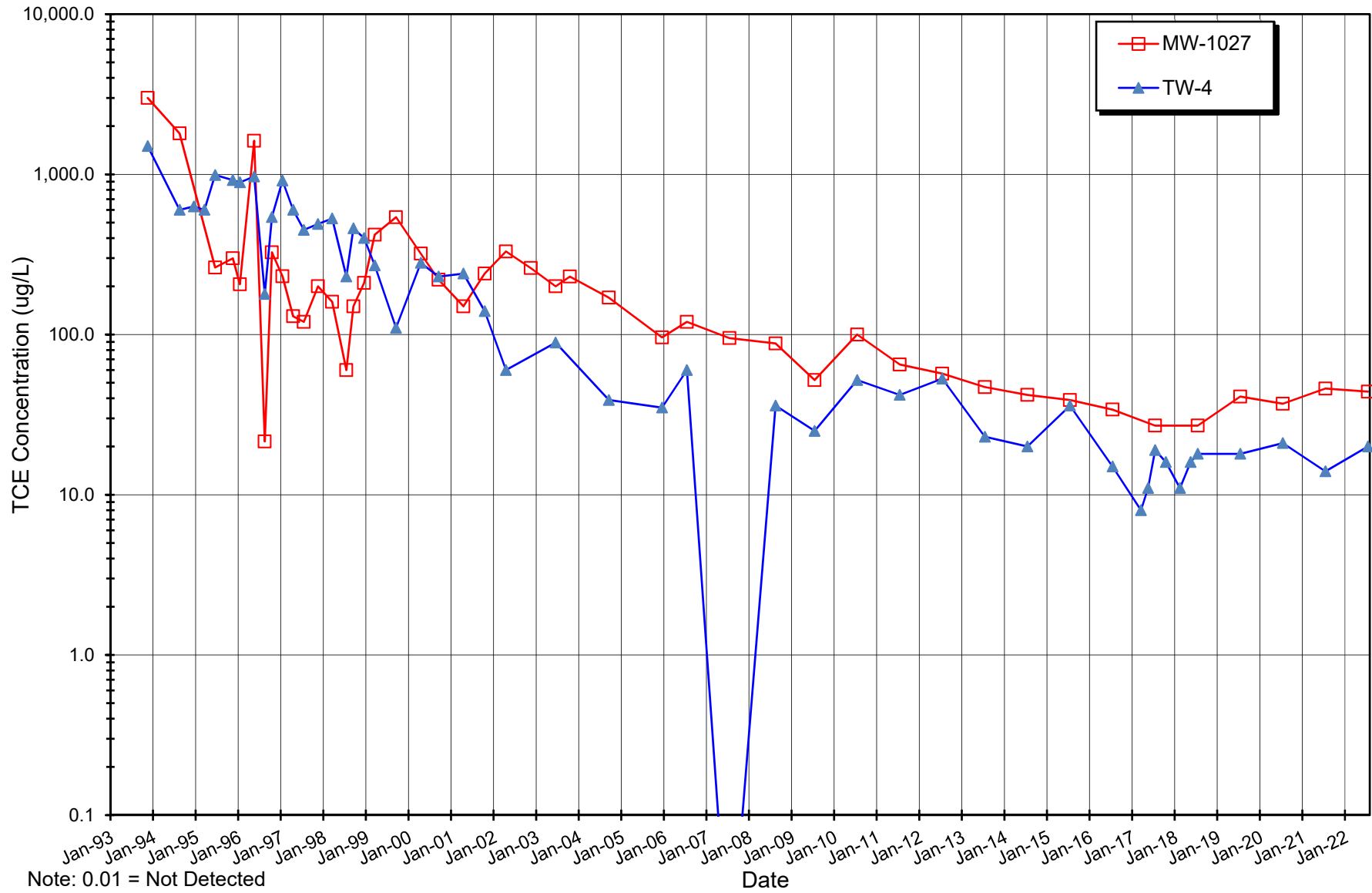
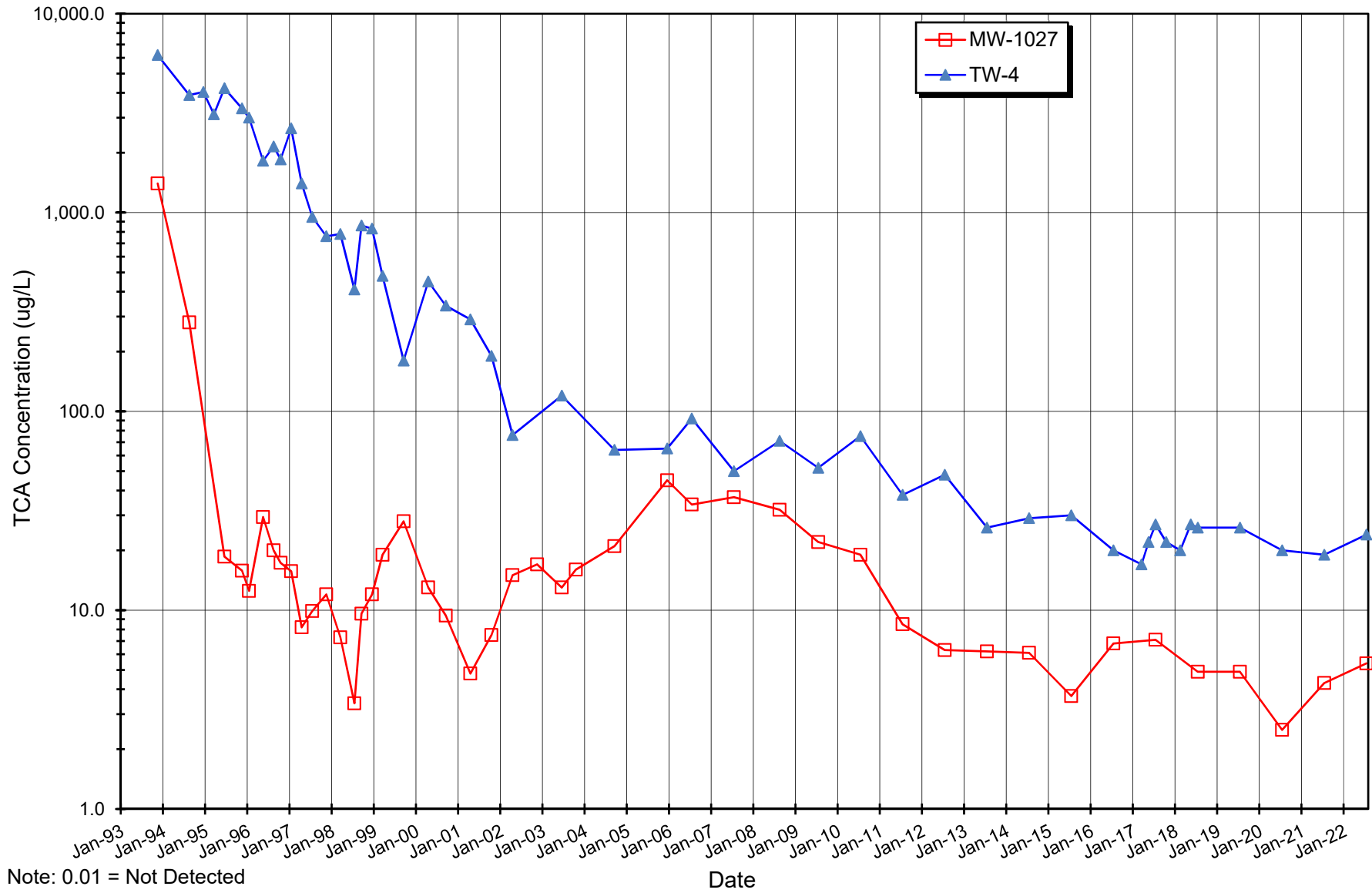
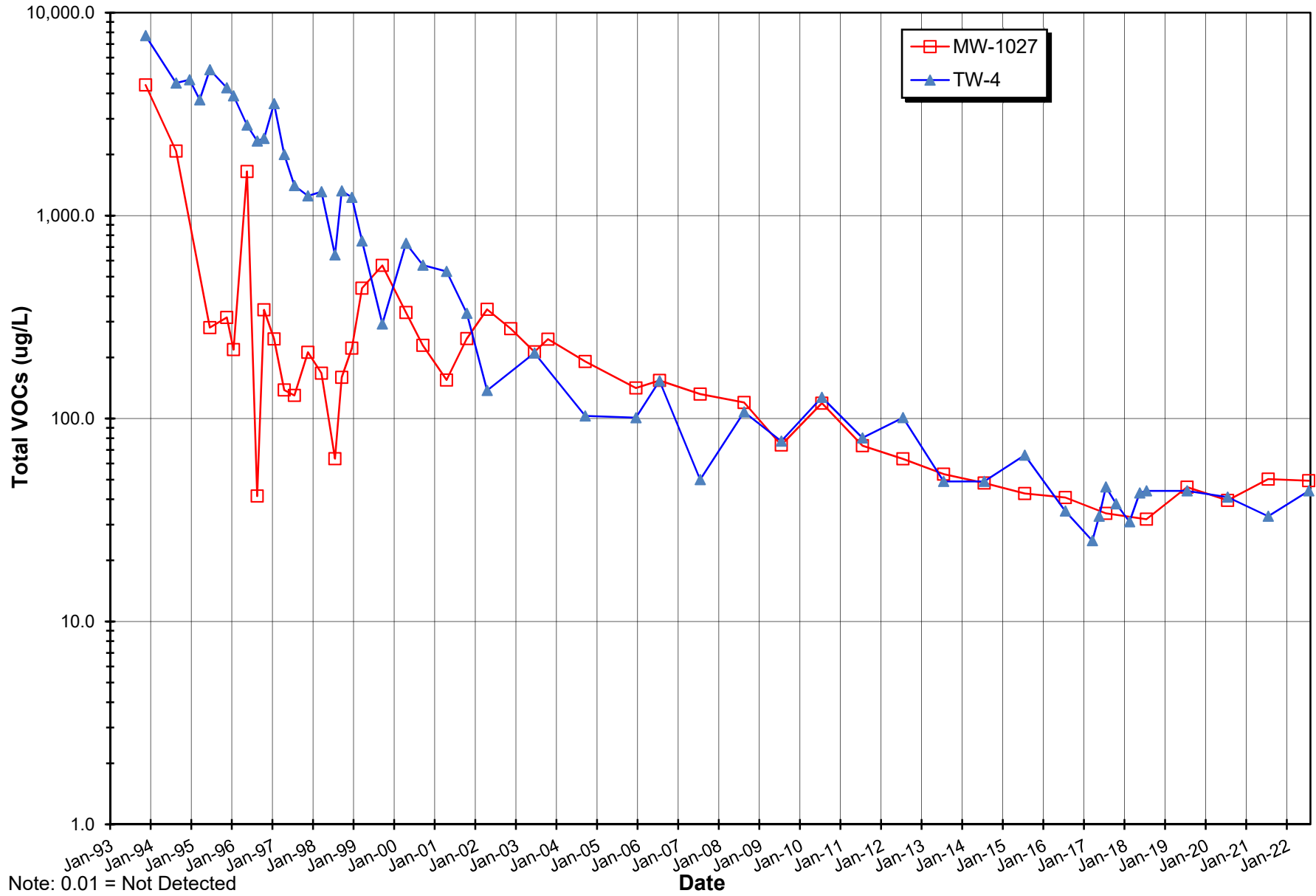


Figure 3. Plant 1 1,1,1-Trichloroethane (TCA) Concentration Changes
ES = 200 ug/L, PAL = 40 ug/L



