Section 1. Contact and Recipient Information

Requester Information

This is the person requesting technical assistance or a post-closure modification review, that his or her liability be clarified or a specialized agreement and is identified as the requester in Section 7. DNR will address its response letter to this person.

Last Name	First	MI	Organization/ Business Name		
Harvey	Christopher	D	TRC		
Mailing Address			**City**	**State**	**ZIP Code**
230 West Monroe St., Suite 630			Chicago	IL	60606
Phone # (include area code)	**Fax # (include area code)**		**Email**		
(312) 578-0870	(312) 578-0877		charvey@trccompanies.com		

The requester listed above: (select all that apply)

- ☐ Is currently the owner
- ☐ Is considering selling the Property
- ☐ Is renting or leasing the Property
- ☐ Is considering acquiring the Property
- ☐ Is a lender with a mortgagee interest in the Property
- ☒ Other. Explain the status of the Property with respect to the applicant:

Consultant for the responsible party

Contact Information (to be contacted with questions about this request) ☒ Select if same as requester

Contact Last Name	First	MI	Organization/ Business Name		
Harvey	Christopher	D	TRC		
Mailing Address			**City**	**State**	**ZIP Code**
230 West Monroe St., Suite 630			Chicago	IL	60606
Phone # (include area code)	**Fax # (include area code)**		**Email**		
(312) 578-0870	(312) 578-0877		charvey@trccompanies.com		

Environmental Consultant (if applicable)

Contact Last Name	First	MI	Organization/ Business Name		
Harvey	Christopher	D	TRC		
Mailing Address			**City**	**State**	**ZIP Code**
230 West Monroe St., Suite 630			Chicago	IL	60606
Phone # (include area code)	**Fax # (include area code)**		**Email**		
(312) 578-0870	(312) 578-0877		charvey@trccompanies.com		

Property Owner (if different from requester)

Contact Last Name	First	MI	Organization/ Business Name		
Langenfeld	Casey		City of New Holstein		
Mailing Address			**City**	**State**	**ZIP Code**
2110 Washington St.			New Holstein	WI	53061
Phone # (include area code)	**Fax # (include area code)**		**Email**		
(920) 898-5766	(920) 898-5879		clangenfeld@wppienergy.org		

Section 2. Property Information

Property Name	FID No. (if known)
Tecumseh Products Co. (former) - Chromium Line	

BRRTS No. (if known)	Parcel Identification Number
02-08-36333	18919, 18569, 18921, 18646, 18465, 18450, 18568

Street Address	City	State	ZIP Code
1604 Michigan Avenue	New Holstein	WI	53061

County	Municipality where the Property is located	Property is composed of:	Property Size Acres
Calumet	◉ City ○ Town ○ Village of New Holstein	○ Single tax parcel ◉ Multiple tax parcels	38

1. Is a response needed by a specific date? (e.g., Property closing date) Note: Most requests are completed within 60 days. Please plan accordingly.

◉ No ○ Yes

Date requested by: _____

Reason:

2. Is the "Requester" enrolled as a Voluntary Party in the Voluntary Party Liability Exemption (VPLE) program?

◉ No. **Include the fee that is required for your request in Section 3, 4 or 5.**

○ Yes. **Do not include a separate fee.** This request will be billed separately through the VPLE Program.

Fill out the information in Section 3, 4 or 5 which corresponds with the type of request:
Section 3. Technical Assistance or Post-Closure Modifications;
Section 4. Liability Clarification; or Section 5. Specialized Agreement.

Section 3. Request for Technical Assistance or Post-Closure Modification

Select the type of technical assistance requested: **[Numbers in brackets are for WI DNR Use]**

☐ No Further Action Letter (NFA) (Immediate Actions) - NR 708.09, [183] - **Include a fee of $350.** Use for a written response to an immediate action after a discharge of a hazardous substance occurs. Generally, these are for a one-time spill event.

☐ Review of Site Investigation Work Plan - NR 716.09, [135] - **Include a fee of $700.**

☐ Review of Site Investigation Report - NR 716.15, [137] - **Include a fee of $1050.**

☐ Approval of a Site-Specific Soil Cleanup Standard - NR 720.10 or 12, [67] - **Include a fee of $1050.**

☐ Review of a Remedial Action Options Report - NR 722.13, [143] - **Include a fee of $1050.**

☐ Review of a Remedial Action Design Report - NR 724.09, [148] - **Include a fee of $1050.**

☐ Review of a Remedial Action Documentation Report - NR 724.15, [152] - **Include a fee of $350**

☒ Review of a Long-term Monitoring Plan - NR 724.17, [25] - **Include a fee of $425.**

☐ Review of an Operation and Maintenance Plan - NR 724.13, [192] - **Include a fee of $425.**

Other Technical Assistance - s. 292.55, Wis. Stats. [97] (For request to build on an abandoned landfill use Form 4400-226)

☐ Schedule a Technical Assistance Meeting - **Include a fee of $700.**

☐ Hazardous Waste Determination - **Include a fee of $700.**

☐ Other Technical Assistance - **Include a fee of $700.** Explain your request in an attachment.

