Thompson, Matthew A - DNR

From: lverson, Bruce <Blverson@trccompanies.com>

Sent:Friday, June 18, 2021 9:11 AMTo:Thompson, Matthew A - DNRCc:Quinn, Kenneth; SchreinerE (Guest)

Subject: RE: [EXTERNAL] RE: Wauleco: Request for Modification of the Wauleco Groundwater

Monitoring Parameter List

Understood. Thank you Matt. Bruce

From: Thompson, Matthew A - DNR < Matthew A. Thompson@wisconsin.gov>

Sent: Friday, June 18, 2021 8:57 AM

To: Iverson, Bruce <BIverson@trccompanies.com>

Cc: Quinn, Kenneth < KQuinn@trccompanies.com>; SchreinerE (Guest) < Evan. Schreiner@sentry.com>

Subject: [EXTERNAL] RE: Wauleco: Request for Modification of the Wauleco Groundwater Monitoring Parameter List

This is an **EXTERNAL** email. Do not click links or open attachments unless you validate the sender and know the content is safe.

Bruce,

Please include xylenes and naphthalene in the July 2021 groundwater sampling event. We will take a look at the information provided and circle back with comments or questions after our review.

Thanks,

Matt

We are committed to service excellence.

Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Matt Thompson Office: 715-492-2304

MatthewA.Thompson@wisconsin.gov

From: Iverson, Bruce <BIverson@trccompanies.com>

Sent: Wednesday, June 16, 2021 2:22 PM

To: Thompson, Matthew A - DNR < Matthew A. Thompson@wisconsin.gov >

Cc: Quinn, Kenneth < KQuinn@trccompanies.com>; SchreinerE (Guest) < Evan.Schreiner@sentry.com> Monitoring Parameter List

Matt,

In our continued review of the water quality data at Wauleco, we've been watching total xylenes and naphthalene concentrations decrease throughout the monitoring network. The attached Figures A and B illustrate the isoconcentration maps for these compounds from 2017 through 2020. Both total xylenes and naphthalene are constituents of mineral spirits and originate from dissolution from the residual phase LNAPL but are easily degraded in aerobic or anaerobic groundwater.

Total xylenes is shown to have no exceedances of the ES (2,000 ug/L) in 2017 through 2020 and only 1 well (W40R) with a PAL (400 ug/L) exceedance in 2017 and 2018, with no PAL exceedances in 2019 and 2020. Even the 100 ug/L contour has shrunk from 2017 through 2019, disappearing in 2020.

Naphthalene has shown a general decline in the areal extent exceeding the ES (100 ug/L) from 2018 to 2019, disappearing in 2020. The areal extent exceeding the PAL (10 ug/L) is also generally declining, especially from 2019 to 2020. Currently there are no ES exceedances and only three PAL exceedances for naphthalene from the monitoring wells sampled.

These two parameters are showing declining concentrations and have declined to below their respective ESs, and PALs for the most part. The concentration of mineral spirits constituents in the groundwater will continue to be monitored through trimethylbenzenes and total petroleum hydrocarbons. Therefore, we request the DNR approve removal of total xylenes and naphthalene from the groundwater monitoring program. If the DNR's approval is received by July 2, 2021, we will implement this change as part of the July 2021 semi-annual sampling event.

Please contact us if you would like to discuss. Thanks Ken and Bruce

Kenneth J. Quinn

Technical Director - Hydrogeologist



708 Heartland Trail, Suite 3000, Madison, WI 53717

Phone: 608.358.5193

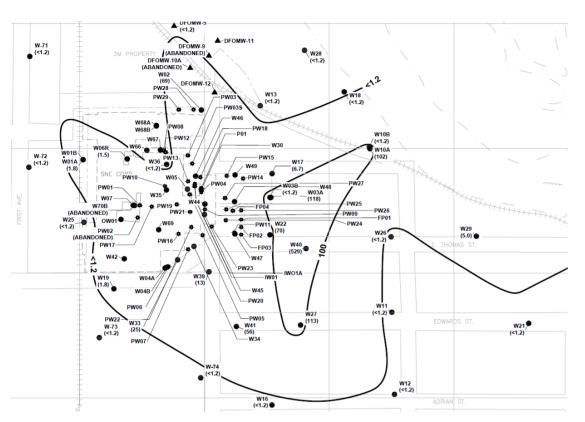
<u>LinkedIn | Twitter | Blog | TRCcompanies.com</u>

Bruce Iverson, P.E. (WI) Senior Project Manager

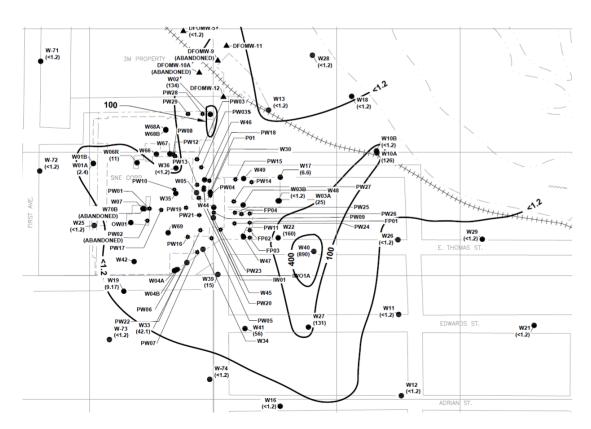


708 Heartland Trail, Suite 3000, Madison, WI 53717 **T** 608.826.3644 | **C** 608.235.4963

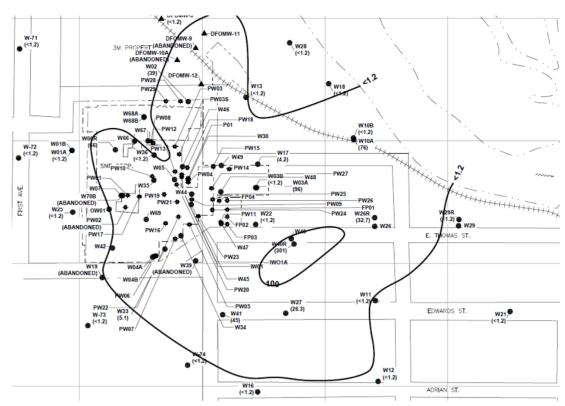
LinkedIn | Twitter | Blog | TRCcompanies.com



