

Neste, David E - DNR

From: Jeffrey Howard Danko <jeffrey.howard.danko@jci.com>
Sent: Friday, January 31, 2020 3:12 PM
To: Chronert, Roxanne N - DNR; Neste, David E - DNR
Cc: Scott D Wahl; Mia Lombardi; Bedard, Michael; John D Perkins; Rick Dewey Bethel
Subject: Draft Groundwater Plume Map - FTC and Stanton St Areas, Marinette, WI
Attachments: DRAFT_GW_Plume-Data_Map_31Jan2020.pdf

Roxanne and Dave:

The attached draft figure provides the currently understood western bounds of the PFAS groundwater plume associated with the FTC and Stanton Street sites. The figure follows the conventions presented during the January 23, 2020 Summit meeting in Madison. The boundary is defined by PFOS and PFOA concentrations total 20 nanograms per liter (ng/L) in groundwater. The delineation is based on groundwater data from vertical aquifer profiling (VAP) grab samples and permanent monitoring well results, and integrates all depths sampled. Private well sampling data are presented on the figure for additional context.

As discussed during the January 23 Summit, the plume boundary does not include a few outlying areas in the Town of Peshtigo where detections of PFOA and PFOS above 20 ng/L are interpreted to be unrelated to the FTC. This interpretation is based on multiple lines of evidence previously communicated to WDNR.

Tyco and Arcadis are in the process of further analyzing the existing data to develop a more refined version of the attached figure. This additional evaluation is expected to provide greater definition on the vertical and lateral distribution of PFAS above 20 ng/L occurring within the area defined on the attached figure.

We anticipate discussion of this figure, along with other technical matters, during the meeting that is tentatively scheduled for February 7, 2020 with WDNR, Wood, Tyco and Arcadis. If you have any questions regarding this figure before the meeting, please let us know.

Jeffrey Danko

EHS Manager – Environmental Remediation
Johnson Controls

5757 N. Green Bay Ave

Milwaukee, WI 53209

+1 414 524 3344 direct

+1 262 349 2528 cell

jeffrey.howard.danko@jci.com

[@johnsoncontrols](https://www.linkedin.com/company/johnsoncontrols)