Post-Closure Modifications - NR 727, [181]

☐ Post-Closure Modifications: Modification to Property boundaries and/or continuing obligations of a closed site or Property; sites may be on the GIS Registry. This also includes removal of a site or Property from the GIS Registry. **Include a fee of $1050, and:**

☐ Include a fee of $300 for sites with residual soil contamination; and

☐ Include a fee of $350 for sites with residual groundwater contamination, monitoring wells or for vapor intrusion continuing obligations.

Attach a description of the changes you are proposing, and documentation as to why the changes are needed (if the change to a Property, site or continuing obligation will result in revised maps, maintenance plans or photographs, those documents may be submitted later in the approval process, on a case-by-case basis).

Skip Sections 4 and 5 if the technical assistance you are requesting is listed above and complete Sections 6 and 7 of this form.

Section 4. Request for Liability Clarification

Select the type of liability clarification requested. Use the available space given or attach information, explanations, or specific questions that you need answered in DNR's reply. Complete Sections 6 and 7 of this form. **[Numbers in brackets are for DNR Use]**

☐ "Lender" liability exemption clarification - s. 292.21, Wis. Stats. [686]

❖ **Include a fee of $700.**

Provide the following documentation:

(1) ownership status of the real Property, and/or the personal Property and fixtures;

(2) an environmental assessment, in accordance with s. 292.21, Wis. Stats.;

(3) the date the environmental assessment was conducted by the lender;

(4) the date of the Property acquisition; for foreclosure actions, include a copy of the signed and dated court order confirming the sheriff's sale.

(5) documentation showing how the Property was acquired and the steps followed under the appropriate state statutes.

(6) a copy of the Property deed with the correct legal description; and,

(7) the Lender Liability Exemption Environmental Assessment Tracking Form (Form 4400-196).

(8) If no sampling was done, please provide reasoning as to why it was **not** conducted. Include this either in the accompanying environmental assessment or as an attachment to this form, and cite language in s. 292. 21(1)(c)2.,h.-i., Wis. Stats.:

h. The collection and analysis of representative samples of soil or other materials in the ground that are suspected of being contaminated based on observations made during a visual inspection of the real Property or based on aerial photographs, or other information available to the lender, including stained or discolored soil or other materials in the ground and including soil or materials in the ground in areas with dead or distressed vegetation. The collection and analysis shall identify contaminants in the soil or other materials in the ground and shall quantify concentrations.

i. The collection and analysis of representative samples of unknown wastes or potentially hazardous substances found on the real Property and the determination of concentrations of hazardous waste and hazardous substances found in tanks, drums or other containers or in piles or lagoons on the real Property.

☐ "Representative" liability exemption clarification (e.g. trustees, receivers, etc.) - s. 292.21, Wis. Stats. [686]

❖ **Include a fee of $700.**

Provide the following documentation:

(1) ownership status of the Property;

(2) the date of Property acquisition by the representative;

(3) the means by which the Property was acquired;

(4) documentation that the representative has no beneficial interest in any entity that owns, possesses, or controls the Property;

(5) documentation that the representative has not caused any discharge of a hazardous substance on the Property; and

(6) a copy of the Property deed with the correct legal description.

☐ Clarification of local governmental unit (LGU) liability exemption at sites with: (select all that apply)

☐ hazardous substances spills - s. 292.11(9)(e), Wis. Stats. [649];

☐ Perceived environmental contamination - [649];

☐ hazardous waste - s. 292.24 (2), Wis. Stats. [649]; and/or

☐ solid waste - s. 292.23 (2), Wis. Stats. [649].

❖ **Include a fee of $700, a summary of the environmental liability clarification being requested, and the following:**

(1) clear supporting documentation showing the acquisition method used, and the steps followed under the appropriate state statute(s).