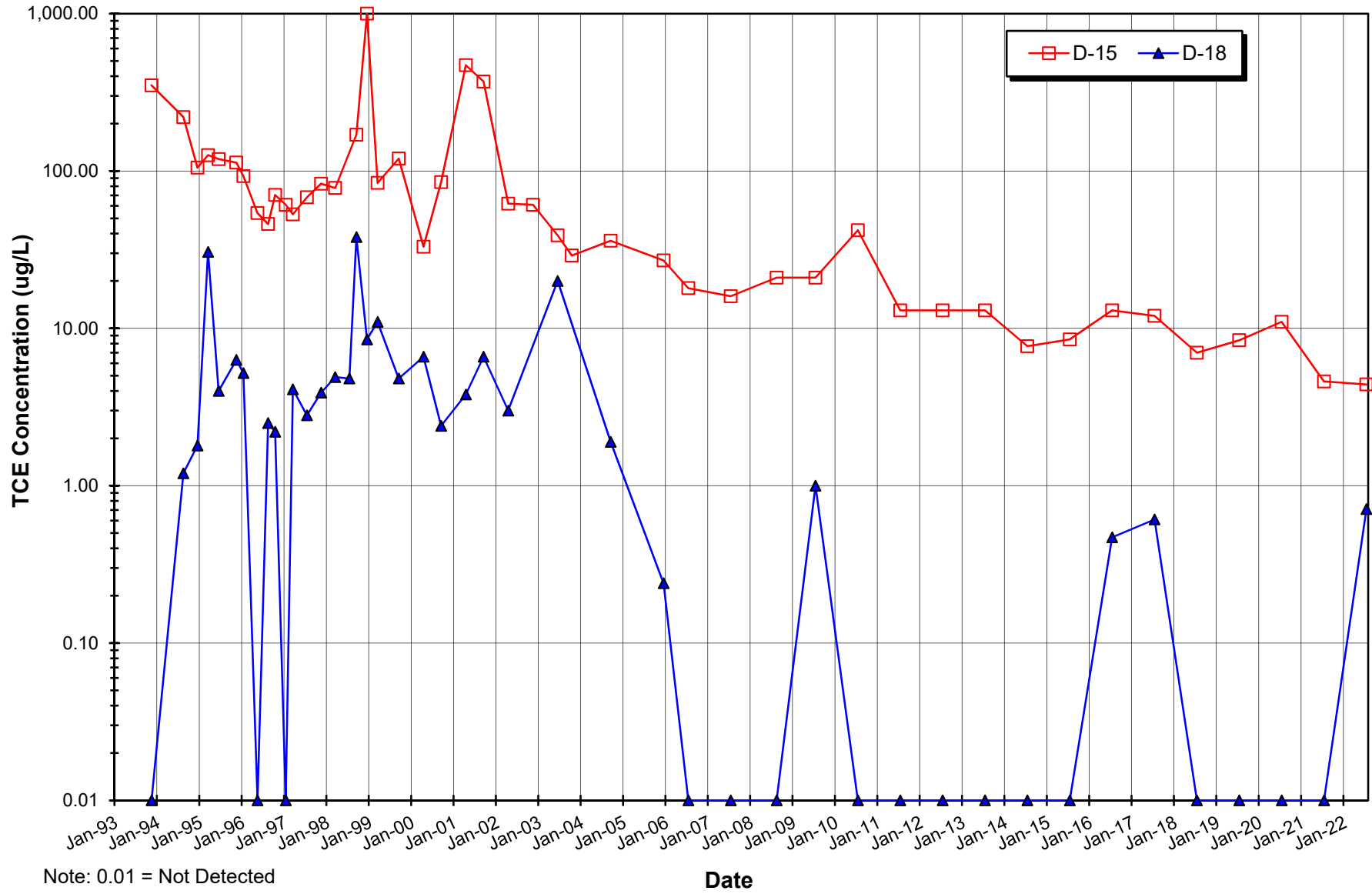
Note: 0.01 = Not Detected

Figure 4. Plant 1 Total VOC Concentration Changes



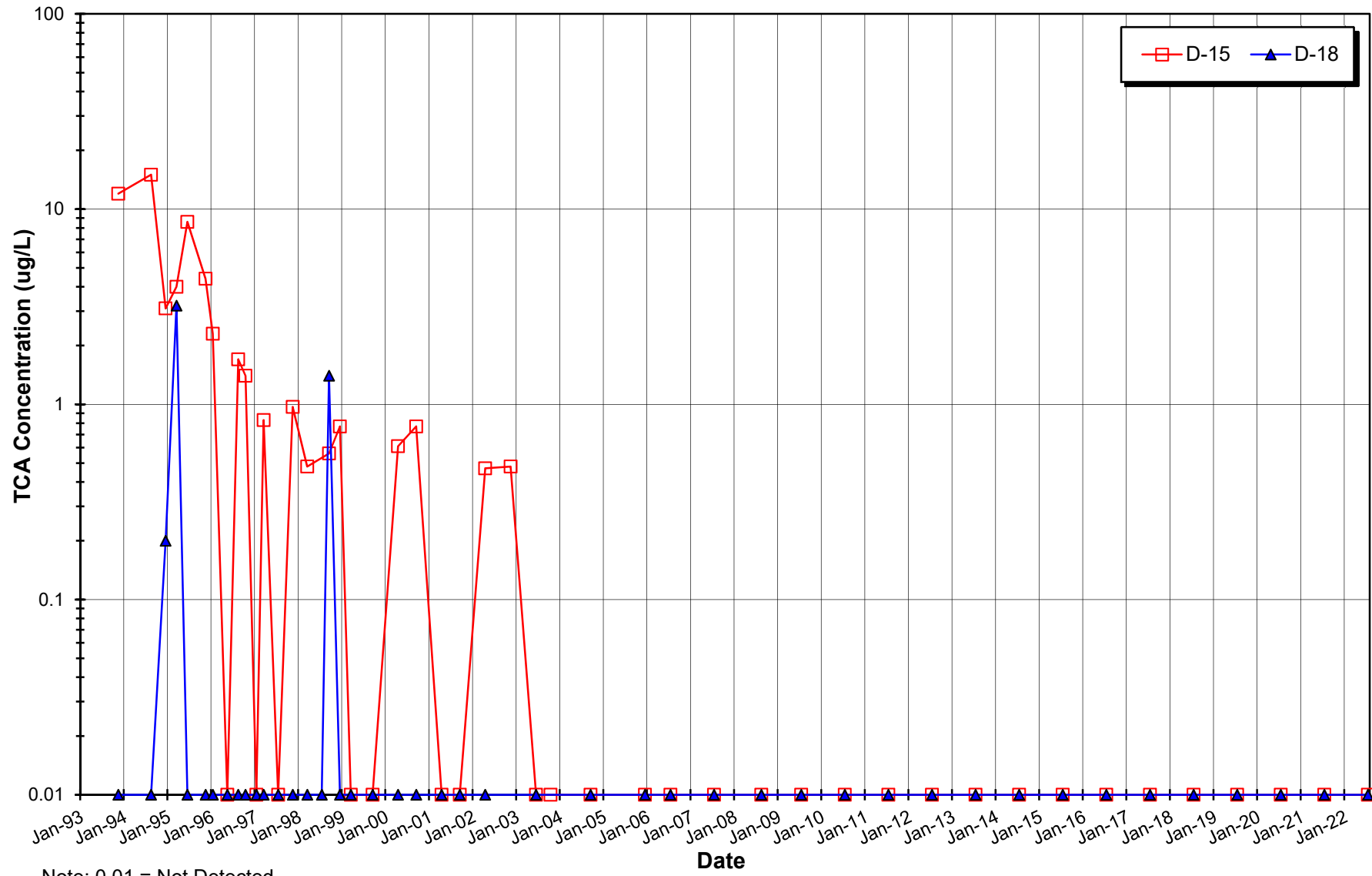
Note: 0.01 = Not Detected

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

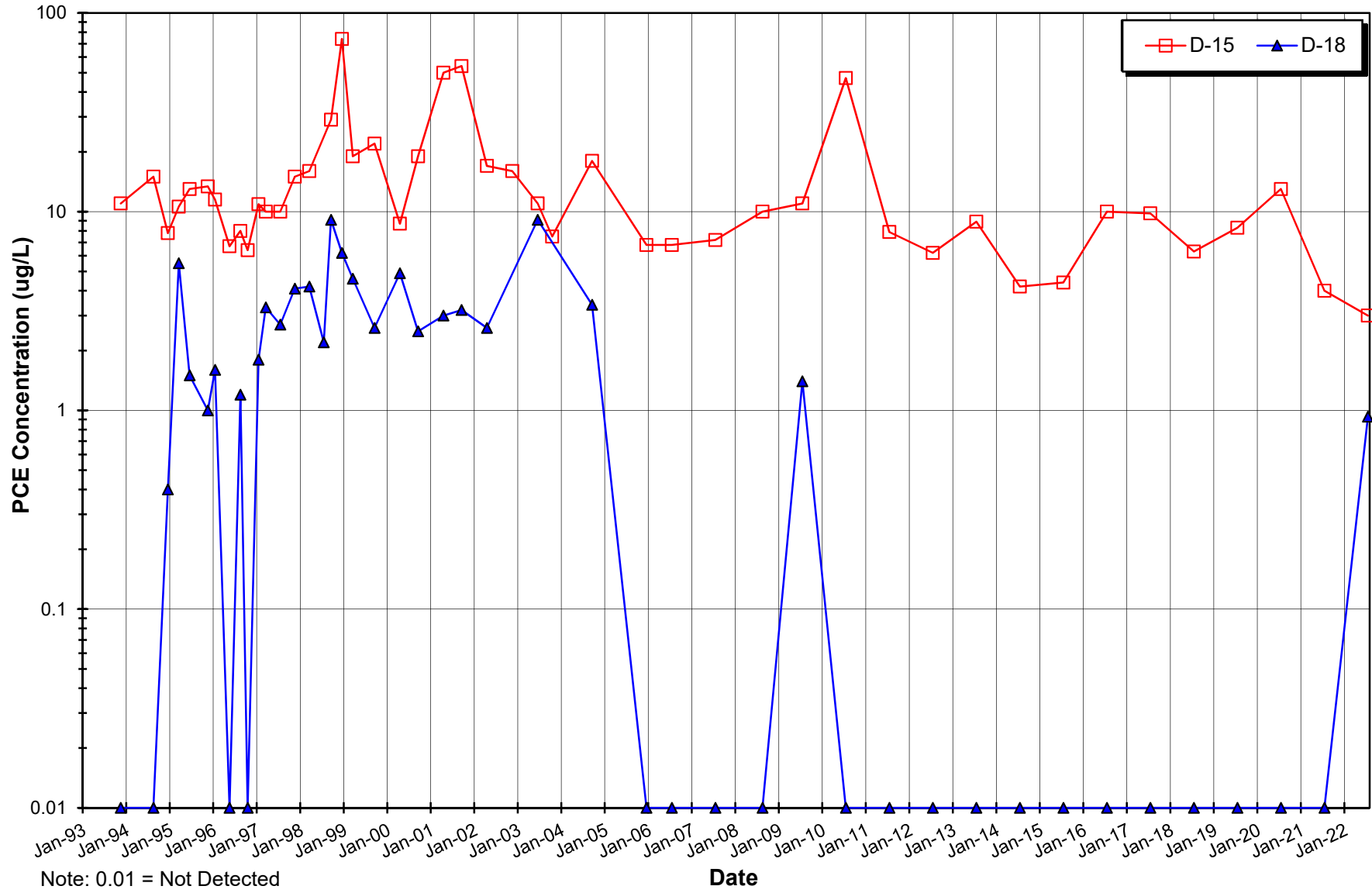
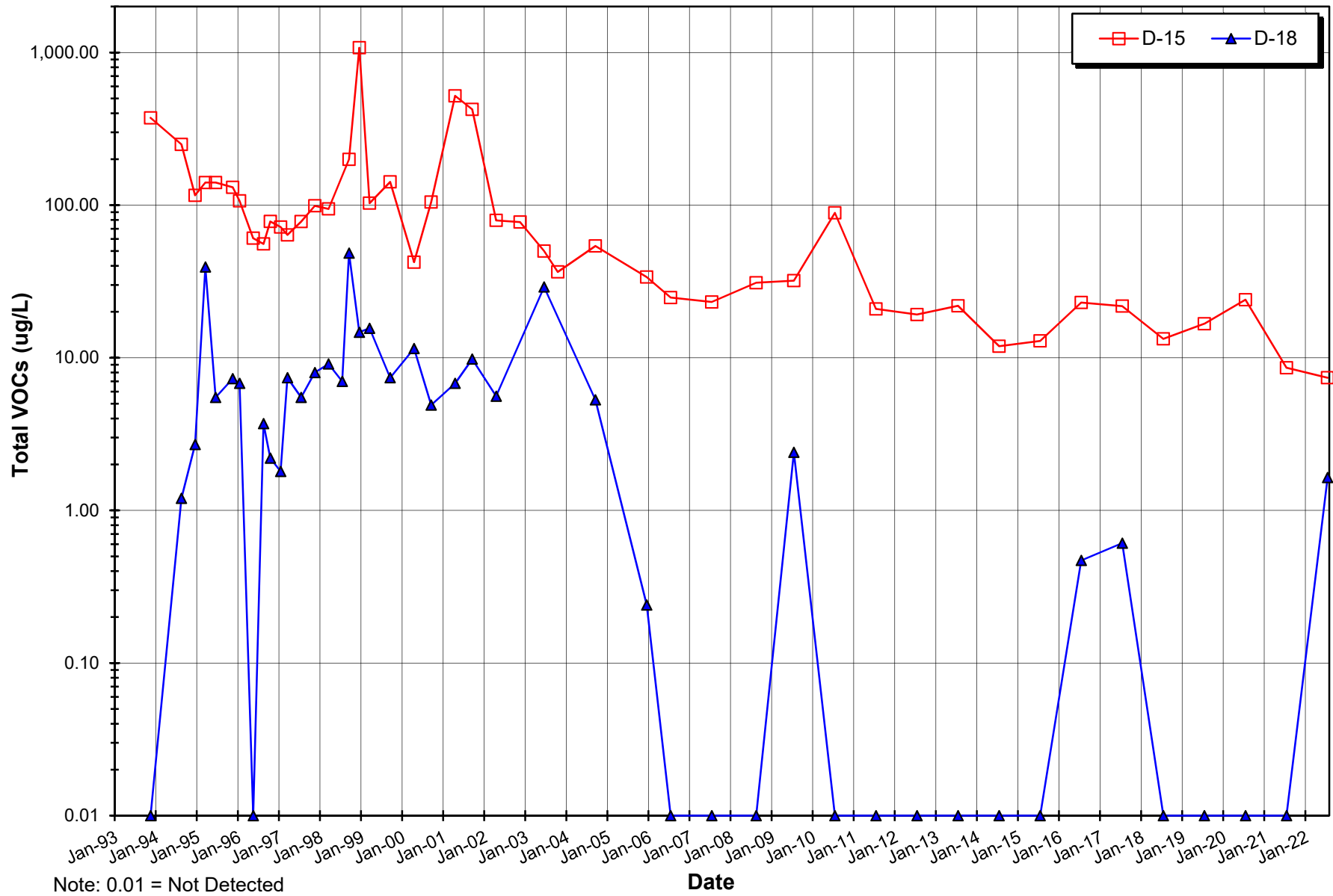


Figure 8. Plant 2 Total VOC Concentration Changes



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 Monitor Wells	12/11/91	1.0	22000	1500	10	<0.3	23511
	11/11/93	<0.5	4500	250	1.0	<0.3	4751
	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
	07/22/20	<0.37	3.2	1.3	<0.35	<0.20	4.5
	07/22/21	<0.37	5.6	1.6	<0.35	<0.20	7.2
MW-1026	07/20/22	<0.37	11	3.5	<0.35	<0.20	14.5
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
MW-1027	04/23/01	<1.0	4.8	150	NA	<1.0	154.8

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-1027	10/02/01	<1.0	7.5	240	<1.0	NA	247.5
	04/16/02	<1.2	15	330	<1.2	NA	345
	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
	07/22/20	<0.37	2.5	37	<0.35	<0.20	39.5
	07/21/21	<0.37	4.3	46	<0.35	<0.20	50.3
MW-1027	07/20/22	<0.37	5.4	44	<0.35	<0.20	49.4
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
	11/08/95	1.2	3340	920	NA	<0.5	4261.2
TW-4	01/25/96	1.1	3000	891	NA	<0.5	3892.1

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	05/14/96	0.90	1820	969	NA	<0.5	2789.9
	08/14/96	<0.5	2150	179	1.8	<0.5	2330.8
TW-4	10/08/96	0.90	1850	541	6.3	<0.5	2398.2
	01/21/97	<0.5	2650	913	NA	<0.5	3563
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
	07/29/16	<0.37	20	15	<0.35	<0.20	35
TW-4	03/01/17	<0.37	17	8.0	<0.35	<0.20	25

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	05/17/17	<0.37	22	11	<0.35	<0.20	33
	07/13/17	<0.37	27	19	<0.35	<0.20	46
TW-4	10/24/17	<0.37	22	16	<0.35	<0.20	38
	02/28/18	<0.37	20	11	<0.35	<0.20	31
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
	07/23/20	<0.37	20	21	<0.35	<0.20	41
TW-4	07/22/21	<0.37	19	14	<0.35	<0.20	33
	07/20/22	<0.37	24	20	<0.35	<0.20	44
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
D-25R	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
D-25R	04/25/00	1.0	3.5	4.0	NA	<0.46	8.5

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-25R	09/26/00	0.82	4.5	4.7	NA	NA	10.02
	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
D-25R	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
	06/24/03	0.86	6.1	7.7	<0.25	NA	14.66
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
	07/22/20	<0.37	<0.38	<0.16	<0.35	<0.20	0
	07/21/21	<0.37	<0.38	0.46	<0.35	<0.20	0.46
D-25R	07/19/22	<0.37	0.62	0.54	<0.35	<0.20	1.16
Original Extraction Wells	EX-2	<0.5	870	210	1.1	<0.3	1081.1
		<0.5	1260	268	1.4	<0.3	1529.4
	11/11/93	<0.5	890	250	1.3	<0.3	1141.3
	12/13/94	<0.5	17.3	3.5	NA	<0.5	20.8
	06/21/95	<0.34	375	96.4	<0.19	<0.27	471.4
	EX-2 /	<0.5	99.8	52	<0.5	<0.5	151.8
	EX-2R	<0.63	1.2	2.6	<0.15	<0.46	3.8

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-2R	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
EX-2R	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
	06/24/03	<0.50	0.69	2.9	<0.25	NA	3.59
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
	07/23/20	<0.37	<0.38	2.4	<0.35	<0.20	2.4
	07/22/21	<0.37	0.47	2.1	<0.35	<0.20	2.57
EX-2R	07/20/22	<0.37	<0.38	0.67	<0.35	<0.20	0.67
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 Extraction Wells	11/11/93	<0.5	<0.5	<0.5	<0.5	<0.3	0
	12/13/94	<0.5	14.4	5.8	NA	<0.5	20.2
	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