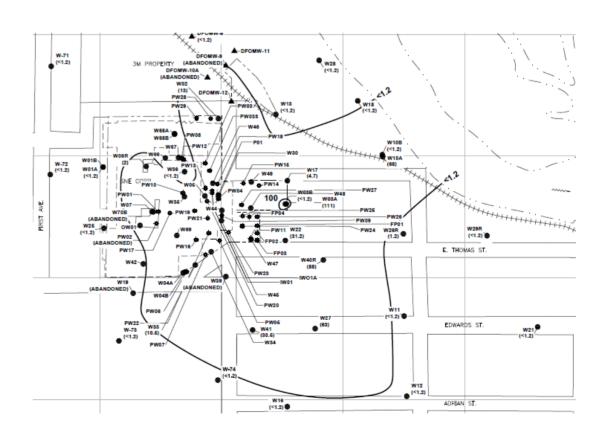
2017 Total Xylenes



2018 Total Xylenes



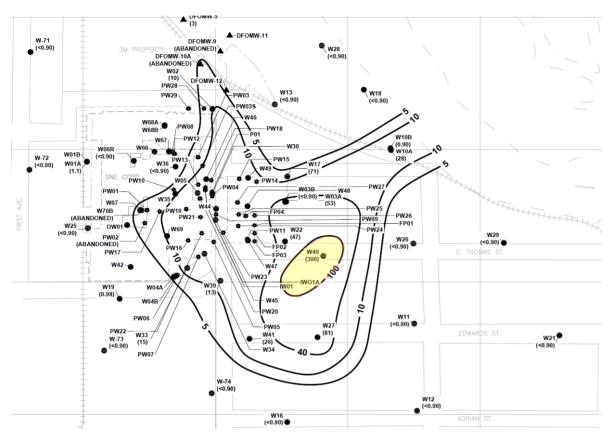
2019 Total Xylenes



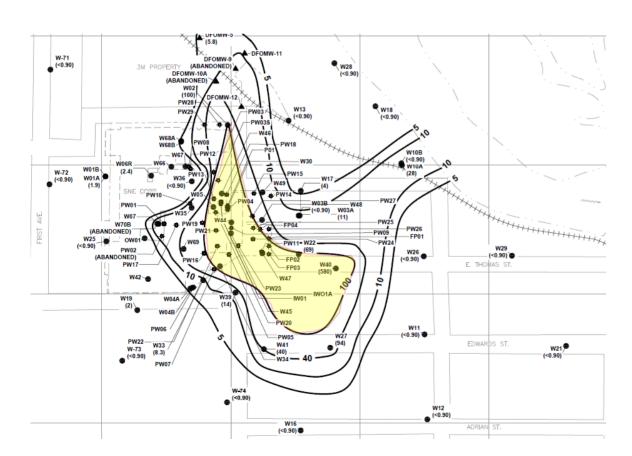
2020 Total Xylenes

No area exceeding an ES (2,000 ug/L)

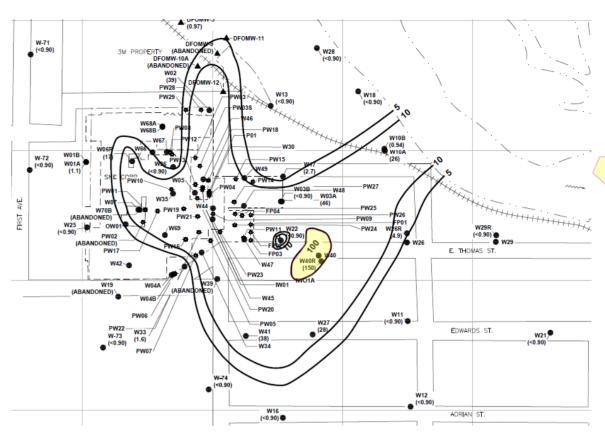
Figure A
Total Xylenes in
Groundwater
2017-2020



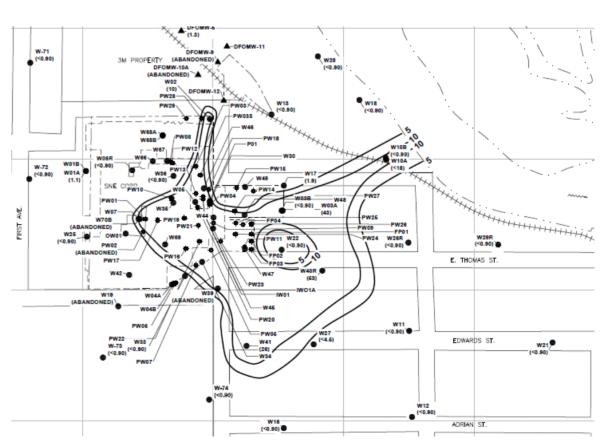
2017 Naphthalene



2018 Naphthalene



2019 Naphthalene



2020 Naphthalene

Figure B
Naphthalene in
Groundwater
2017-2020

Area exceeding an ES (100 ug/L)