(2) current and proposed ownership status of the Property;

(3) date and means by which the Property was acquired by the LGU, where applicable;

(4) a map and the ¼, ¼ section location of the Property;

(5) summary of current uses of the Property;

(6) intended or potential use(s) of the Property;

(7) descriptions of other investigations that have taken place on the Property; and

(8) (for solid waste clarifications) a summary of the license history of the facility.

Section 4. Request for Liability Clarification (cont.)

☐ Lease liability clarification - s. 292.55, Wis. Stats. [646]

- ❖ **Include a fee of $700 for a single Property, or $1400 for multiple Properties and the information listed below:**

(1) a copy of the proposed lease;

(2) the name of the current owner of the Property and the person who will lease the Property;

(3) a description of the lease holder's association with any persons who have possession, control, or caused a discharge of a hazardous substance on the Property;

(4) map(s) showing the Property location and any suspected or known sources of contamination detected on the Property;

(5) a description of the intended use of the Property by the lease holder, with reference to the maps to indicate which areas will be used. Explain how the use will not interfere with any future investigation or cleanup at the Property; and

(6) all reports or investigations (e.g. Phase I and Phase II Environmental Assessments and/or Site Investigation Reports conducted under s. NR 716, Wis. Adm. Code) that identify areas of the Property where a discharge has occurred.

General or other environmental liability clarification - s. 292.55, Wis. Stats. [682] - Explain your request below.

- ❖ **Include a fee of $700 and an adequate summary of relevant environmental work to date.**

☐ No Action Required (NAR) - NR 716.05, [682]

- ❖ **Include a fee of $700.**

Use where an environmental discharge has or has not occurred, and applicant wants a DNR determination that no further assessment or clean-up work is required. Usually this is requested after a Phase I and Phase II environmental assessment has been conducted; the assessment reports should be submitted with this form. This is not a closure letter.

☐ Clarify the liability associated with a "closed" Property - s. 292.55, Wis. Stats. [682]

- ❖ **Include a fee of $700.**

- Include a copy of any closure documents if a state agency other than DNR approved the closure.

Use this space or attach additional sheets to provide necessary information, explanations or specific questions to be answered by the DNR.

Section 5. Request for a Specialized Agreement

Select the type of agreement needed. Include the appropriate draft agreements and supporting materials. Complete Sections 6 and 7 of this form. More information and model draft agreements are available at: dnr.wi.gov/topic/Brownfields/lgu.html#tabx4.

☐ Tax cancellation agreement - s. 75.105(2)(d), Wis. Stats. [654]

- ❖ **Include a fee of $700, and the information listed below:**

(1) Phase I and II Environmental Site Assessment Reports,

(2) a copy of the Property deed with the correct legal description.

☐ Agreement for assignment of tax foreclosure judgement - s.75.106, Wis. Stats. [666]

- ❖ **Include a fee of $700, and the information listed below:**

(1) Phase I and II Environmental Site Assessment Reports,

(2) a copy of the Property deed with the correct legal description.

☐ Negotiated agreement - Enforceable contract for non-emergency remediation - s. 292.11(7)(d) and (e), Wis. Stats. [630]

- ❖ **Include a fee of $1400, and the information listed below:**

(1) a draft schedule for remediation; and,

(2) the name, mailing address, phone and email for each party to the agreement.

Section 6. Other Information Submitted

Identify all materials that are included with this request.

Send both a paper copy of the signed form and all reports and supporting materials, and an electronic copy of the form and all reports, including Environmental Site Assessment Reports, and supporting materials on a compact disk.

Include one copy of any document from any state agency files that you want the Department to review as part of this request. The person submitting this request is responsible for contacting other state agencies to obtain appropriate reports or information.

☐ Phase I Environmental Site Assessment Report - Date: _____

☐ Phase II Environmental Site Assessment Report - Date: _____

☐ Legal Description of Property (required for all liability requests and specialized agreements)

☐ Map of the Property (required for all liability requests and specialized agreements)

Analytical results of the following sampled media: Select all that apply and include date of collection.

☐ Groundwater ☐ Soil ☐ Sediment ☐ Other medium - Describe: _____

Date of Collection: _____

☐ A copy of the closure letter and submittal materials

☐ Draft tax cancellation agreement

☐ Draft agreement for assignment of tax foreclosure judgment

☒ Other report(s) or information - Describe: Groundwater Monitoring Report

For Property with newly identified discharges of hazardous substances only: Has a notification of a discharge of a hazardous substance been sent to the DNR as required by s. NR 706.05(1)(b), Wis. Adm. Code?

◯ Yes - Date (if known): _____

◯ No

Note: The Notification for Hazardous Substance Discharge (non-emergency) form is available at: dnr.wi.gov/files/PDF/forms/4400/4400-225.pdf.