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	07/28/98	<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
EX-3	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
	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/ EX-3R	07/15/15	<0.17	3.1	3.5	<0.28	<0.10	6.6
	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
	07/23/20	<0.37	5.0	6.3	<0.35	<0.20	11.3
	07/22/21	<0.37	4.2	5.6	<0.35	<0.20	9.8
EX-3R	07/20/22	<0.37	3.9	5.7	<0.35	<0.20	9.6
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
Storm Sewer Outfall	SS-1 11/11/93	0.90	71	24	<0.5	<0.3	95.9
	08/16/94	<1	55	25	NA	<5	80
	12/14/94	0.10	11.2	3.0	NA	<0.5	14.3
	06/21/95	<0.34	31.2	18.1	<0.19	<0.27	49.3

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	
SS-1	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
SS-1	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
	10/01/01	<0.25	1.5	3.7	<0.25	<0.25	5.2
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

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	06/09/21	<0.37	<0.38	0.42	NA	<0.20	0.42
SS-1	06/20/22	<0.37	<0.38	<0.16	NA	<0.20	0
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 Source Area and Former Sump Source Area Monitor Wells	11/11/93	<0.5	<0.5	<0.5	<0.5	<0.3	0
	08/16/94	<1	<1	1.2	NA	<5	1.2
	12/13/94	0.40	0.20	1.8	NA	0.30	2.7
	03/13/95	5.5	3.2	30.6	NA	ND	39.3
	06/21/95	1.5	<0.13	4.0	<0.19	<0.27	5.5
	11/06/95	1.0	<0.5	6.3	NA	<0.5	7.3
	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
	08/13/96	1.2	<0.5	2.5	<0.5	<0.5	3.7
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
D-18	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
	10/20/03	Not Sampled.					
D-18	09/20/04	3.4	<0.50	1.9	NA	<0.20	5.3

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-18	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
	07/13/10	<0.50	<0.50	<0.20	<0.25	<0.20	0
D-18	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
	07/17/19	<0.37	<0.38	<0.16	<0.35	<0.20	0
	07/22/20	<0.37	<0.38	<0.16	<0.35	<0.20	0
	07/21/21	<0.37	<0.38	<0.16	<0.35	<0.20	0
D-18	07/19/22	0.93	<0.38	0.71	<0.35	<0.20	1.64
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
MW-2004	07/29/06	<0.50	<0.50	0.37	NA	NA	0.37

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-2004	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	<0.50	<0.50	<0.20	<0.25	<0.20	0
MW-2004	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
MW-2004	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
	07/22/20	<0.37	<0.38	<0.16	<0.35	<0.20	0
	07/21/21	<0.37	<0.38	<0.16	<0.35	<0.20	0
MW-2004	07/19/22	<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
	12/13/91	32	3.0	23	<0.5	<0.3	58
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
MW-2005	09/25/98	14	<0.28	1.1	<0.28	<0.46	15.1

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	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
MW-2005	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
	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
	07/22/20	<0.37	<0.38	<0.16	<0.35	<0.20	0
	07/21/21	<0.37	<0.38	<0.16	<0.35	<0.20	0
MW-2005R	07/19/22	<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
	07/24/13	<0.17	2.3	9.0	<0.28	<0.10	11.3
MW-2011	07/29/14	<0.17	4.1	35	<0.28	<0.10	39.1

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-2011	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
MW-2011	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
	07/22/20	<0.37	2.0	13	<0.35	<0.20	15
	07/21/21	<0.37	2.0	14	<0.35	<0.20	16
MW-2011	07/19/22	<0.37	<0.38	0.69	<0.35	<0.20	0.69
D-15	11/05/91	26	45	420	<0.5	<0.3	491
D-15	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
	10/08/96	6.4	1.4	70.4	<0.5	<0.5	78.2
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
D-15	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
D-15	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
	09/28/00	19	0.77	85	NA	NA	104.77
D-15	04/19/01	50	<2.5	470	NA	<2.5	520

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	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
D-15	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
	07/17/19	8.3	<0.38	8.4	<0.35	<0.20	16.7
	07/22/20	13	<0.38	11	<0.35	<0.20	24
	07/21/21	4.0	<0.38	4.6	<0.35	<0.20	8.6
D-15	07/19/22	3.0	<0.38	4.4	<0.35	<0.20	7.4
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
TW-1	01/25/96	1.5	1.3	4.7	NA	<0.5	7.5

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	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
TW-1	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
TW-1	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
	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
	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
	07/22/20	<0.37	<0.38	<0.16	<0.35	<0.20	0
TW-1	07/21/21	<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	
TW-1	07/19/22	<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
TW-3	08/13/96	2.3	9.7	8.1	<0.5	<0.5	20.1
TW-3	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
TW-3	04/25/00	1.2	0.74	1.9	NA	<0.46	3.84
	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
	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
TW-3	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		
Original Extraction Well	TW-3	07/17/19	<0.37	<0.38	<0.16	<0.35	<0.20	0
		07/22/20	0.91	<0.38	<0.16	<0.35	<0.20	0.91
		07/21/21	0.85	<0.38	0.26	<0.35	<0.20	1.11
	TW-3	07/19/22	0.43	<0.38	0.23	<0.35	<0.20	0.66
	EX-1	11/07/91	8.2	3.7	20	<0.5	<0.3	31.9
		12/18/91	6.3	3.9	14.6	<0.5	<0.3	24.8
		11/11/93	6.8	2.3	13	<0.5	<0.3	22.1
		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
	EX-1	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
		07/15/15	<0.17	<0.20	<0.19	<0.28	<0.10	0
	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
	07/23/20	<0.37	<0.38	<0.16	<0.35	<0.20	0	
EX-1	07/22/21	<0.37	<0.38	0.31	<0.35	<0.20	0.31	
EX-7	11/07/91	37	5.0	350	<0.5	<0.3	392	

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	
Original Extraction Well	12/18/91	44	5.1	241	<0.5	<0.3	290.1
	11/11/93	27	8.1	160	<0.5	<0.3	195.1
	12/13/94	19.6	0.80	62.8	NA	<0.5	83.2
	EX-7 06/21/95	60.6	<0.13	105	<0.19	<0.27	165.6
	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
	EX-7 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
	04/19/01	56	<1.0	110	NA	<1.0	166
	EX-7 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
	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	
07/23/20	5.0	<0.38	2.6	<0.35	<0.20	7.6	
EX-7R 07/22/21	3.2	<0.38	1.8	<0.35	<0.20	5	

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-7R	07/20/22	4.8	<0.38	2.1	<0.35	<0.20	6.9

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	Chloroethane	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	ug/L
NR 140	ES	5.0	200	5	5	0.2	9000	5.0	400	6	850	5	7	70	100	5	700	2000	
NR 140	PAL	0.5	40	0.5	0.5	0.02	1800	0.5	80	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	<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	<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	<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	<5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4500
	12/14/94	<50	4040	630	NA	<50	NA	NA	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	4670
	03/13/95	ND	3120	600	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	3720
	06/21/95	NA	4220	990	17.6	5.4	<1.0	NA	<0.21	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	<0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	4261.2
	01/25/96	1.1	3000	891	NA	<0.5	NA	NA	<0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	3892.1
	05/14/96	0.90	1820	969	NA	<0.5	NA	NA	<0.7	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	<0.7	<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	<0.7	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	<0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	3563
	04/01/97	0.83	1400	600	NA	<0.46	NA	NA	<1.2	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	<1.2	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	<0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	1250.83
	03/23/98	0.74	780	530	NA	<0.46	NA	NA	<1.2	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	<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	<1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	1322.8
	12/05/98	<6.3	830	400	NA	<4.6	NA	NA	<12	NA	NA	NA	NA	NA	NA	NA	NA	NA	1230
	03/11/99	<6.3	480	270	NA	<4.6	NA	NA	<12	NA	NA	NA	NA	NA	NA	NA	NA	NA	750
	09/02/99	<3.2	180	110	2.4	<2.3	NA	<1.6	<6.0	<0.90	<1.2	<1.0	19	2.0	<2.0	<4.4	<1.9	<5.5	313.4
TW-4	04/25/00	<3.2	450	280	NA	<2.3	NA	NA	<6.0	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	<6.0	<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	Chloroethane	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	ug/L	
NR 140	ES	5.0	200	5	5	0.2	9000	5.0	400	6	850	5	7	70	100	5	700	2000		
NR 140	PAL	0.5	40	0.5	0.5	0.02	1800	0.5	80	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	<0.25	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	<2.0	2.1	<2.0	6.8	3.0	<2.0	8.1	<2.0	<2.0	<2.0	350
	04/16/02	<0.25	76	60	1.5	<0.25	NA	<0.10	<0.25	<0.25	1.4	<0.25	2.5	0.76	<0.25	0.47	<0.25	<0.25	<0.25	142.63
TW-4	06/24/03	<1.0	120	89	1.4	<1.0	NA	<0.50	<2.0	<0.50	2.1	<1.0	4.7	3.7	<1.0	<2.0	<1.0	<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	NA	NA	103
	12/14/05	<0.50	65	35	0.92	<0.20	<2.0	<0.20	<1.0	<0.20	0.76	<0.50	1.6	0.55	<0.50	<1.0	<0.50	<0.50	<0.50	103.83
	07/31/06	<0.50	92	60	1.3	<0.20	<2.0	<0.20	<1.0	<0.20	1.3	<0.50	2.9	1.4	<0.50	<1.0	<0.50	<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	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	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	NA	NA	77.34
	07/14/10	<0.50	75	52	0.28	<0.20	NA	<0.20	<1.0	<0.20	<0.50	<0.50	2.1	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	129.38
	07/21/11	<0.50	38	42	0.28	<0.20	NA	<0.20	<1.0	<0.20	0.52	<0.50	0.78	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	81.58
	07/10/12	<0.17	48	53	<0.28	<0.10	NA	<0.074	<0.34	<0.20	1.8	<0.28	1.8	<0.12	<0.25	<0.68	<0.50	<0.068	<0.068	104.6
	07/24/13	<0.17	26	23	<0.28	<0.10	NA	<0.074	<0.34	<0.20	0.54	<0.28	1.1	<0.12	<0.25	<0.68	0.13	0.20	<0.068	50.97
	07/29/14	<0.17	29	20	<0.28	<0.10	NA	<0.074	<0.34	<0.20	<0.19	<0.28	0.9	<0.12	<0.25	<0.68	<0.13	<0.068	<0.068	49.9
	07/14/15	<0.17	30	36	<0.28	<0.10	NA	<0.074	<0.34	<0.20	4.9	<0.28	1.4	1.7	<0.25	8.2 B	<0.10	<0.068	<0.068	82.2
	07/29/16	<0.37	20	15	<0.35	<0.20	NA	<0.15	<0.51	<0.37	<0.41	<0.39	<0.39	<0.41	<0.35	<1.6	<0.18	<0.22	<0.22	35
	03/01/17	<0.37	17	8.0	<0.35	<0.20	NA	<0.15	<0.51	<0.37	<0.41	<0.39	<0.39	<0.41	<0.35	<1.6	<0.18	<0.22	<0.22	25
	05/17/17	<0.37	22	11	<0.35	<0.20	NA	<0.15	<0.51	<0.37	0.96	<0.39	0.90	<0.41	<0.35	<1.6	<0.18	<0.22	<0.22	34.86
	07/13/17	<0.37	27	19	<0.35	<0.20	NA	<0.15	<0.51	<0.37	1.1	<0.39	1.0	<0.41	<0.35	<1.6	<0.18	<0.22	<0.22	48.1
	10/24/17	<0.37	22	16	<0.35	<0.20	NA	<0.15	<0.51	<0.37	<0.41	<0.39	0.91	<0.41	<0.35	<1.6	<0.18	<0.22	<0.22	38.91
TW-4	02/28/18	<0.37	20	11	<0.35	<0.20	NA	<0.15	<0.51	<0.37	<0.41	<0.39	<0.39	<0.41	<0.35	<1.6	<0.18	<0.22	<0.22	31
	05/10/18	<0.74	27	16	<0.33	<0.50	NA	<0.43	<2.5	<0.50	0.58	<0.50	0.70	<0.41	<0.37	<2.5	<0.33	<0.23	<0.23	44.28
TW-4	07/30/18	<0.37	26	18	<0.35	<0.20	NA	<0.15	<0.51	<0.37	4.7	<0.39	1.6	<0.41	<0.35	<1.6	<0.18	<0.22	<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	Chloroethane	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	ug/L
NR 140	ES	5.0	200	5	5	0.2	9000	5.0	400	6	850	5	7	70	100	5	700	2000	
NR 140	PAL	0.5	40	0.5	0.5	0.02	1800	0.5	80	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	<0.51	<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	<0.51	<0.37	1.1	<0.39	<0.39	<0.41	<0.35	<1.6	<0.18	<0.22	42.1
TW-4	07/22/21	<0.37	19	14	<0.35	<0.20	NA	<0.15	<0.51	<0.37	1.1	<0.39	0.64	<0.41	<0.35	<1.6	<0.18	<0.22	34.74
	07/20/22	<0.37	24	20	<0.35	<0.20	NA	<0.15	0.56	<0.37	6.7	<0.39	0.93	1.6	<0.35	11	<0.18	<0.22	64.79

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-22	343,896,630	0.0	0.00	0.00
EX-1	February-22	343,896,630	1,266,048.0	45,216.00	31.40
EX-1	March-22	343,896,630	1,401,696.0	45,216.00	31.40
EX-1	April-22	343,896,630	1,356,480.0	45,216.00	31.40
EX-1	May-22	343,896,630	1,071,360.0	34,560.00	24.00
EX-1	June-22	66,420	3,256.0	108.53	0.08
EX-1	July-22	66,530	11.0	0.35	0.00
EX-1	August-22	66,530	0.0	0.00	0.00
EX-1	September-22	66,530	0.0	0.00	0.00
EX-1	October-22	66,530	0.0	0.00	0.00
EX-1	November-22	66,530	0.0	0.00	0.00
EX-1	December-22	66,530	0.0	0.00	0.00
EX-2R EX-3R	January-22	994,377,090	1,506,856.0	48,608.26	33.76
EX-2R EX-3R	February-22	7,447,160	1,307,007.0	46,678.82	32.42
EX-2R EX-3R	March-22	21,196,240	1,374,908.0	44,351.87	30.80
EX-2R EX-3R	April-22	34,245,990	1,304,975.0	43,499.17	30.21
EX-2R EX-3R	May-22	47,726,720	1,341,269.0	43,266.74	30.05
EX-2R EX-3R	June-22	60,692,670	1,296,595.0	43,219.83	30.01
EX-2R EX-3R	July-22	73,434,080	1,274,141.0	41,101.32	28.54
EX-2R EX-3R	August-22	85,246,000	1,181,192.0	38,102.97	26.46
EX-2R EX-3R	September-22	97,545,420	1,229,942.0	40,998.07	28.47
EX-2R EX-3R	October-22	110,991,460	1,344,604.0	43,374.32	30.12
EX-2R EX-3R	November-22	135,486,020	2,449,456.0	81,648.53	56.70
EX-2R EX-3R	December-22	155,127,150	1,964,113.0	63,358.48	44.00
EX-4R	January-22	746,666,790	1,835,775.0	59,218.55	41.12
EX-4R	February-22	763,240,180	1,657,339.0	59,190.68	41.10
EX-4R	March-22	781,581,180	1,834,100.0	59,164.52	41.09
EX-4R	April-22	799,369,260	1,778,808.0	59,293.60	41.18
EX-4R	May-22	817,093,850	1,772,459.0	57,176.10	39.71
EX-4R	June-22	833,418,370	1,632,452.0	54,415.07	37.79
EX-4R	July-22	850,310,850	1,689,248.0	54,491.87	37.84
EX-4R	August-22	867,059,160	1,674,831.0	54,026.81	37.52
EX-4R	September-22	883,194,370	1,613,521.0	53,784.03	37.35
EX-4R	October-22	899,846,810	1,665,244.0	53,717.55	37.30
EX-4R	November-22	916,533,150	1,668,634.0	55,621.13	38.63
EX-4R	December-22	933,952,080	1,741,893.0	56,190.10	39.02
EX-5R	January-22	792,377,170	1,837,882.0	59,286.52	41.17
EX-5R	February-22	808,987,670	1,661,050.0	59,323.21	41.20
EX-5R	March-22	827,366,910	1,837,924.0	59,287.87	41.17
EX-5R	April-22	845,168,840	1,780,193.0	59,339.77	41.21
EX-5R	May-22	862,791,490	1,762,265.0	56,847.26	39.48
EX-5R	June-22	878,592,690	1,580,120.0	52,670.67	36.58
EX-5R	July-22	894,920,230	1,632,754.0	52,669.48	36.58