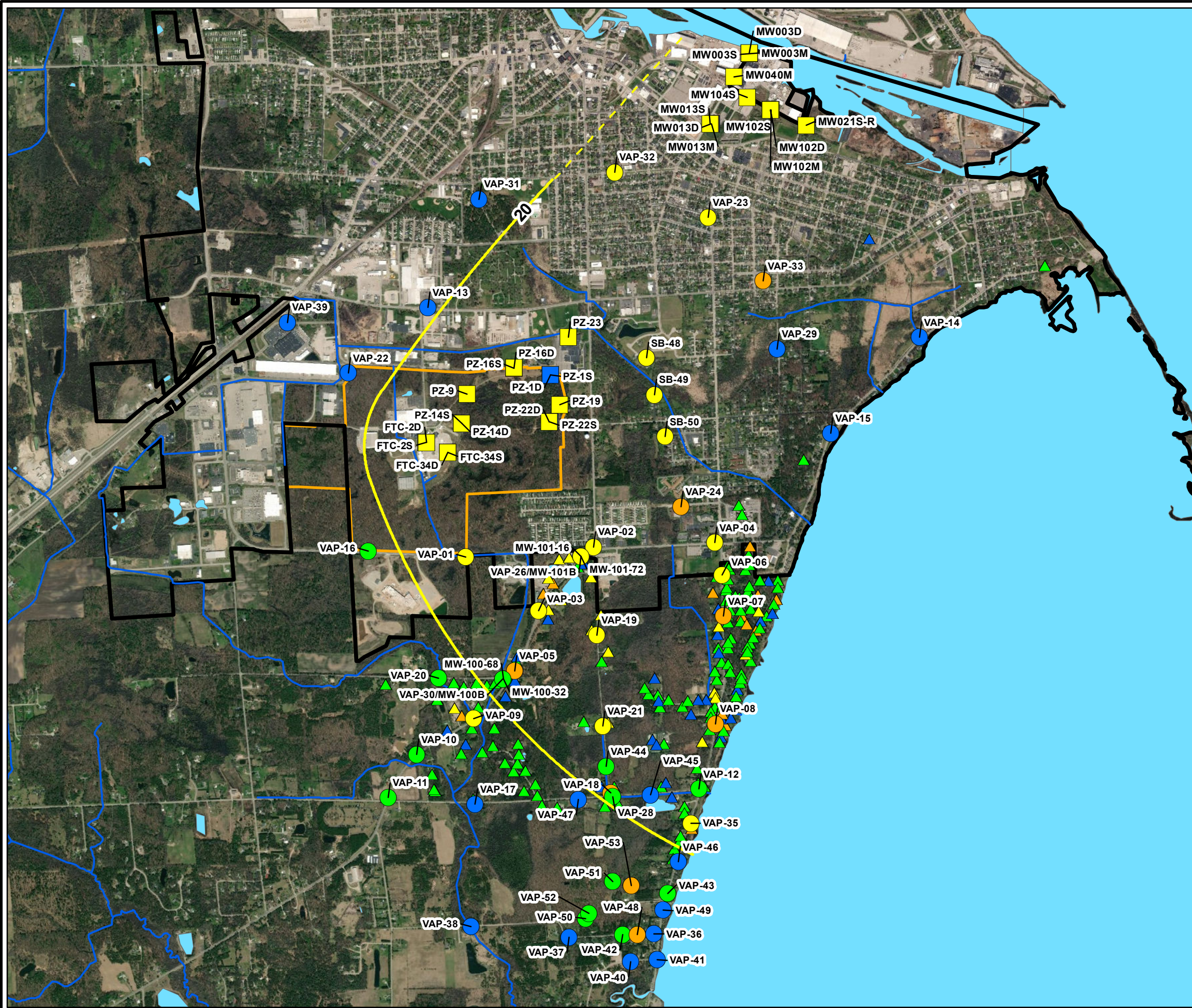
www.johnsoncontrols.com

The power behind **your mission**

Johnson Controls
USA

THIS MESSAGE MAY CONTAIN INFORMATION THAT IS PRIVILEGED AND CONFIDENTIAL. The information contained in, or attached to, this message is intended solely for the use of the specific person(s) named above. If you are not the intended recipient then you have received this communication in error and are prohibited from review, retransmission, taking any action in reliance upon, sharing the content of, disseminating or copying this message and any of the attachments in any way. If you have received this communication in error, please contact the sender immediately and promptly delete this message from all types of media and devices. Thank you.

City: Minneapolis/Citrix Div/Group: IMDVC Created By: Last Saved By: msmiller
 TYCO Marinette, WI
 Z:\GIS\Projects_ENVTYCO_Marinette_WI\IMXD\2020-01\ManagementPlan\MapFigures\VAP_HeatMap01282020.mxd 1/30/2020 1:33:21 PM



LEGEND:

- APPROXIMATE SITE PROPERTY BOUNDARY
- APPROXIMATE MARINETTE CITY BOUNDARY
- DITCH/STREAM
- WATERBODY
- APPROXIMATE WESTERN EXTENT OF GROUNDWATER WHERE COMBINED PFOS AND PFOA DETECTED ABOVE 20 ppt AND POTENTIALLY ASSOCIATED WITH THE FTC OR STANTON STREET SITES (DASHED WHERE INFERRED)

TOTAL PFOS AND PFOA IN GROUNDWATER

VAP BORING (MAX RESULT AT ANY SAMPLE DEPTH)

- ND - 2 ppt
- 2 - 20 ppt
- 20 - 70 ppt
- >70 ppt

MONITORING WELL SAMPLE RESULT (AUGUST 2019)

- ND - 2 ppt
- 2 - 20 ppt
- 20 - 70 ppt
- >70 ppt

RESIDENTIAL WELL SAMPLING RESULT (SPRING 2019)

- ▲ ND - 2 ppt
- ▲ 2 - 20 ppt
- ▲ 20 - 70 ppt
- ▲ >70 ppt

DRAFT
1/31/2020

- NOTES:**
1. RESIDENTIAL WELL LOCATIONS ARE APPROXIMATE
 2. ppt = PARTS PER TRILLION
 PFOA = PERFLUOROCTANOIC ACID
 PFOS = PERFLUOROCTANESULFONIC ACID
 VAP = VERTICAL AQUIFER PROFILE
 FTC = FIRE TRAINING CENTER
 3. SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRIID, IGN, AND THE GIS USER COMMUNITY



TYCO FIRE PRODUCTS, LP
MARINETTE, WISCONSIN

**DETECTIONS OF PFOA AND
PFOS IN GROUNDWATER**

ARCADIS | **FIGURE 1**