Section 7. Certification by the Person who completed this form

☒ I am the person submitting this request (requester)

☐ I prepared this request for: _____
Requester Name

I certify that I am familiar with the information submitted on this request, and that the information on and included with this request is true, accurate and complete to the best of my knowledge. I also certify I have the legal authority and the applicant's permission to make this request.

CJH
Signature

5/13/2019
Date Signed

Principal
Title

312-578-0870
Telephone Number (include area code)

Section 8. DNR Contacts and Addresses for Request Submittals

Send or deliver one paper copy and one electronic copy on a compact disk of the completed request, supporting materials, and fee to the region where the property is located to the address below. Contact a DNR regional brownfields specialist with any questions about this form or a specific situation involving a contaminated property. For electronic document submittal requirements see: http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf.

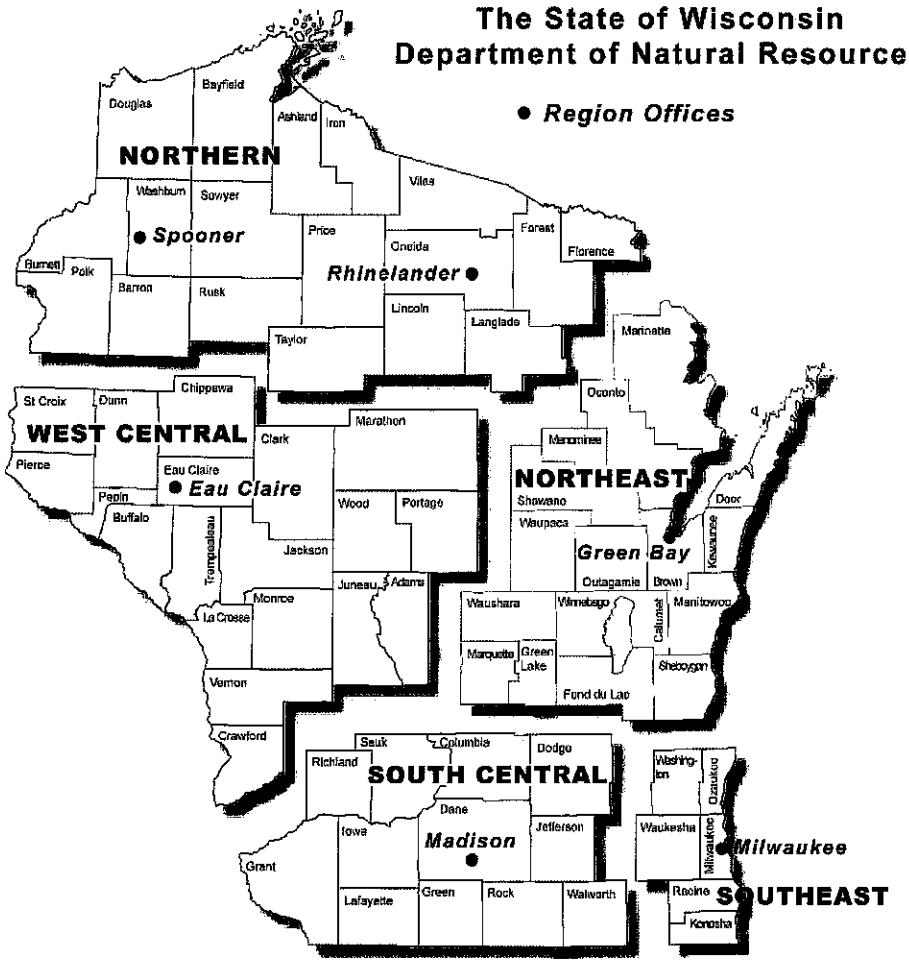
DNR NORTHERN REGION
Attn: RR Program Assistant
Department of Natural Resources
223 E Steinfest Rd Antigo, WI 54409

DNR NORTHEAST REGION
Attn: RR Program Assistant
Department of Natural Resources
2984 Shawano Avenue
Green Bay WI 54313

DNR SOUTH CENTRAL REGION
Attn: RR Program Assistant
Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg WI 53711

DNR SOUTHEAST REGION
Attn: RR Program Assistant
Department of Natural Resources
2300 North Martin Luther King Drive
Milwaukee WI 53212

DNR WEST CENTRAL REGION
Attn: RR Program Assistant
Department of Natural Resources
1300 Clairemont Ave.
Eau Claire WI 54702



Note: These are the Remediation and Redevelopment Program's designated regions. Other DNR program regional boundaries may be different.