**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-5R	August-22	909,605,540	1,468,531.0	47,371.97	32.90
EX-5R	September-22	925,794,500	1,618,896.0	53,963.20	37.47
EX-5R	October-22	942,850,880	1,705,638.0	55,020.58	38.21
EX-5R	November-22	959,514,210	1,666,333.0	55,544.43	38.57
EX-5R	December-22	976,734,530	1,722,032.0	55,549.42	38.58
EX-6	January-22	446,052,040	2,224,304.0	71,751.74	49.83
EX-6	February-22	459,056,980	1,300,494.0	46,446.21	32.25
EX-6	March-22	474,122,740	1,506,576.0	48,599.23	33.75
EX-6	April-22	492,235,470	1,811,273.0	60,375.77	41.93
EX-6	May-22	506,204,610	1,396,914.0	45,061.74	31.29
EX-6	June-22	513,401,370	719,676.0	23,989.20	16.66
EX-6	July-22	515,310,630	190,926.0	6,158.90	4.28
EX-6	August-22	515,491,450	18,082.0	583.29	0.41
EX-6	September-22	515,676,880	18,543.0	618.10	0.43
EX-6	October-22	515,866,520	18,964.0	611.74	0.42
EX-6	November-22	515,930,010	6,349.0	211.63	0.15
EX-6	December-22	515,981,880	8,283.0	267.19	0.19
EX-7R	January-22	656,984,120	1,642,293.0	52,977.19	36.79
EX-7R	February-22	671,592,020	1,460,790.0	52,171.07	36.23
EX-7R	March-22	687,502,630	1,539,482.0	49,660.71	34.49
EX-7R	April-22	702,686,860	1,518,423.0	50,614.10	35.15
EX-7R	May-22	718,237,120	1,555,026.0	50,162.13	34.83
EX-7R	June-22	733,167,980	1,493,086.0	49,769.53	34.56
EX-7R	July-22	746,209,760	1,304,178.0	42,070.26	29.22
EX-7R	August-22	759,081,720	1,287,196.0	41,522.45	28.84
EX-7R	September-22	770,286,850	1,120,513.0	37,350.43	25.94
EX-7R	October-22		1,086,091.2	35,035.20	24.33
EX-7R	November-22		1,051,056.0	35,035.20	24.33
EX-7R	December-22		490,492.8	15,822.35	10.99

Notes:

gal/month: Gallons pumped for the month.

gpd: Average gallons per day.

gpm: Average gallons per minute.

February through May flow data for EX-1 calculated from manual pumping rate measurements collected by Pentair personnel.

October, November, and December flow data for EX-7R calculated from average flow rates from 10/1 to 10/4, which were the last days data was uploaded from the EX-7R meter.

Pumping from EX-7R stopped on 12/14/2022 due to pump failure.

Table 4. Delavan Facility 2022 Groundwater Monitoring Program Well List
 Pentair Flow Technologies, LLC, Delavan, Wisconsin

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

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

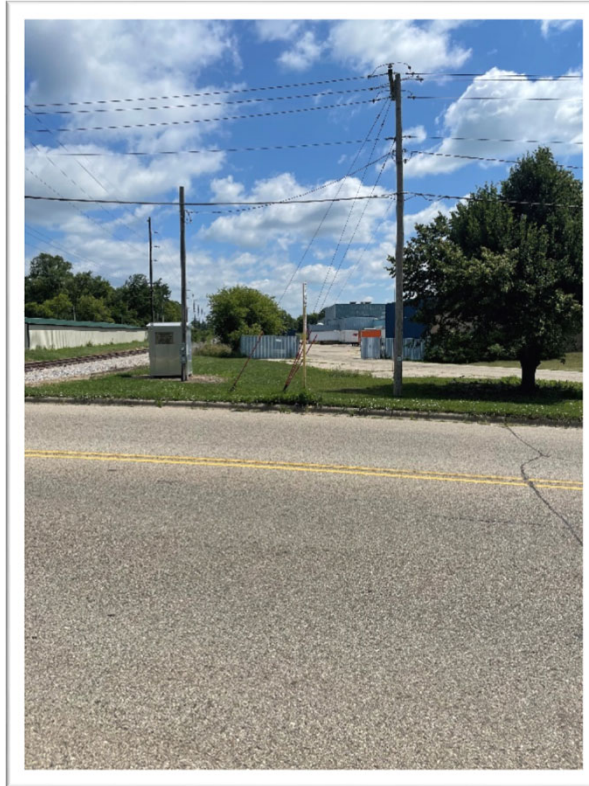
Table 5. Delavan Facility 2023 Groundwater Monitoring Program Well List
 Pentair Flow Technologies, LLC, Delavan, Wisconsin

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

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

APPENDIX A
SITE INSPECTON PHOTOGRAPHS

1. View looking northeast towards north side of property.



2. View looking northwest towards north side of property.



3.View looking west towards south side of property



4.View looking north towards southeast half of east side of property.



5. View looking north towards east side of property.



6. View looking south towards west side of property.



7. View looking north at west side of property.



8. View looking south inside Plant 1 where low-level VOC's impacts occur in the sub-surface soil.



9. View looking south towards monitoring well D-15 where the protector top steel casing is corroded at ground surface.



10. View looking at ground surface where monitor well D-15 steel casing is corroded and the surface seal is broken up.



11. New PVC protective casing installed around monitoring well D-15 that replaced corroded steel casing.



APPENDIX B
GROUNDWATER MONITORING ANALYTICAL RESULTS
AND FIELD DATA SHEETS

TETRA TECH

MONITOR WELL INSPECTION FORM

Project Name: Pentair Delavan
 Project No: 117-7469011.100
 Well No.: Site Monitor Wells

Location: Delavan, WI
 Personnel: Connor Lauzon
 Inspection Date: 7/20/22

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 and Outside?	X			
Is Well Flushmount?			X	Both types
Protective Casing Diameter? Material?			X	
Is Well Immobile?			X	
Protective Casing Locked? Type of Lock?	X			2121, Locks replaced on two wells
Protective Casing Secure in Ground?	X			Rotted casing on D-15
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		No cap on TW-2A. New cap TW-2
Well Diameter and Material			X	
Solvent cement present?		X		
Type of Surface Seal? Is Seal Cracked?		X		D-15 concrete seal damaged/gone
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	

Pentair Delavan Facility Field Water Level Data Sheet

Project Number: 117-7469011.100			Project Name: Pentair Delavan Remedial Action	
Personnel: Connor Lauzon			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	7/19/22	13:45	32.91	Missing cap. New cap
TW-2A	7/19/22	13:46	33.49	Missing cap. (Sch. 80 PVC)
TW-4	7/20/22	8:20	39.89	
D-1R	7/19/22	15:50	31.80	
D-5	NA	NA	NA	ABANDONED
D-6	NA	NA	NA	ABANDONED
D-14R	NA	NA	NA	
D-23	7/20/22	7:55	34.62	
D-24R	7/20/22	8:07	32.44	
D-25R	7/19/22	14:14	34.54	
D-26	7/19/22	14:16	34.08	
D-27	7/19/22	14:15	34.09	
MW-1026	7/19/22	15:38	33.60	
MW-1027	7/20/22	8:52	31.92	
Plant 2 Wells				
EX-1	NA	NA	NA	
EX-7R	NA	NA	NA	
TW-1	7/19/22	10:55	29.43	New lock. Broken hinge
TW-1A	7/19/22	10:56	30.59	
TW-3	7/19/22	11:35	34.70	New lock
D-3	NA	NA	NA	ABANDONED
D-4	NA	NA	NA	ABANDONED
D-15	7/19/22	12:50	33.82	
P-2009	7/19/22	13:18	33.56	
P-2010	7/19/22	13:16	33.22	
D-18	7/19/22	14:55	32.41	In tree
MW-2004	7/19/22	10:20	29.85	
MW-2005R	7/19/22	9:35	26.91	
MW-2011	7/19/22	9:00	28.35	

TETRA TECH FIELD WATER QUALITY SAMPLING AND ANALYSIS FORM

PROJECT INFORMATION			INSTRUMENTS		
PROJECT	Delavan Facility Remedial Action		Temp. & pH	Hanna	
PROJECT NO.	117-7469011.100		Conductivity	Hanna	
LOCATION	Delavan, WI		ORP	NA	
PERSONNEL	Connor Lauzon		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)	7/19/22	7/19/22	7/19/22	7/19/22	7/19/22
CLOCK TIME (Military)	10:00	9:20	13:10	11:55	10:40
DEPTH TO WATER (ft)*	26.91	28.35	33.82	34.70	29.85
MEASURED WELL DEPTH (ft)*	37.81	36.51	38.18	50.73	39.33
CASING VOLUME (gallons)	2	1.5	0.75	2.5	1.5
PURGE VOLUME (gallons)	6	4.5	3	8	4.5
DEPTH SAMPLE TAKEN (ft)*	35	34	34	45	35
SAMPLING DEVICE	Hanging Bailer	Hanging Bailer	Hanging Bailer	Hanging Bailer	Hanging Bailer
FIELD TEMPERATURE (°C)	15.8	15.5	15.6	16.6	16.0
pH	7.69	7.92	7.37	7.49	7.72
ELEC. COND. (µS/cm) at 25° C	1320	945	>3999	1109	880
ORP (mV)	NA	NA	NA	NA	NA
DISSOLVED OXYGEN (ppm)	NA	NA	NA	NA	NA
DISSOLVED OXYGEN (% Sat.)	NA	NA	NA	NA	NA
COLOR	Brown	Brn-Gry	lt. Brn	clear	clear
ODOR	None	None	None	None	None
CLARITY	cloudy	cloudy	Turbid	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
<u>Comments:</u>					
NAME OF LABORATORY	Test America	Test America	Test America	Test America	Test America
DATE SENT TO LAB	7/21/22 →				
SAMPLER'S NAME	CSL →				

*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.	117-7469011.100	Conductivity	Hanna		
LOCATION	Delavan, WI	ORP	NA		
PERSONNEL	Connor Lauzon	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)	7/19/22	7/19/22	7/19/22	7/20/22	7/20/22
CLOCK TIME (Military)	11:15	15:15	14:35	9:10	8:40
DEPTH TO WATER (ft)*	29.43	32.41	34.54	31.92	39.89
MEASURED WELL DEPTH (ft)*	45.50	39.90	42.39	39.98	50.52
CASING VOLUME (gallons)	2.75	1.25	1.3	1.3	2
PURGE VOLUME (gallons)	8.5	4	4	4	6
DEPTH SAMPLE TAKEN (ft)*	40	36	38	36	45
SAMPLING DEVICE	Hanging Bailer	Hanging Bailer	Hanging Bailer	Hanging Bailer	Hanging Bailer
FIELD TEMPERATURE (°C)	15.6	16.8	16.2	16.4	15.9
pH	7.66	7.55	7.36	7.37	7.16
ELEC. COND. (uS/cm) at 25° C	1096	1990	1130	1792	3435
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	v. Lt Brn	clear	clear
ODOR	None	None	None	None	None
CLARITY	clear	clear	sl. cloudy	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
<u>Comments:</u>					
NAME OF LABORATORY	Test America	Test America	Test America	Test America	Test America
DATE SENT TO LAB	7/21/22 →				
SAMPLER'S NAME	CSL →				

*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		
PROJECT NO.	117-7469011.100		Conductivity		
LOCATION	Delavan, WI		ORP	NA	
PERSONNEL	Connor Lauzon		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)	7/20/22	NS	7/20/22	7/20/22	7/20/22
CLOCK TIME (Military)	10:05		10:45	11:00	11:45
DEPTH TO WATER (ft)*	33.62	NA	NA	NA	NA
MEASURED WELL DEPTH (ft)*	36.00	NA	NA	NA	NA
CASING VOLUME (gallons)	0.5	NA	NA	NA	NA
PURGE VOLUME (gallons)	1.5	Grab	Grab	Grab	Grab
DEPTH SAMPLE TAKEN (ft)*	35	NA	NA	NA	NA
SAMPLING DEVICE	Hanging Bailer	Spigot	Spigot	Spigot	Spigot
FIELD TEMPERATURE (°C)	16.8		16.6	16.5	15.9
pH	7.48		7.38	7.41	7.57
ELEC. COND. (uS/cm) at 25° C	1098		2153	1457	1393
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
ODOR	None		None	None	None
CLARITY	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
		Turned off			
<u>Comments:</u>					
NAME OF LABORATORY	Test America	Test America	Test America	Test America	Test America
DATE SENT TO LAB	7/21/22 →				
SAMPLER'S NAME	CSL →				

*Measured from top of well casing.

ANALYTICAL REPORT

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

Laboratory Job ID: 500-219778-1
Client Project/Site: Pentair Delavan
Revision: 1

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

Attn: Mr. Mark Manthey



Authorized for release by:
8/5/2022 1:31:07 PM

Sandie Fredrick, Project Manager II
(920)261-1660
Sandra.Fredrick@et.eurofinsus.com

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Tetra Tech GEO
Project/Site: Pentair Delavan

Job ID: 500-219778-1

Job ID: 500-219778-1

Laboratory: Eurofins Chicago

Narrative

**Job Narrative
500-219778-1**

Comments

No additional comments.

Revision

The report being provided is a revision of the original report sent on 8/4/2022. The report (revision 1) is being revised due to: VOC analyte list updated per COC.

Receipt

The samples were received on 7/22/2022 10:15 AM. Unless otherwise noted below, 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.

Receipt Exceptions

Received all 3 VOA vials for samples 3 & 12 with headspace.

GC/MS VOA

Method 8260B: Methylene chloride was detected in the following items: TW-4 (500-219778-10). Methylene chloride is a known lab contaminant; therefore all low level detects for this compound could be suspected as lab contamination.

Method 8260B: The following sample(s) was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 14-day holding time specified for preserved samples: D-15 (500-219778-3).

Method 8260B: The method blank for analytical batch 500-667157 contained analytes above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. (MB 500-667157/6)

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

Job ID: 500-219778-1

Client Sample ID: MW-2005R

Lab Sample ID: 500-219778-1

No Detections.

Client Sample ID: MW-2011

Lab Sample ID: 500-219778-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.69		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: D-15

Lab Sample ID: 500-219778-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	3.0		1.0	0.37	ug/L	1		8260B	Total/NA
Trichloroethene	4.4		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: TW-3

Lab Sample ID: 500-219778-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.43	J	1.0	0.37	ug/L	1		8260B	Total/NA
Trichloroethene	0.23	J	0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-2004

Lab Sample ID: 500-219778-5

No Detections.

Client Sample ID: TW-1

Lab Sample ID: 500-219778-6

No Detections.

Client Sample ID: D-18

Lab Sample ID: 500-219778-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.93	J	1.0	0.37	ug/L	1		8260B	Total/NA
Trichloroethene	0.71		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: D-25R

Lab Sample ID: 500-219778-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.62	J	1.0	0.38	ug/L	1		8260B	Total/NA
Trichloroethene	0.54		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: MW-1027

Lab Sample ID: 500-219778-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	5.4		1.0	0.38	ug/L	1		8260B	Total/NA
Trichloroethene	44		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: TW-4

Lab Sample ID: 500-219778-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	0.56	J	1.0	0.51	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	1.6		1.0	0.41	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	6.7		1.0	0.41	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	0.93	J	1.0	0.39	ug/L	1		8260B	Total/NA
Methylene Chloride	11		5.0	1.6	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	24		1.0	0.38	ug/L	1		8260B	Total/NA
Trichloroethene	20		0.50	0.16	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Detection Summary

Client: Tetra Tech GEO
Project/Site: Pentair Delavan

Job ID: 500-219778-1

Client Sample ID: MW-1026

Lab Sample ID: 500-219778-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	11		1.0	0.38	ug/L	1		8260B	Total/NA
Trichloroethene	3.5		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: EX-2R

Lab Sample ID: 500-219778-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.67		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: EX-3R

Lab Sample ID: 500-219778-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	3.9		1.0	0.38	ug/L	1		8260B	Total/NA
Trichloroethene	5.7		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: EX-7R

Lab Sample ID: 500-219778-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	4.8		1.0	0.37	ug/L	1		8260B	Total/NA
Trichloroethene	2.1		0.50	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 500-219778-15

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Method Summary

Client: Tetra Tech GEO
Project/Site: Pentair Delavan

Job ID: 500-219778-1

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

Protocol References:

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

Laboratory References:

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

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Sample Summary

Client: Tetra Tech GEO
Project/Site: Pentair Delavan

Job ID: 500-219778-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-219778-1	MW-2005R	Water	07/19/22 10:00	07/22/22 10:15
500-219778-2	MW-2011	Water	07/19/22 09:20	07/22/22 10:15
500-219778-3	D-15	Water	07/19/22 13:10	07/22/22 10:15
500-219778-4	TW-3	Water	07/19/22 11:55	07/22/22 10:15
500-219778-5	MW-2004	Water	07/19/22 10:40	07/22/22 10:15
500-219778-6	TW-1	Water	07/19/22 11:15	07/22/22 10:15
500-219778-7	D-18	Water	07/19/22 15:15	07/22/22 10:15
500-219778-8	D-25R	Water	07/19/22 14:35	07/22/22 10:15
500-219778-9	MW-1027	Water	07/20/22 09:10	07/22/22 10:15
500-219778-10	TW-4	Water	07/20/22 08:40	07/22/22 10:15
500-219778-11	MW-1026	Water	07/20/22 10:05	07/22/22 10:15
500-219778-12	EX-2R	Water	07/20/22 10:45	07/22/22 10:15
500-219778-13	EX-3R	Water	07/20/22 11:00	07/22/22 10:15
500-219778-14	EX-7R	Water	07/20/22 11:45	07/22/22 10:15
500-219778-15	Trip Blank	Water	07/19/22 00:00	07/22/22 10:15

Client Sample Results

Client: Tetra Tech GEO
 Project/Site: Pentair Delavan

Job ID: 500-219778-1

Client Sample ID: MW-2005R

Lab Sample ID: 500-219778-1

Date Collected: 07/19/22 10:00

Matrix: Water

Date Received: 07/22/22 10:15

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			07/27/22 10:19	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/27/22 10:19	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/27/22 10:19	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/27/22 10:19	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/27/22 10:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		72 - 124		07/27/22 10:19	1
Dibromofluoromethane	103		75 - 120		07/27/22 10:19	1
1,2-Dichloroethane-d4 (Surr)	101		75 - 126		07/27/22 10:19	1
Toluene-d8 (Surr)	93		75 - 120		07/27/22 10:19	1

Client Sample Results

Client: Tetra Tech GEO
Project/Site: Pentair Delavan

Job ID: 500-219778-1

Client Sample ID: MW-2011

Lab Sample ID: 500-219778-2

Date Collected: 07/19/22 09:20

Matrix: Water

Date Received: 07/22/22 10:15

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			07/27/22 10:46	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/27/22 10:46	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/27/22 10:46	1
Trichloroethene	0.69		0.50	0.16	ug/L			07/27/22 10:46	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/27/22 10:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		72 - 124		07/27/22 10:46	1
Dibromofluoromethane	103		75 - 120		07/27/22 10:46	1
1,2-Dichloroethane-d4 (Surr)	102		75 - 126		07/27/22 10:46	1
Toluene-d8 (Surr)	94		75 - 120		07/27/22 10:46	1

Client Sample Results

Client: Tetra Tech GEO
 Project/Site: Pentair Delavan

Job ID: 500-219778-1

Client Sample ID: D-15

Lab Sample ID: 500-219778-3

Date Collected: 07/19/22 13:10

Matrix: Water

Date Received: 07/22/22 10:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	3.0		1.0	0.37	ug/L			07/27/22 11:12	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/27/22 11:12	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/27/22 11:12	1
Trichloroethene	4.4		0.50	0.16	ug/L			07/27/22 11:12	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/27/22 11:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		72 - 124		07/27/22 11:12	1
Dibromofluoromethane	104		75 - 120		07/27/22 11:12	1
1,2-Dichloroethane-d4 (Surr)	104		75 - 126		07/27/22 11:12	1
Toluene-d8 (Surr)	93		75 - 120		07/27/22 11:12	1

Client Sample Results

Client: Tetra Tech GEO
 Project/Site: Pentair Delavan

Job ID: 500-219778-1

Client Sample ID: TW-3

Lab Sample ID: 500-219778-4

Date Collected: 07/19/22 11:55

Matrix: Water

Date Received: 07/22/22 10:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	0.43	J	1.0	0.37	ug/L			07/27/22 11:39	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/27/22 11:39	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/27/22 11:39	1
Trichloroethene	0.23	J	0.50	0.16	ug/L			07/27/22 11:39	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/27/22 11:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		72 - 124		07/27/22 11:39	1
Dibromofluoromethane	106		75 - 120		07/27/22 11:39	1
1,2-Dichloroethane-d4 (Surr)	106		75 - 126		07/27/22 11:39	1
Toluene-d8 (Surr)	93		75 - 120		07/27/22 11:39	1

Client Sample Results

Client: Tetra Tech GEO
 Project/Site: Pentair Delavan

Job ID: 500-219778-1

Client Sample ID: MW-2004

Lab Sample ID: 500-219778-5

Date Collected: 07/19/22 10:40

Matrix: Water

Date Received: 07/22/22 10:15

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			07/27/22 12:06	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/27/22 12:06	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/27/22 12:06	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/27/22 12:06	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/27/22 12:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		72 - 124		07/27/22 12:06	1
Dibromofluoromethane	107		75 - 120		07/27/22 12:06	1
1,2-Dichloroethane-d4 (Surr)	107		75 - 126		07/27/22 12:06	1
Toluene-d8 (Surr)	93		75 - 120		07/27/22 12:06	1

Client Sample Results

Client: Tetra Tech GEO
 Project/Site: Pentair Delavan

Job ID: 500-219778-1

Client Sample ID: TW-1

Lab Sample ID: 500-219778-6

Date Collected: 07/19/22 11:15

Matrix: Water

Date Received: 07/22/22 10:15

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			07/27/22 12:33	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/27/22 12:33	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/27/22 12:33	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/27/22 12:33	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/27/22 12:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		72 - 124		07/27/22 12:33	1
Dibromofluoromethane	106		75 - 120		07/27/22 12:33	1
1,2-Dichloroethane-d4 (Surr)	102		75 - 126		07/27/22 12:33	1
Toluene-d8 (Surr)	93		75 - 120		07/27/22 12:33	1

Client Sample Results

Client: Tetra Tech GEO
Project/Site: Pentair Delavan

Job ID: 500-219778-1

Client Sample ID: D-18

Lab Sample ID: 500-219778-7

Date Collected: 07/19/22 15:15

Matrix: Water

Date Received: 07/22/22 10:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	0.93	J	1.0	0.37	ug/L			07/27/22 13:00	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/27/22 13:00	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/27/22 13:00	1
Trichloroethene	0.71		0.50	0.16	ug/L			07/27/22 13:00	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/27/22 13:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		72 - 124		07/27/22 13:00	1
Dibromofluoromethane	104		75 - 120		07/27/22 13:00	1
1,2-Dichloroethane-d4 (Surr)	103		75 - 126		07/27/22 13:00	1
Toluene-d8 (Surr)	94		75 - 120		07/27/22 13:00	1

Client Sample Results

Client: Tetra Tech GEO
 Project/Site: Pentair Delavan

Job ID: 500-219778-1

Client Sample ID: D-25R
Date Collected: 07/19/22 14:35
Date Received: 07/22/22 10:15

Lab Sample ID: 500-219778-8
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			07/27/22 13:26	1
1,1,1-Trichloroethane	0.62	J	1.0	0.38	ug/L			07/27/22 13:26	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/27/22 13:26	1
Trichloroethene	0.54		0.50	0.16	ug/L			07/27/22 13:26	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/27/22 13:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		72 - 124		07/27/22 13:26	1
Dibromofluoromethane	105		75 - 120		07/27/22 13:26	1
1,2-Dichloroethane-d4 (Surr)	103		75 - 126		07/27/22 13:26	1
Toluene-d8 (Surr)	95		75 - 120		07/27/22 13:26	1

Client Sample Results

Client: Tetra Tech GEO
 Project/Site: Pentair Delavan

Job ID: 500-219778-1

Client Sample ID: MW-1027

Lab Sample ID: 500-219778-9

Date Collected: 07/20/22 09:10

Matrix: Water

Date Received: 07/22/22 10:15

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			07/27/22 13:53	1
1,1,1-Trichloroethane	5.4		1.0	0.38	ug/L			07/27/22 13:53	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/27/22 13:53	1
Trichloroethene	44		0.50	0.16	ug/L			07/27/22 13:53	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/27/22 13:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		72 - 124		07/27/22 13:53	1
Dibromofluoromethane	105		75 - 120		07/27/22 13:53	1
1,2-Dichloroethane-d4 (Surr)	104		75 - 126		07/27/22 13:53	1
Toluene-d8 (Surr)	95		75 - 120		07/27/22 13:53	1

Client Sample Results

Client: Tetra Tech GEO
Project/Site: Pentair Delavan

Job ID: 500-219778-1

Client Sample ID: TW-4

Lab Sample ID: 500-219778-10

Date Collected: 07/20/22 08:40

Matrix: Water

Date Received: 07/22/22 10:15

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			07/27/22 14:20	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/27/22 14:20	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/27/22 14:20	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/27/22 14:20	1
Bromoform	<0.48		1.0	0.48	ug/L			07/27/22 14:20	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/27/22 14:20	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/27/22 14:20	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/27/22 14:20	1
Chloroethane	0.56	J	1.0	0.51	ug/L			07/27/22 14:20	1
Chloroform	<0.37		2.0	0.37	ug/L			07/27/22 14:20	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/27/22 14:20	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/27/22 14:20	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/27/22 14:20	1
cis-1,2-Dichloroethene	1.6		1.0	0.41	ug/L			07/27/22 14:20	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/27/22 14:20	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/27/22 14:20	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/27/22 14:20	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/27/22 14:20	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/27/22 14:20	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/27/22 14:20	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/27/22 14:20	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/27/22 14:20	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/27/22 14:20	1
1,1-Dichloroethane	6.7		1.0	0.41	ug/L			07/27/22 14:20	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/27/22 14:20	1
1,1-Dichloroethene	0.93	J	1.0	0.39	ug/L			07/27/22 14:20	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/27/22 14:20	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/27/22 14:20	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/27/22 14:20	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/27/22 14:20	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/27/22 14:20	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/27/22 14:20	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/27/22 14:20	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/27/22 14:20	1
Methylene Chloride	11		5.0	1.6	ug/L			07/27/22 14:20	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/27/22 14:20	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/27/22 14:20	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/27/22 14:20	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/27/22 14:20	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/27/22 14:20	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/27/22 14:20	1
Styrene	<0.39		1.0	0.39	ug/L			07/27/22 14:20	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/27/22 14:20	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/27/22 14:20	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/27/22 14:20	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/27/22 14:20	1
Toluene	<0.15		0.50	0.15	ug/L			07/27/22 14:20	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/27/22 14:20	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/27/22 14:20	1

Eurofins Chicago

Client Sample Results

Client: Tetra Tech GEO
Project/Site: Pentair Delavan

Job ID: 500-219778-1

Client Sample ID: TW-4

Lab Sample ID: 500-219778-10

Date Collected: 07/20/22 08:40

Matrix: Water

Date Received: 07/22/22 10:15

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			07/27/22 14:20	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/27/22 14:20	1
1,1,1-Trichloroethane	24		1.0	0.38	ug/L			07/27/22 14:20	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/27/22 14:20	1
Trichloroethene	20		0.50	0.16	ug/L			07/27/22 14:20	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/27/22 14:20	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/27/22 14:20	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/27/22 14:20	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/27/22 14:20	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/27/22 14:20	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/27/22 14:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		72 - 124		07/27/22 14:20	1
Dibromofluoromethane	108		75 - 120		07/27/22 14:20	1
1,2-Dichloroethane-d4 (Surr)	106		75 - 126		07/27/22 14:20	1
Toluene-d8 (Surr)	93		75 - 120		07/27/22 14:20	1

Client Sample Results

Client: Tetra Tech GEO
 Project/Site: Pentair Delavan

Job ID: 500-219778-1

Client Sample ID: MW-1026

Lab Sample ID: 500-219778-11

Date Collected: 07/20/22 10:05

Matrix: Water

Date Received: 07/22/22 10:15

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			07/27/22 14:46	1
1,1,1-Trichloroethane	11		1.0	0.38	ug/L			07/27/22 14:46	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/27/22 14:46	1
Trichloroethene	3.5		0.50	0.16	ug/L			07/27/22 14:46	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/27/22 14:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		72 - 124		07/27/22 14:46	1
Dibromofluoromethane	105		75 - 120		07/27/22 14:46	1
1,2-Dichloroethane-d4 (Surr)	104		75 - 126		07/27/22 14:46	1
Toluene-d8 (Surr)	93		75 - 120		07/27/22 14:46	1

Client Sample Results

Client: Tetra Tech GEO
 Project/Site: Pentair Delavan

Job ID: 500-219778-1

Client Sample ID: EX-2R
Date Collected: 07/20/22 10:45
Date Received: 07/22/22 10:15

Lab Sample ID: 500-219778-12
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			07/27/22 15:13	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/27/22 15:13	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/27/22 15:13	1
Trichloroethene	0.67		0.50	0.16	ug/L			07/27/22 15:13	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/27/22 15:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		72 - 124		07/27/22 15:13	1
Dibromofluoromethane	107		75 - 120		07/27/22 15:13	1
1,2-Dichloroethane-d4 (Surr)	106		75 - 126		07/27/22 15:13	1
Toluene-d8 (Surr)	94		75 - 120		07/27/22 15:13	1