DNR Use Only			
Date Received	Date Assigned	BRRTS Activity Code	BRRTS No. (if used)
DNR Reviewer	Comments		
Fee Enclosed? ◯ Yes ◯ No	Fee Amount $	Date Additional Information Requested	Date Requested for DNR Response Letter
Date Approved	Final Determination		

230 W Monroe St., Suite 630
Chicago, IL 60606
T 312.578.0870
TRCcompanies.com

May 13, 2019

Mr. Kevin McKnight
Northeast Region
Wisconsin Department of Natural Resources
625 East County Road Y, Suite 700
Oshkosh, WI 54901

Subject: 2019 Groundwater Monitoring Report
Former Tecumseh Products, Former Plating Line Area
New Holstein, Wisconsin
BRRTS# 02-08-363333

Dear Mr. McKnight:

TRC is implementing monitored natural attenuation (MNA) and groundwater monitoring specific to the former plating line area at the former Tecumseh Products facility in New Holstein, Wisconsin (BRRTS #: 02-08-363333). On March 21, 2019, TRC completed groundwater sampling at monitoring wells specific to the former plating line area to verify a stable residual chromium plume and confirm that the chromium plume is naturally attenuating. This letter presents the results of the data collected during the groundwater monitoring event, in accordance with the proposed work plan, dated June 21, 2017. A technical review and response from the Wisconsin Department of Natural Resources (WDNR) is requested, and a $425 check is included for the review, per the State of Wisconsin Chapter NR 749 fee for long-term monitoring plans.

BACKGROUND

Evaluation of the groundwater data through August 2014 indicated that 1) the extent of chromium impacts to groundwater from the former plating line were defined, remains stable, and that natural attenuation is occurring and 2) total dissolved chromium continues to consist of predominantly dissolved hexavalent chromium and future sampling would focus on the total dissolved chromium. Beginning in 2016, only the plume monitoring wells that exceeded the Enforcement Standard (ES) point-of-compliance for total dissolved chromium (>100 µg/L) were being monitored. These monitoring wells include MW-A, MW-B, MW-E, MW-8, TEC-3, and TEC-4. During the April and September 2016 sampling events, the wells were sampled for total dissolved chromium to track MNA. At the request of WDNR, the April 2017 sampling event included the six plume monitoring wells, three additional monitoring wells (TEC-1, NH-2, NH-26), and three additional groundwater sample analyses (dissolved hexavalent chromium, ferrous iron, and total organic carbon [TOC]). The additional analyses were included to assess the geochemical composition of the subsurface materials with respect to MNA.

A Groundwater Monitoring Report, which summarized the above analyses, was submitted to the WDNR on June 21, 2017. The report concluded that 1) the contaminant plume remains stable and has not shown any migration from previous sampling events, 2) the groundwater impacts do not pose a threat to human health or the environment, and 3) that natural attenuation continues to control the migration of chromium impacts and is still a viable remedy for the site. TRC proposed to conduct biennial groundwater sampling beginning in 2019. Samples would be analyzed for only total dissolved chromium. The proposed frequency of sampling is based on the fact that sufficient data has been collected, evaluated and presented to suggest the stable nature of the chromium groundwater impacts.

An additional Groundwater Monitoring Plan was submitted to the WDNR on July 11, 2017. According to the plan, TRC proposed to perform a groundwater sampling event on monitoring wells MW-E, TEC-3, TEC-4, MW-8, NH-26, MW-A, and MW-B.

The WDNR responded with a letter on August 22, 2017 approving the long-term monitoring plan with the following notable stipulations.

- Monitoring well NH-7 had to be added to the monitoring schedule.
- Monitoring wells MW-5, TEC-1, MW-24, and MW-F (at a minimum) should be sampled in the final sampling event prior to submittal of a case closure request.
- If groundwater contaminant trends in source area wells (TEC-3, TEC-4, and NH-26) do not allow for case closure after the 2019 sampling event, evaluation of additional remedial alternatives will need to be conducted to facilitate site closure.

SUMMARY OF GROUNDWATER MONITORING

Groundwater Monitoring Program

On March 21, 2019, TRC completed a groundwater gauging and sampling event at the former Tecumseh chromium line remediation area. Prior to groundwater sampling, water levels were measured at every monitoring well that could be located with an oil-water interface probe.