Client Sample Results

Client: Tetra Tech GEO
 Project/Site: Pentair Delavan

Job ID: 500-219778-1

Client Sample ID: EX-3R
Date Collected: 07/20/22 11:00
Date Received: 07/22/22 10:15

Lab Sample ID: 500-219778-13
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			07/27/22 15:40	1
1,1,1-Trichloroethane	3.9		1.0	0.38	ug/L			07/27/22 15:40	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/27/22 15:40	1
Trichloroethene	5.7		0.50	0.16	ug/L			07/27/22 15:40	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/27/22 15:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		72 - 124		07/27/22 15:40	1
Dibromofluoromethane	108		75 - 120		07/27/22 15:40	1
1,2-Dichloroethane-d4 (Surr)	107		75 - 126		07/27/22 15:40	1
Toluene-d8 (Surr)	93		75 - 120		07/27/22 15:40	1

Client Sample Results

Client: Tetra Tech GEO
 Project/Site: Pentair Delavan

Job ID: 500-219778-1

Client Sample ID: EX-7R
Date Collected: 07/20/22 11:45
Date Received: 07/22/22 10:15

Lab Sample ID: 500-219778-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	4.8		1.0	0.37	ug/L			07/27/22 16:06	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/27/22 16:06	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/27/22 16:06	1
Trichloroethene	2.1		0.50	0.16	ug/L			07/27/22 16:06	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/27/22 16:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		72 - 124		07/27/22 16:06	1
Dibromofluoromethane	104		75 - 120		07/27/22 16:06	1
1,2-Dichloroethane-d4 (Surr)	104		75 - 126		07/27/22 16:06	1
Toluene-d8 (Surr)	94		75 - 120		07/27/22 16:06	1

Client Sample Results

Client: Tetra Tech GEO
 Project/Site: Pentair Delavan

Job ID: 500-219778-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-219778-15

Date Collected: 07/19/22 00:00

Matrix: Water

Date Received: 07/22/22 10:15

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			07/27/22 09:52	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/27/22 09:52	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/27/22 09:52	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/27/22 09:52	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/27/22 09:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		72 - 124		07/27/22 09:52	1
Dibromofluoromethane	104		75 - 120		07/27/22 09:52	1
1,2-Dichloroethane-d4 (Surr)	104		75 - 126		07/27/22 09:52	1
Toluene-d8 (Surr)	94		75 - 120		07/27/22 09:52	1

Definitions/Glossary

Client: Tetra Tech GEO
Project/Site: Pentair Delavan

Job ID: 500-219778-1

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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

Job ID: 500-219778-1

GC/MS VOA

Analysis Batch: 667157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-219778-1	MW-2005R	Total/NA	Water	8260B	
500-219778-2	MW-2011	Total/NA	Water	8260B	
500-219778-3	D-15	Total/NA	Water	8260B	
500-219778-4	TW-3	Total/NA	Water	8260B	
500-219778-5	MW-2004	Total/NA	Water	8260B	
500-219778-6	TW-1	Total/NA	Water	8260B	
500-219778-7	D-18	Total/NA	Water	8260B	
500-219778-8	D-25R	Total/NA	Water	8260B	
500-219778-9	MW-1027	Total/NA	Water	8260B	
500-219778-10	TW-4	Total/NA	Water	8260B	
500-219778-11	MW-1026	Total/NA	Water	8260B	
500-219778-12	EX-2R	Total/NA	Water	8260B	
500-219778-13	EX-3R	Total/NA	Water	8260B	
500-219778-14	EX-7R	Total/NA	Water	8260B	
500-219778-15	Trip Blank	Total/NA	Water	8260B	
MB 500-667157/6	Method Blank	Total/NA	Water	8260B	
LCS 500-667157/4	Lab Control Sample	Total/NA	Water	8260B	

Surrogate Summary

Client: Tetra Tech GEO
Project/Site: Pentair Delavan

Job ID: 500-219778-1

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	DBFM	DCA	TOL
		(72-124)	(75-120)	(75-126)	(75-120)
500-219778-1	MW-2005R	98	103	101	93
500-219778-2	MW-2011	95	103	102	94
500-219778-3	D-15	95	104	104	93
500-219778-4	TW-3	95	106	106	93
500-219778-5	MW-2004	95	107	107	93
500-219778-6	TW-1	97	106	102	93
500-219778-7	D-18	96	104	103	94
500-219778-8	D-25R	95	105	103	95
500-219778-9	MW-1027	97	105	104	95
500-219778-10	TW-4	97	108	106	93
500-219778-11	MW-1026	96	105	104	93
500-219778-12	EX-2R	97	107	106	94
500-219778-13	EX-3R	95	108	107	93
500-219778-14	EX-7R	97	104	104	94
500-219778-15	Trip Blank	101	104	104	94
LCS 500-667157/4	Lab Control Sample	93	91	92	98
MB 500-667157/6	Method Blank	97	103	104	93

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Tetra Tech GEO
 Project/Site: Pentair Delavan

Job ID: 500-219778-1

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

Lab Sample ID: MB 500-667157/6
 Matrix: Water
 Analysis Batch: 667157

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<0.36		1.0	0.36	ug/L			07/27/22 09:26	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/27/22 09:26	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/27/22 09:26	1
Benzene	<0.15		0.50	0.15	ug/L			07/27/22 09:26	1
Bromoform	<0.48		1.0	0.48	ug/L			07/27/22 09:26	1
Bromomethane	<0.80		3.0	0.80	ug/L			07/27/22 09:26	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/27/22 09:26	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/27/22 09:26	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/27/22 09:26	1
Chloroform	<0.37		2.0	0.37	ug/L			07/27/22 09:26	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/27/22 09:26	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/27/22 09:26	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/27/22 09:26	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/27/22 09:26	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/27/22 09:26	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/27/22 09:26	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/27/22 09:26	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/27/22 09:26	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/27/22 09:26	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/27/22 09:26	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/27/22 09:26	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/27/22 09:26	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			07/27/22 09:26	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/27/22 09:26	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/27/22 09:26	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/27/22 09:26	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/27/22 09:26	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/27/22 09:26	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/27/22 09:26	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/27/22 09:26	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/27/22 09:26	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/27/22 09:26	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/27/22 09:26	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/27/22 09:26	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/27/22 09:26	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/27/22 09:26	1
Naphthalene	0.831	J	1.0	0.34	ug/L			07/27/22 09:26	1
n-Butylbenzene	0.659	J	1.0	0.39	ug/L			07/27/22 09:26	1
N-Propylbenzene	0.622	J	1.0	0.41	ug/L			07/27/22 09:26	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/27/22 09:26	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/27/22 09:26	1
Styrene	0.792	J	1.0	0.39	ug/L			07/27/22 09:26	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/27/22 09:26	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/27/22 09:26	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/27/22 09:26	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/27/22 09:26	1
Toluene	<0.15		0.50	0.15	ug/L			07/27/22 09:26	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/27/22 09:26	1

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QC Sample Results

Client: Tetra Tech GEO
Project/Site: Pentair Delavan

Job ID: 500-219778-1

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

Lab Sample ID: MB 500-667157/6
Matrix: Water
Analysis Batch: 667157

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/27/22 09:26	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/27/22 09:26	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/27/22 09:26	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/27/22 09:26	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/27/22 09:26	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/27/22 09:26	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/27/22 09:26	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			07/27/22 09:26	1
1,2,4-Trimethylbenzene	0.758	J	1.0	0.36	ug/L			07/27/22 09:26	1
1,3,5-Trimethylbenzene	0.791	J	1.0	0.25	ug/L			07/27/22 09:26	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/27/22 09:26	1
Xylenes, Total	0.311	J	1.0	0.22	ug/L			07/27/22 09:26	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	97		72 - 124		07/27/22 09:26	1
Dibromofluoromethane	103		75 - 120		07/27/22 09:26	1
1,2-Dichloroethane-d4 (Surr)	104		75 - 126		07/27/22 09:26	1
Toluene-d8 (Surr)	93		75 - 120		07/27/22 09:26	1

Lab Sample ID: LCS 500-667157/4
Matrix: Water
Analysis Batch: 667157

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromochloromethane	40.0	41.3		ug/L		103	65 - 122
Bromodichloromethane	40.0	40.9		ug/L		102	69 - 120
Benzene	40.0	40.3		ug/L		101	70 - 120
Bromoform	40.0	43.0		ug/L		108	56 - 132
Bromomethane	40.0	30.1		ug/L		75	40 - 152
m&p-Xylene	40.0	39.2		ug/L		98	70 - 125
Carbon tetrachloride	40.0	42.3		ug/L		106	59 - 133
o-Xylene	40.0	41.4		ug/L		104	70 - 120
Chlorobenzene	40.0	43.0		ug/L		108	70 - 120
Chloroethane	40.0	40.5		ug/L		101	48 - 136
Chloroform	40.0	39.8		ug/L		100	70 - 120
Chloromethane	40.0	30.5		ug/L		76	56 - 152
2-Chlorotoluene	40.0	41.8		ug/L		104	70 - 125
4-Chlorotoluene	40.0	43.0		ug/L		107	68 - 124
cis-1,2-Dichloroethene	40.0	40.6		ug/L		102	70 - 125
cis-1,3-Dichloropropene	40.0	36.0		ug/L		90	64 - 127
Dibromochloromethane	40.0	41.1		ug/L		103	68 - 125
1,2-Dibromo-3-Chloropropane	40.0	33.4		ug/L		84	56 - 123
1,2-Dibromoethane	40.0	37.4		ug/L		94	70 - 125
Dibromomethane	40.0	39.3		ug/L		98	70 - 120
1,2-Dichlorobenzene	40.0	43.7		ug/L		109	70 - 125
1,3-Dichlorobenzene	40.0	44.9		ug/L		112	70 - 125
1,4-Dichlorobenzene	40.0	43.0		ug/L		108	70 - 120

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QC Sample Results

Client: Tetra Tech GEO
Project/Site: Pentair Delavan

Job ID: 500-219778-1

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

Lab Sample ID: LCS 500-667157/4
Matrix: Water
Analysis Batch: 667157

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	40.0	36.2		ug/L		91	40 - 159
1,1-Dichloroethane	40.0	42.1		ug/L		105	70 - 125
1,2-Dichloroethane	40.0	41.5		ug/L		104	68 - 127
1,1-Dichloroethene	40.0	41.1		ug/L		103	67 - 122
1,2-Dichloropropane	40.0	42.1		ug/L		105	67 - 130
1,3-Dichloropropane	40.0	39.8		ug/L		100	62 - 136
2,2-Dichloropropane	40.0	43.5		ug/L		109	58 - 139
1,1-Dichloropropene	40.0	44.4		ug/L		111	70 - 121
Ethylbenzene	40.0	43.4		ug/L		109	70 - 123
Hexachlorobutadiene	40.0	46.5		ug/L		116	51 - 150
Isopropylbenzene	40.0	37.3		ug/L		93	70 - 126
Methylene Chloride	40.0	39.5		ug/L		99	69 - 125
Methyl tert-butyl ether	40.0	34.3		ug/L		86	55 - 123
Naphthalene	40.0	34.5		ug/L		86	53 - 144
n-Butylbenzene	40.0	38.8		ug/L		97	68 - 125
N-Propylbenzene	40.0	38.6		ug/L		97	69 - 127
p-Isopropyltoluene	40.0	40.0		ug/L		100	70 - 125
sec-Butylbenzene	40.0	38.5		ug/L		96	70 - 123
Styrene	40.0	39.2		ug/L		98	70 - 120
tert-Butylbenzene	40.0	38.6		ug/L		96	70 - 121
1,1,1,2-Tetrachloroethane	40.0	42.9		ug/L		107	70 - 125
1,1,2,2-Tetrachloroethane	40.0	36.2		ug/L		91	62 - 140
Tetrachloroethene	40.0	46.3		ug/L		116	70 - 128
Toluene	40.0	43.1		ug/L		108	70 - 125
trans-1,2-Dichloroethene	40.0	42.4		ug/L		106	70 - 125
trans-1,3-Dichloropropene	40.0	35.4		ug/L		89	62 - 128
1,2,3-Trichlorobenzene	40.0	42.4		ug/L		106	51 - 145
1,2,4-Trichlorobenzene	40.0	43.2		ug/L		108	57 - 137
1,1,1-Trichloroethane	40.0	41.3		ug/L		103	70 - 125
1,1,2-Trichloroethane	40.0	39.9		ug/L		100	71 - 130
Trichloroethene	40.0	44.9		ug/L		112	70 - 125
Trichlorofluoromethane	40.0	40.1		ug/L		100	55 - 128
1,2,3-Trichloropropane	40.0	36.1		ug/L		90	50 - 133
1,2,4-Trimethylbenzene	40.0	39.5		ug/L		99	70 - 123
1,3,5-Trimethylbenzene	40.0	39.1		ug/L		98	70 - 123
Vinyl chloride	40.0	38.5		ug/L		96	64 - 126
Xylenes, Total	80.0	80.6		ug/L		101	70 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	93		72 - 124
Dibromofluoromethane	91		75 - 120
1,2-Dichloroethane-d4 (Surr)	92		75 - 126
Toluene-d8 (Surr)	98		75 - 120

Lab Chronicle

Client: Tetra Tech GEO
Project/Site: Pentair Delavan

Job ID: 500-219778-1

Client Sample ID: MW-2005R

Date Collected: 07/19/22 10:00

Date Received: 07/22/22 10:15

Lab Sample ID: 500-219778-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	667157	07/27/22 10:19	W1T	EETNC CHI

Client Sample ID: MW-2011

Date Collected: 07/19/22 09:20

Date Received: 07/22/22 10:15

Lab Sample ID: 500-219778-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	667157	07/27/22 10:46	W1T	EETNC CHI

Client Sample ID: D-15

Date Collected: 07/19/22 13:10

Date Received: 07/22/22 10:15

Lab Sample ID: 500-219778-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	667157	07/27/22 11:12	W1T	EETNC CHI

Client Sample ID: TW-3

Date Collected: 07/19/22 11:55

Date Received: 07/22/22 10:15

Lab Sample ID: 500-219778-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	667157	07/27/22 11:39	W1T	EETNC CHI

Client Sample ID: MW-2004

Date Collected: 07/19/22 10:40

Date Received: 07/22/22 10:15

Lab Sample ID: 500-219778-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	667157	07/27/22 12:06	W1T	EETNC CHI

Client Sample ID: TW-1

Date Collected: 07/19/22 11:15

Date Received: 07/22/22 10:15

Lab Sample ID: 500-219778-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	667157	07/27/22 12:33	W1T	EETNC CHI

Client Sample ID: D-18

Date Collected: 07/19/22 15:15

Date Received: 07/22/22 10:15

Lab Sample ID: 500-219778-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	667157	07/27/22 13:00	W1T	EETNC CHI

Lab Chronicle

Client: Tetra Tech GEO
Project/Site: Pentair Delavan

Job ID: 500-219778-1

Client Sample ID: D-25R
Date Collected: 07/19/22 14:35
Date Received: 07/22/22 10:15

Lab Sample ID: 500-219778-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	667157	07/27/22 13:26	W1T	EETNC CHI

Client Sample ID: MW-1027
Date Collected: 07/20/22 09:10
Date Received: 07/22/22 10:15

Lab Sample ID: 500-219778-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	667157	07/27/22 13:53	W1T	EETNC CHI