Groundwater sampling was completed at monitoring wells MW-E, TEC-3, TEC-4, MW-8, NH-7, NH-26, MW-A, and MW-B. In addition, TRC also sampled MW-5, TEC-1 and MW-F in anticipation of being a final groundwater sampling event for submittal of case closure. TRC had intended to sample MW-24 as well, but this monitoring well was destroyed.

Groundwater samples were collected using low-flow sampling techniques with an Alexis peristaltic pump and Horiba U-53 multi-parameter meter and flow cell. During well purging, field parameters (temperature, conductivity, turbidity, dissolved oxygen, pH and oxidation/reduction potential [ORP]) were measured and allowed to stabilize prior to sampling. Low-flow sampling stabilization forms are provided in Attachment A. Groundwater samples were field filtered with a 0.52 micron filter and submitted for laboratory analysis of total dissolved chromium using method EPA 6010. All samples were packaged in a cooler with ice and shipped to Pace Analytical Services, LLC in Green Bay, Wisconsin (Pace) under standard chain of custody procedures.

Purge water was drummed and discharged into the nearest sanitary sewer line, with permission from the City of New Holstein wastewater treatment plant.

Groundwater Elevations

Table 1 presents a summary of water level measurements collected during events between 2009 and 2019 and Figure A presents the groundwater elevation contours for the March 2019 sampling event. The groundwater gradient is oriented from the east/southeast portion of the facility, towards the west. Groundwater elevations were similar to previous groundwater monitoring events. Groundwater continues to exhibit an overall westerly flow direction as illustrated on Figure 1.

Groundwater Quality Assurance/Quality Control Results

TRC performed a Quality Assurance/Quality Control (QA/QC) review of the laboratory report, in regards to analyses, procedures, and protocols performed by Pace. Samples were received by Pace within the mandated timeframe and maintained at the proper temperature. Based on the results, there were no major insufficiencies regarding surrogate recoveries, analyte detections or sample duplicate recoveries. Based on an internal review by TRC, all data were considered acceptable. QC data indicate that measurement data are sufficient to meet method quality objectives, data are defensible, and QC mechanisms were effective in ensuring measurement data reliability.

RESULTS AND DISCUSSION

The groundwater analytical results are summarized in Table 2, which contains total dissolved chromium results from the March 2019 groundwater event, as well as previous analytical results. The low-flow stabilization geochemical results indicate that the dissolved oxygen is ranging between 3 and 10 milligrams per liter (mg/L) and an ORP greater than 200 millivolts (mV). The pH of the groundwater is slightly basic, ranging between 7 and 8 S.U. There is no obvious difference between the geochemistry of the source area as compared to down-gradient. The distribution of total dissolved chromium in groundwater is shown on Figure 2. The monitoring wells with total dissolved chromium exceeding the ES are shown on Figure 2. The laboratory analytical results are provided in Attachment B.

Total dissolved chromium concentrations exceeded the ES in 7 of the 11 monitoring wells in March 2019 (MW-A, MW-E, TEC-1, TEC-3, TEC-4, NH-7 and NH-26). Monitoring wells MW-B and MW-5 exceeded the Preventative Action Limit (PAL) in March 2019, but not the ES. The remaining two monitoring wells MW-F and MW-8 were below the ES and PAL.

In order to assess the current subsurface conditions of the Site, an evaluation of the dissolved chromium concentration trends has been completed. The historic distribution of total dissolved chromium in groundwater is shown on Figure 2. The extent of the total dissolved chromium has receded over time. The northern extent of dissolved chromium is likely not related to migration; dissolved chromium was likely there beforehand, which is supported by the more recent data points. The trend analysis charts were completed on monitoring wells which exceeded the ES. The trend analysis charts are provided in Attachment C. Based on these

charts, which track dissolved chromium verses time, the following significant points can be made.

Source area monitoring well TEC-4 has remained stable through the last three groundwater sampling events. The overall concentrations of chromium have decreased compared to the 2011 and 2016 results. The high dissolved chromium concentration received during the April 22, 2016 groundwater sampling event appears to be an anomaly.

Dissolved chromium concentrations in source area monitoring well TEC-3 shows a decreasing trend since 2015. Dissolved chromium concentrations in NH-26 show a significant decrease since the last sampling event in 2017.

Dissolved chromium concentrations in down-gradient monitoring wells MW-E and MW-A have had significantly lower concentrations from their maximum concentrations of the last three groundwater sampling events (MW-E maximum concentration 1,290 µg/L in 2014; MW-A maximum concentration 4,100 µg/L in 2007). Dissolved chromium concentrations in down-gradient monitoring well TEC-1 have continued to decline since 2010. The dissolved chromium concentrations in these three monitoring wells has dropped significantly over time from the maximum concentrations which were greater than 1,200 µg/L.