Client Sample ID: TW-4
Date Collected: 07/20/22 08:40
Date Received: 07/22/22 10:15

Lab Sample ID: 500-219778-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	667157	07/27/22 14:20	W1T	EETNC CHI

Client Sample ID: MW-1026
Date Collected: 07/20/22 10:05
Date Received: 07/22/22 10:15

Lab Sample ID: 500-219778-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	667157	07/27/22 14:46	W1T	EETNC CHI

Client Sample ID: EX-2R
Date Collected: 07/20/22 10:45
Date Received: 07/22/22 10:15

Lab Sample ID: 500-219778-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	667157	07/27/22 15:13	W1T	EETNC CHI

Client Sample ID: EX-3R
Date Collected: 07/20/22 11:00
Date Received: 07/22/22 10:15

Lab Sample ID: 500-219778-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	667157	07/27/22 15:40	W1T	EETNC CHI

Client Sample ID: EX-7R
Date Collected: 07/20/22 11:45
Date Received: 07/22/22 10:15

Lab Sample ID: 500-219778-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	667157	07/27/22 16:06	W1T	EETNC CHI

Lab Chronicle

Client: Tetra Tech GEO
Project/Site: Pentair Delavan

Job ID: 500-219778-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-219778-15

Date Collected: 07/19/22 00:00

Matrix: Water

Date Received: 07/22/22 10:15

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Analysis	8260B		1	667157	07/27/22 09:52	W1T	EETNC CHI

Laboratory References:

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

- 1
- 2
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- 15

Accreditation/Certification Summary

Client: Tetra Tech GEO
Project/Site: Pentair Delavan

Job ID: 500-219778-1

Laboratory: Eurofins Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-22

- 1
- 2
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- 11
- 12
- 13
- 14
- 15

Eurofins Chicago

2417 Bond Street
University Park IL 60484
Phone 708-534-5200 Fax 708-534-5211

Chain of Custody Record

eurofins

500-219778

Client Information		Sampler <i>Connor Lavzon</i>		Lab PM Fredrick Sandie		Carrier Tracking No(s)		COC No 500-103617-41443 1			
Client Contact Mr Mark Manthey		Phone (262) 792-1282		E-Mail Sandra.Fredrick@eurofinsus.com		State of Origin		Page Page 1 of 2			
Company Tetra Tech GEO		PWS ID		Analysis Requested						Job # 117-7469011.100	
Address 175 N Corporate Drive Suite 100		Due Date Requested <i>standard</i>		Field Filtered Sample (Yes or No) Perform MS/MS D (Yes or No) 8260B VOC PCE, 1,1,1 TCA 1,1,2-TCA TCE, VC 8260B VOC Full list		Total Number of Containers		Preservation Codes A H ₂ L N Hexane B NaOH N None C Zn Acetate O AsNaO ₂ D Nitric Acid P Na ₂ O ₄ S E NaHSO ₄ Q Na ₂ SO ₃ F MeOH R Na ₂ S ₂ O ₃ G Amchlor S H ₂ SO ₄ H Ascorbil Acid T TSP Dodecahyd rate I ce L Acetone J DI Water V MCAA K ED ^{TA} W pH 4-5 L ELA Y Trizma Z Other (specify)			
City Brookfield		TAT Requested (days)						Special Instructions/Note			
State Zip WI 53045		Compliance Project <input type="checkbox"/> Yes <input type="checkbox"/> No									
Phone 262 792 1282(Te)		PO #									
Email mark.manthey@tetratech.com		W#									
Project Name Pentair Delavan		Project # 50006640									
Site		SSOW#									
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=wastewater)		Preservation Code	
		<i>2022</i>									
<i>11099876543</i>		MW-2005R		7/19 10:00		G		Water		N N 3	
		MW-2011		9:20				Water		3	
		D-15		13:10				Water		3	
		TW-3		11:55				Water		3	
		MW-2004		10:40				Water		3	
		TW-1		11:15				Water		3	
		D-18		15:15				Water		3	
		D-25R		14:35				Water		3	
		MW-1027		7/20 9:10				Water		3	
		TW-4		8:40				Water		3	
		MW-1026		10:05				Water		3	
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
<input type="checkbox"/> Non Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological						<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Del verable Requested I II III IV Other (specify)						Special Instructions/QC Requirements					
Empty Kit Reinquished by		Date		Time		Method of Shipment					
Reinquished by <i>Connor Lavzon</i>		Date/Time 7/21/22 10:00		Company Tetra Tech		Received by <i>[Signature]</i>		Date/Time 7/21/22 10:00		Company Eurofins	
Reinquished by <i>[Signature]</i>		Date/Time 7-21-22 17:00		Company Eurofins		Received by <i>[Signature]</i>		Date/Time 7/22/22 10:15		Company Eurofins	
Reinquished by		Date/Time		Company		Received by		Date/Time		Company	
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No				Cooler Temperature s C and Other Remarks		4.4 → 2.4			

Login Sample Receipt Checklist

Client: Tetra Tech GEO

Job Number: 500-219778-1

Login Number: 219778

List Number: 1

Creator: Scott, Sherri L

List Source: Eurofins 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").	False	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



APPENDIX C

**WASTEWATER DISCHARGE MONITORING SHORT REPORTS AND
STORM SEWER OUTFALL SS-1 ANALYTICAL RESULTS**

TETRA TECH

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 : 01/01/2022 - 03/31/2022
 Form Due Date : 04/21/2022
 Permit Number : **0046566**

Date Received:	
DOC:	488246
FIN:	7072
FID:	265010900
Region:	Southeast Region
Permit Drafter:	Drafter not set
Reviewer:	Nicholas M Lent
Office:	Milwaukee

Sample Point	Parameter #	Parameter	Date Sample	Sample Type	Sample Results	Units	Limit Type	Limit	LOD	LOQ	QC Exceed?	Lab Certification
001	377	pH Field	03/28/2022	GRAB	7.59	su	Daily Max Daily Min	9(0) 6(0)			N	
001	457	Suspended Solids, Total	03/28/2022	GRAB	<1.9	mg/L	Daily Max	40(0)	1.9	5.0	N	999580010
001	490	Tetrachloroethylene	03/28/2022	GRAB	<0.37	ug/L	Monthly Avg	50(0)	0.37	1.0	N	999580010
001	561	1,1,1-Trichloro- ethane	03/28/2022	GRAB	<0.38	ug/L	Monthly Avg	50(0)	0.38	1.0	N	999580010
001	508	Trichloro- ethylene	03/28/2022	GRAB	0.38	ug/L	Monthly Avg	50(0)	0.16	0.50	Y	999580010
001	517	Vinyl chloride	03/28/2022	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	HI 98129	
PROJECT NO.	Delavan Well #4 WPDES		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)	3/28/2022				
CLOCK TIME (Military)	1048				
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)	12.2				
pH	7.59				
ELEC. COND. (uS/cm)	Measured	1264			
	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	3/28/2022				
SAMPLER'S NAME	Dennis				

*Measured from top of well casing.

ANALYTICAL REPORT

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

Laboratory Job ID: 500-214285-1
Client Project/Site: Delavan Well #4 WPDES

For:
Pentair Water
293 Wright Street
Delavan, Wisconsin 53115

Attn: Dennis Schwind



Authorized for release by:
4/5/2022 1:56:23 PM

Sandie Fredrick, Project Manager II
(920)261-1660
Sandra.Fredrick@et.eurofinsus.com

LINKS

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results through
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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Lab Chronicle	7
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Definitions/Glossary

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

Job ID: 500-214285-1

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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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: 500-214285-1

Job ID: 500-214285-1

Laboratory: Eurofins Chicago

Narrative

Job Narrative
500-214285-1

Comments

No additional comments.

Receipt

The samples were received on 3/29/2022 10:20 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.8° 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: 500-214285-1

Client Sample ID: SS1

Lab Sample ID: 500-214285-1

Date Collected: 03/28/22 10:48

Matrix: Water

Date Received: 03/29/22 10:20

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			04/01/22 13:03	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/01/22 13:03	1
Trichloroethene	0.38	J	0.50	0.16	ug/L			04/01/22 13:03	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/01/22 13:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 126		04/01/22 13:03	1
4-Bromofluorobenzene (Surr)	99		72 - 124		04/01/22 13:03	1
Dibromofluoromethane (Surr)	94		75 - 120		04/01/22 13:03	1
Toluene-d8 (Surr)	96		75 - 120		04/01/22 13:03	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			03/31/22 11:24	1

Client Sample Results

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

Job ID: 500-214285-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-214285-2

Date Collected: 03/28/22 00:00

Matrix: Water

Date Received: 03/29/22 10:20

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			04/01/22 13:28	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			04/01/22 13:28	1
Trichloroethene	<0.16		0.50	0.16	ug/L			04/01/22 13:28	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			04/01/22 13:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		75 - 126		04/01/22 13:28	1
4-Bromofluorobenzene (Surr)	98		72 - 124		04/01/22 13:28	1
Dibromofluoromethane (Surr)	95		75 - 120		04/01/22 13:28	1
Toluene-d8 (Surr)	95		75 - 120		04/01/22 13:28	1

Lab Chronicle

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

Job ID: 500-214285-1

Client Sample ID: SS1

Lab Sample ID: 500-214285-1

Date Collected: 03/28/22 10:48

Matrix: Water

Date Received: 03/29/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	649831	04/01/22 13:03	STW	TAL CHI
Total/NA	Analysis	SM 2540D		1	649680	(Start) 03/31/22 11:24 (End) 03/31/22 11:25	SMO	TAL CHI

Client Sample ID: Trip Blank

Lab Sample ID: 500-214285-2

Date Collected: 03/28/22 00:00

Matrix: Water

Date Received: 03/29/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	649831	04/01/22 13:28	STW	TAL CHI

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 500-214285-1

Laboratory: Eurofins Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-22

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Method Summary

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

Job ID: 500-214285-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL CHI
5030B	Purge and Trap	SW846	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 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: 500-214285-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-214285-1	SS1	Water	03/28/22 10:48	03/29/22 10:20
500-214285-2	Trip Blank	Water	03/28/22 00:00	03/29/22 10:20

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Login Sample Receipt Checklist

Client: Pentair Water

Job Number: 500-214285-1

Login Number: 214285

List Source: Eurofins Chicago

List Number: 1

Creator: Buckley, Paula M

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	3.8
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 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 : 04/01/2022 - 06/30/2022
 Form Due Date : 07/21/2022
 Permit Number : **0046566**

Date Received:	
DOC:	495819
FIN:	7072
FID:	265010900
Region:	Southeast Region
Permit Drafter:	Drafter not set
Reviewer:	Nicholas M Lent
Office:	Milwaukee

Sample Point	Parameter #	Parameter	Date Sample	Sample Type	Sample Results	Units	Limit Type	Limit	LOD	LOQ	QC Exceed?	Lab Certification
001	377	pH Field	06/20/2022	GRAB	7.46	su	Daily Max Daily Min	9(0) 6(0)			N	
001	457	Suspended Solids, Total	06/20/2022	GRAB	<1.9	mg/L	Daily Max	40(0)	1.9	5.0	N	999580010
001	490	Tetrachloroethylene	06/20/2022	GRAB	<0.37	ug/L	Monthly Avg	50(0)	0.37	1.0	N	999580010
001	561	1,1,1-Trichloro- ethane	06/20/2022	GRAB	<0.38	ug/L	Monthly Avg	50(0)	0.38	1.0	N	999580010
001	508	Trichloro- ethylene	06/20/2022	GRAB	<0.16	ug/L	Monthly Avg	50(0)	0.16	0.50	N	999580010
001	517	Vinyl chloride	06/20/2022	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

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)	6/20/2022				
CLOCK TIME (Military)	0954				
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)	17.1				
pH	7.46				
ELEC. COND. (uS/cm)	Measured	1354			
	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	6/20/22				
SAMPLER'S NAME	Dennis				

*Measured from top of well casing.

ANALYTICAL REPORT

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

Laboratory Job ID: 500-218374-1
Client Project/Site: Delavan Well #4 WPDES

For:
Pentair Water
293 Wright Street
Delavan, Wisconsin 53115

Attn: Dennis Schwind



Authorized for release by:
7/5/2022 2:03:19 PM

Sandie Fredrick, Project Manager II
(920)261-1660
Sandra.Fredrick@et.eurofinsus.com

LINKS

Review your project
results through



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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

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

Job ID: 500-218374-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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: 500-218374-1

Job ID: 500-218374-1

Laboratory: Eurofins Chicago

Narrative

Job Narrative
500-218374-1

Comments

No additional comments.

Receipt

The samples were received on 6/21/2022 10:10 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.7° 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.

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Client Sample Results

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

Job ID: 500-218374-1

Client Sample ID: SS1

Lab Sample ID: 500-218374-1

Date Collected: 06/20/22 09:54

Matrix: Water

Date Received: 06/21/22 10:10

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			07/01/22 18:00	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/01/22 18:00	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/01/22 18:00	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/01/22 18:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		75 - 126		07/01/22 18:00	1
4-Bromofluorobenzene (Surr)	79		72 - 124		07/01/22 18:00	1
Dibromofluoromethane (Surr)	107		75 - 120		07/01/22 18:00	1
Toluene-d8 (Surr)	92		75 - 120		07/01/22 18:00	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			06/23/22 15:34	1

Client Sample Results

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

Job ID: 500-218374-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-218374-2

Date Collected: 06/20/22 00:00

Matrix: Water

Date Received: 06/21/22 10:10

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			07/01/22 13:32	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/01/22 13:32	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/01/22 13:32	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			07/01/22 13:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		75 - 126		07/01/22 13:32	1
4-Bromofluorobenzene (Surr)	78		72 - 124		07/01/22 13:32	1
Dibromofluoromethane (Surr)	100		75 - 120		07/01/22 13:32	1
Toluene-d8 (Surr)	95		75 - 120		07/01/22 13:32	1

Lab Chronicle

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

Job ID: 500-218374-1

Client Sample ID: SS1

Lab Sample ID: 500-218374-1

Date Collected: 06/20/22 09:54

Matrix: Water

Date Received: 06/21/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	663816	07/01/22 18:00	PSP	TAL CHI
Total/NA	Analysis	SM 2540D		1	662588	(Start) 06/23/22 15:34	SMO	TAL CHI
						(End) 06/23/22 15:37		

Client Sample ID: Trip Blank

Lab Sample ID: 500-218374-2

Date Collected: 06/20/22 00:00

Matrix: Water

Date Received: 06/21/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	663816	07/01/22 13:32	PSP	TAL CHI

Laboratory References:

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



Accreditation/Certification Summary

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

Job ID: 500-218374-1

Laboratory: Eurofins Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-22

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Method Summary

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

Job ID: 500-218374-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL CHI
5030B	Purge and Trap	SW846	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 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: 500-218374-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-218374-1	SS1	Water	06/20/22 09:54	06/21/22 10:10
500-218374-2	Trip Blank	Water	06/20/22 00:00	06/21/22 10:10

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Login Sample Receipt Checklist

Client: Pentair Water

Job Number: 500-218374-1

Login Number: 218374

List Number: 1

Creator: Buckley, Paula M

List Source: Eurofins 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	1.7
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.	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 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 : 07/01/2022 - 09/30/2022
 Form Due Date : 10/21/2022
 Permit Number : **0046566**

Date Received:
 DOC: 500751
 FIN: 7072
 FID: 265010900
 Region: Southeast Region
 Permit Drafter: Drafter not set
 Reviewer: Nicholas M Lent
 Office: Milwaukee

Sample Point	Parameter #	Parameter	Date Sample	Sample Type	Sample Results	Units	Limit Type	Limit	LOD	LOQ	QC Exceed?	Lab Certification
001	377	pH Field	09/07/2022	GRAB	7.3	su	Daily Max Daily Min	9(0) 6(0)			N	
001	457	Suspended Solids, Total	09/07/2022	GRAB	<1.9	mg/L	Daily Max	40(0)	1.9	5.0	N	999580010
001	490	Tetrachloroethylene	09/07/2022	GRAB	<0.37	ug/L	Monthly Avg	50(0)	0.37	1.0	N	999580010
001	561	1,1,1-Trichloro- ethane	09/07/2022	GRAB	<0.38	ug/L	Monthly Avg	50(0)	0.38	1.0	N	999580010
001	508	Trichloro- ethylene	09/07/2022	GRAB	0.59	ug/L	Monthly Avg	50(0)	0.16	0.50	N	999580010
001	517	Vinyl chloride	09/07/2022	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

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 #4WPDES		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)	9-7-2022				
CLOCK TIME (Military)	1100				
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)	16.6				
pH	7.3				
ELEC. COND. (uS/cm)	Measured	1409			
	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	9-7-2022				
SAMPLER'S NAME	Dennis				

*Measured from top of well casing.