Dissolved chromium concentrations in down-gradient monitoring well NH-7 do not show a definitive trend. The concentration increased during the 2019 groundwater sampling event; however, these concentrations are still relatively low. Monitoring well NH-7 is near to and upgradient of MW-24 and NH-10, both of which have historical chromium results below the PAL and ES.

CONCLUSIONS AND RECOMMENDATIONS

Based on the evaluation of recent groundwater data, the overall extent of the dissolved contaminant plume remains stable compared with previous sampling events. Additionally, monitoring wells MW-B, MW-5, and MW-8 now lie outside of the impacted area above the ES indicating that the dissolved chromium has receded over time near the source area. These results confirm that MNA continues to be effective in controlling and mitigating the migration of residual chromium impacts to groundwater and remains a viable remedy for the site and that no further evaluation of remedial alternatives is necessary.

The groundwater impacts do not pose a threat to human health or the environment. Moreover, there is a deed restriction recorded to the property limiting certain activities and uses that further acts to protect human health and the environment.

TRC proposes to continue biennial groundwater sampling with the next round scheduled for Spring 2021 to further assess contaminant trends and confirm the effectiveness of MNA as a final remedy. Samples will be collected and analyzed for total dissolved chromium from the same monitoring well network. In addition, TRC proposes to sample monitoring well NH-10 to evaluate low level residual chromium impacts around NH-7. The proposed frequency of

sampling is based on the fact that sufficient data has been collected, evaluated and presented to confirm the stable nature of the chromium groundwater impacts. If the stable to declining groundwater contaminant trends in source area wells (TEC-3, TEC-4, and NH-26) can be demonstrated after the 2021 sampling event, TRC will evaluate the appropriateness of recommending the site for case closure.

If you have any questions, please contact me at (312) 578-0870, extension 11910.

Sincerely,

Chris Harvey, PE
Program Manager

Enclosures: Check for $425: Report Fee

TABLES
Table 1. Groundwater Elevations 2009 - 2019
Table 2. Summary of Groundwater Analytical Data

FIGURES
Figure 1. Groundwater Isoconcentration Map – March 2019
Figure 2. Total Dissolved Chromium in Groundwater March 2019

ATTACHMENTS
Attachment A. Low-Flow Sampling Logs
Attachment B. Laboratory Analytical Report (March 29, 2019)
Attachment C. Trend Analysis Charts

cc: Mr. Jason Smith/Tecumseh Products Co. – Paris, TN
Mr. Curtis Toll/Greenberg Traurig, LLP – Philadelphia
Mr. Ron Bock/TRC – Irvine, CA
Ms. Denise Danelski/WDNR – Green Bay, WI