ANALYTICAL REPORT

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

Laboratory Job ID: 500-221892-1
Client Project/Site: Delavan Well #4 WPDES

For:
Pentair Water
293 Wright Street
Delavan, Wisconsin 53115

Attn: Dennis Schwind



Authorized for release by:
9/22/2022 7:23:15 AM

Sandie Fredrick, Project Manager II
(920)261-1660
Sandra.Fredrick@et.eurofinsus.com

LINKS

Review your project
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

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

Job ID: 500-221892-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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: 500-221892-1

Job ID: 500-221892-1

Laboratory: Eurofins Chicago

Narrative

Job Narrative
500-221892-1

Comments

No additional comments.

Receipt

The samples were received on 9/8/2022 9:50 AM. Unless otherwise noted below, 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 Results

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

Job ID: 500-221892-1

Client Sample ID: SS1

Lab Sample ID: 500-221892-1

Date Collected: 09/07/22 11:00

Matrix: Water

Date Received: 09/08/22 09:50

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			09/17/22 15:05	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			09/17/22 15:05	1
Trichloroethene	0.59		0.50	0.16	ug/L			09/17/22 15:05	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/17/22 15:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		75 - 126		09/17/22 15:05	1
4-Bromofluorobenzene (Surr)	94		72 - 124		09/17/22 15:05	1
Dibromofluoromethane (Surr)	97		75 - 120		09/17/22 15:05	1
Toluene-d8 (Surr)	98		75 - 120		09/17/22 15:05	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			09/14/22 18:58	1

Client Sample Results

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

Job ID: 500-221892-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-221892-2

Date Collected: 09/07/22 00:00

Matrix: Water

Date Received: 09/08/22 09:50

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			09/17/22 15:29	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			09/17/22 15:29	1
Trichloroethene	<0.16		0.50	0.16	ug/L			09/17/22 15:29	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			09/17/22 15:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		75 - 126		09/17/22 15:29	1
4-Bromofluorobenzene (Surr)	94		72 - 124		09/17/22 15:29	1
Dibromofluoromethane (Surr)	97		75 - 120		09/17/22 15:29	1
Toluene-d8 (Surr)	99		75 - 120		09/17/22 15:29	1

Lab Chronicle

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

Job ID: 500-221892-1

Client Sample ID: SS1

Date Collected: 09/07/22 11:00

Date Received: 09/08/22 09:50

Lab Sample ID: 500-221892-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	675099	PMF	EET CHI	09/17/22 15:05
Total/NA	Analysis	SM 2540D		1	674649	PFK	EET CHI	09/14/22 18:58 - 09/14/22 19:00 ¹

Client Sample ID: Trip Blank

Date Collected: 09/07/22 00:00

Date Received: 09/08/22 09:50

Lab Sample ID: 500-221892-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	675099	PMF	EET CHI	09/17/22 15:29

¹ Completion dates and times are reported or not reported per method requirements or individual lab discretion.

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 500-221892-1

Laboratory: Eurofins Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-23

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Method Summary

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

Job ID: 500-221892-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	EET CHI
5030B	Purge and Trap	SW846	EET 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:

EET CHI = Eurofins 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: 500-221892-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-221892-1	SS1	Water	09/07/22 11:00	09/08/22 09:50
500-221892-2	Trip Blank	Water	09/07/22 00:00	09/08/22 09:50

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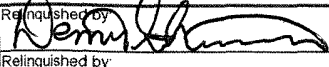
Eurofins Chicago

2417 Bond Street
 University Park IL 60484
 Phone 708-534-5200 Fax. 708-534-5211

Chain of Custody Record



Environment Testing
 America

Client Information		Sampler Dennis		Lab PM Fredrick Sandie		Carrier Tracking No(s)		COC No: 500-99098-25416 1			
Client Contact Dennis Schwind		Phone 262-728-7225		E-Mail Sandra.Fredrick@et.eurofinsus.com		State of Origin.		Page Page 1 of 1			
Company Pentair Water		PWSID		Analysis Requested				Job #: 500-221892			
Address 293 Wright Street		Due Date Requested									
City Delavan		TAT Requested (days)		 500-221892 COC				Preservation Codes 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 Dodecylhydroxide I Ice U Acetone J DI Water V MCAA K EDTA W pH 4-5 L EDA Y Trizma Z other (specify)			
State Zip WI 53115		Compliance Protocol <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No									
Purchase Order #		Purchase Order not required		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No)				Total Number of Containers			
Email denn.s.schwind@PENTAIR.COM		WO #									
Project Name Pentair - SS1 Quarterly		Project # 50006669		TCE TCA PCE Vinyl Chloride TSS				Special Instructions/Note			
Site Delavan WI Well #4 WAPDES		SSOW#									
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue Air/Air)			
1 SS1		9/7/22		1100		Water		X X X X X			
2 Trip Blank						Water		X			
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)							
Deliverable Requested I II III IV Other (specify)				<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months							
Empty Kit Relinquished by		Date		Time		Method of Shipment:					
Relinquished by 		Date/Time 11:30 9/7/22		Company Pentair		Received by Stephanie Hernandez		Date/Time 9/8/22 09:50		Company EEIA	
Relinquished by		Date/Time		Company		Received by		Date/Time		Company	
Relinquished by		Date/Time		Company		Received by		Date/Time		Company	
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks 3.7+2.4							



ORIGIN ID:RRLA (262) 202-5955
DENNIS SCHWIND
PENTAIR WATER
293 WRIGHT ST

DELAVAN, WI 53115
UNITED STATES US

SHIP DATE: 29 JUN 22
ACTWGT: 15 00 LB MAN
CAD: 0269688/CAFE3511



500-221892 Waybi

TO **SAMPLE RECEIPT**
EUROFINS
2417 BOND ST.

57002/2746/AF4B

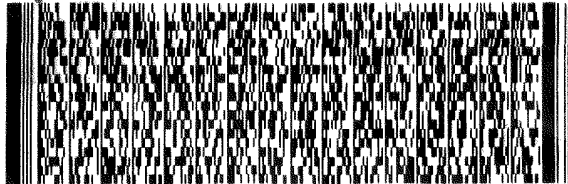
UNIVRSITY PARK IL 60484

(262) 202-5955
INV
PO:

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DEPT:

RMA: ||| ||| |||



TRK# 5887 6287 7745

RETURNS MON - FRI
PRIORITY OVERNIGHT

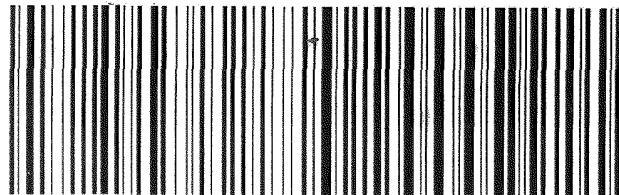
fedEx

THU - 08 SEP AA
PRIORITY OVERNIGHT 34

TRK# 5887 6287 7745
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ORIGIN ID:RRLA (262) 202-5955
DENNIS SCHWIND
PENTAIR WATER
293 WRIGHT ST

DELAVAN, WI 53115
UNITED STATES US

SHIP DATE: 29 JUN 22
ACTWGT: 15 00 LB MAN
CAD: 0269688/CAFE3511



500-221892 Waybi

57002/2746/AF4B

TO **SAMPLE RECEIPT**
EUROFINS
2417 BOND ST.

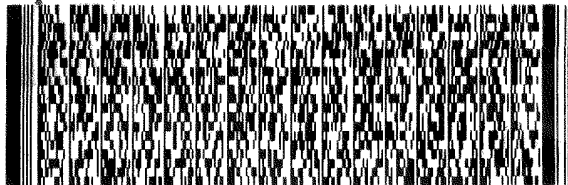
UNIVRSITY PARK IL 60484

(262) 202-5955
INV
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REF:

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RMA: ||| ||| ||| |||



FedEx
Express



JZ110261211070V

RETURNS MON - FRI
PRIORITY OVERNIGHT

TRK# 5887 6287 7745

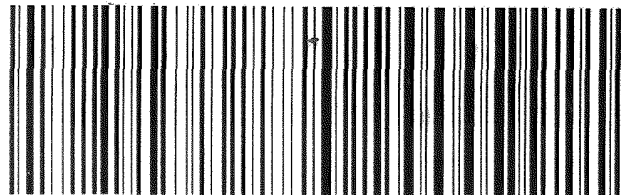
fedEx

THU - 08 SEP AA
PRIORITY OVERNIGHT 34

TRK# 5887 6287 7745
0221

79 JOTA

60484
IL-US
ORD



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Login Sample Receipt Checklist

Client: Pentair Water

Job Number: 500-221892-1

Login Number: 221892

List Number: 1

Creator: Hernandez, Stephanie

List Source: Eurofins 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 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 : 10/01/2022 - 12/31/2022
 Form Due Date : 01/21/2023
 Permit Number : **0046566**

Date Received:
 DOC: 506212
 FIN: 7072
 FID: 265010900
 Region: Southeast Region
 Permit Drafter: Drafter not set
 Reviewer: Nicholas M Lent
 Office: Milwaukee

Sample Point	Parameter #	Parameter	Date Sample	Sample Type	Sample Results	Units	Limit Type	Limit	LOD	LOQ	QC Exceed?	Lab Certification
001	377	pH Field	12/06/2022	GRAB	7.79	su	Daily Max Daily Min	9(0) 6(0)			N	
001	457	Suspended Solids, Total	12/06/2022	GRAB	<1.9	mg/L	Daily Max	40(0)	1.9	5.0	N	999580010
001	490	Tetrachloroethylene	12/06/2022	GRAB	<0.37	ug/L	Monthly Avg	50(0)	0.37	1.0	N	999580010
001	561	1,1,1-Trichloro- ethane	12/06/2022	GRAB	<0.38	ug/L	Monthly Avg	50(0)	0.38	1.0	N	999580010
001	508	Trichloro- ethylene	12/06/2022	GRAB	0.19	ug/L	Monthly Avg	50(0)	0.16	0.50	Y	999580010
001	517	Vinyl chloride	12/06/2022	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.

Submitted by Mark Manthey(mmanthey) on 1/6/2023 11:30:28 AM

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)	12/06/2022				
CLOCK TIME (Military)	1010				
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)	12.0				
pH	7.79				
ELEC. COND. (µS/cm)	Measured	1254			
	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	12-6-22				
SAMPLER'S NAME	Dennis				

*Measured from top of well casing.

 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Dennis Schwind
Pentair Water
293 Wright Street
Delavan, Wisconsin 53115
Generated 12/20/2022 2:53:20 PM

JOB DESCRIPTION

Delavan Well #4 WPDES

JOB NUMBER

500-226463-1

Eurofins Chicago

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

Results relate only to the items tested and the sample(s) as received by the laboratory. The results, detection limits (LOD) and Quantitation Limits (LOQ) have been adjusted for sample dilutions and/or solids content.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Authorization



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12/20/2022 2:53:20 PM

Authorized for release by
Sandie Fredrick, Project Manager II
Sandra.Fredrick@et.eurofinsus.com
(920)261-1660



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Definitions/Glossary

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

Job ID: 500-226463-1

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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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: 500-226463-1

Job ID: 500-226463-1

Laboratory: Eurofins Chicago

Narrative

Job Narrative
500-226463-1

Comments

No additional comments.

Receipt

The samples were received on 12/8/2022 10:10 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.9° 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: 500-226463-1

Client Sample ID: SS1

Lab Sample ID: 500-226463-1

Date Collected: 12/06/22 10:10

Matrix: Water

Date Received: 12/08/22 10:10

Method: SW846 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			12/15/22 15:02	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			12/15/22 15:02	1
Trichloroethene	0.19	J	0.50	0.16	ug/L			12/15/22 15:02	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			12/15/22 15:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		75 - 126		12/15/22 15:02	1
4-Bromofluorobenzene (Surr)	100		72 - 124		12/15/22 15:02	1
Dibromofluoromethane (Surr)	96		75 - 120		12/15/22 15:02	1
Toluene-d8 (Surr)	100		75 - 120		12/15/22 15:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	<1.9		5.0	1.9	mg/L			12/12/22 10:15	1

Client Sample Results

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

Job ID: 500-226463-1

Client Sample ID: Trip Blank

Lab Sample ID: 500-226463-2

Date Collected: 12/06/22 00:00

Matrix: Water

Date Received: 12/08/22 10:10

Method: SW846 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			12/15/22 13:53	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			12/15/22 13:53	1
Trichloroethene	<0.16		0.50	0.16	ug/L			12/15/22 13:53	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			12/15/22 13:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		75 - 126		12/15/22 13:53	1
4-Bromofluorobenzene (Surr)	101		72 - 124		12/15/22 13:53	1
Dibromofluoromethane (Surr)	95		75 - 120		12/15/22 13:53	1
Toluene-d8 (Surr)	98		75 - 120		12/15/22 13:53	1

Lab Chronicle

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

Job ID: 500-226463-1

Client Sample ID: SS1

Lab Sample ID: 500-226463-1

Date Collected: 12/06/22 10:10

Matrix: Water

Date Received: 12/08/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	689949	W1T	EET CHI	12/15/22 15:02
Total/NA	Analysis	SM 2540D		1	689319	EH	EET CHI	12/12/22 10:15 - 12/12/22 10:18 ¹

Client Sample ID: Trip Blank

Lab Sample ID: 500-226463-2

Date Collected: 12/06/22 00:00

Matrix: Water

Date Received: 12/08/22 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	689949	W1T	EET CHI	12/15/22 13:53

¹ Completion dates and times are reported or not reported per method requirements or individual lab discretion.

Laboratory References:

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



Accreditation/Certification Summary

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

Job ID: 500-226463-1

Laboratory: Eurofins Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-23

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Method Summary

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

Job ID: 500-226463-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	EET CHI
5030B	Purge and Trap	SW846	EET 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:

EET CHI = Eurofins 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: 500-226463-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-226463-1	SS1	Water	12/06/22 10:10	12/08/22 10:10
500-226463-2	Trip Blank	Water	12/06/22 00:00	12/08/22 10:10

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Login Sample Receipt Checklist

Client: Pentair Water

Job Number: 500-226463-1

Login Number: 226463

List Number: 1

Creator: James, Jeff A

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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	3.9
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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



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