TABLES

Table 1. Groundwater Level Elevations 2009-2019

Location	Top of Casing (TOC) Elevation (ft MSL)	June 8, 2009		September 23, 2009		December 28 & 29, 2009		March 29 & 30, 2010		March 18 & 19, 2011		May 15, 2012	
		Depth To Water Below TOC	Water Level Elevation	Depth To Water Below TOC	Water Level Elevation	Depth To Water Below TOC	Water Level Elevation	Depth To Water Below TOC	Water Level Elevation	Depth To Water Below TOC	Water Level Elevation	Depth To Water Below TOC	Water Level Elevation
MW-1	932.60	6.13	926.47	8.80	923.80	3.71	928.89	4.98	927.62	4.92	927.68	2.77	929.83
NH-2	935.34	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	932.24	4.32	927.92	7.55	924.69	2.56	929.68	3.77	928.47	3.56	928.68	2.67	929.57
MW-5	931.81	4.30	927.51	7.24	924.57	3.10	928.71	3.27	928.54	2.99	928.82	2.39	929.42
MW-6	931.90	5.23	926.67	8.45	923.45	3.17	928.73	3.72	928.18	3.46	928.44	2.85	929.05
NH-7	935.42	Well installed in 2012		Well installed in 2012		Well installed in 2012		Well installed in 2012		Well installed in 2012		Well installed in 2012	
MW-8	931.89	4.07	927.82	6.73	925.16	2.99	928.90	3.33	928.56	3.11	928.78	2.63	929.26
MW-9	931.54	7.04	924.50	10.65	920.89	4.71	926.83	4.58	926.96	--	--	--	--
NH-10	935.37	--	--	--	--	--	--	--	--	--	--	--	--
NH-25	934.65	Well installed in 2012		Well installed in 2012		Well installed in 2012		Well installed in 2012		Well installed in 2012		Well installed in 2012	
MW-24	931.07	--	--	--	--	--	--	--	--	--	--	--	--
NH-26	934.76	Well installed in 2012		Well installed in 2012		Well installed in 2012		Well installed in 2012		Well installed in 2012		Well installed in 2012	
MW-A	932.83	6.78	926.05	9.38	923.45	4.79	928.04	5.62	927.21	5.57	927.26	4.47	928.36
MW-B	932.58	5.69	926.89	8.60	923.98	3.00	929.58	4.40	928.18	4.22	928.36	3.11	929.47
MW-C	931.89	5.88	926.01	9.24	922.65	3.29	928.60	3.86	928.03	3.64	928.25	2.59	929.30
MW-D	941.90	5.81	936.09	9.96	931.94	5.18	936.72	4.04	937.86	--	--	--	--
MW-E	933.31	7.28	926.03	9.81	923.50	6.20	927.11	6.43	926.88	6.33	926.98	5.32	927.99
MW-F	933.83	8.52	925.31	10.93	922.90	7.31	926.52	7.53	926.30	7.52	926.31	6.71	927.12
MW-G	934.37	7.52	926.85	10.66	923.71	7.02	927.35	7.28	927.09	7.21	927.16	5.98	928.39
MW-H	933.63	8.81	924.82	12.40	921.23	9.06	924.57	8.45	925.18	--	--	--	--
TEC-1	932.51	4.20	928.31	6.67	925.84	3.69	928.82	3.89	928.62	3.46	929.05	3.14	929.37
TEC-1A	932.02	14.29	917.73	18.37	913.65	14.66	917.36	13.58	918.44	13.42	918.60	13.17	918.85
TEC-2	931.90	4.67	927.23	7.47	924.43	3.55	928.35	3.68	928.22	3.40	928.50	2.90	929.00
TEC-3	934.62	6.94	927.68	9.07	925.55	6.51	928.11	6.20	928.42	5.94	928.68	5.38	929.24
TEC-4	934.50	7.15	927.35	9.64	924.86	6.12	928.38	6.33	928.17	5.98	928.52	5.35	929.15

MSL - Mean Sea Level

NA* Well underwater and could not be measured

Table 1. Groundwater Level Elevations 2009-2019

Location	Top of Casing (TOC) Elevation (ft MSL)	June 20 & 21, 2013		August 18, 2014		April 22, 2016		September 7, 2016		April 26, 2017		March 21, 2019	
		Depth To Water Below TOC	Water Level Elevation	Depth To Water Below TOC	Water Level Elevation	Depth To Water Below TOC	Water Level Elevation	Depth To Water Below TOC	Water Level Elevation	Depth To Water Below TOC	Water Level Elevation	Depth To Water Below TOC	Water Level Elevation
MW-1	932.60	5.13	927.47	6.80	925.80	4.53	928.07	2.97	929.63	--	--	4.12	928.48
NH-2	935.34	--	--	3.68	931.66	4.01	931.33	3.65	931.69	3.82	931.52	3.63	931.71
MW-4	932.24	4.08	928.16	5.62	926.62	3.36	928.88	3.03	929.21	--	--	--	--
MW-5	931.81	3.70	928.11	4.89	926.92	2.87	928.94	3.35	928.46	--	--	2.81	929.00
MW-6	931.90	4.28	927.62	5.91	925.99	3.19	928.71	3.69	928.21	--	--	--	--
NH-7	935.42	8.64	926.78	9.14	926.28	7.77	927.65	8.13	927.29	--	--	7.22	928.20
MW-8	931.89	3.63	928.26	4.74	927.15	2.91	928.98	2.42	929.47	2.33	929.56	1.54	930.35
MW-9	931.54	--	--	--	--	3.96	927.58	4.99	926.55	--		--	--
NH-10	935.37	--	--	9.24	926.13	8.23	927.14	8.59	926.78	--	--	7.80	927.57
NH-25	934.65	6.34	928.31	6.73	927.92	5.83	928.82	5.49	929.16	--	--	4.97	929.68
MW-24	931.07	--	--	7.58	923.49	4.94	926.13	6.21	924.86	--	--	Destroyed	
NH-26	934.76	6.76	928.00	6.99	927.77	6.24	928.52	NA*	934.76	5.73	929.03	6.04	928.72
MW-A	932.83	5.72	927.11	7.33	925.50	5.23	927.60	4.56	928.27	3.92	928.91	5.34	927.49
MW-B	932.58	4.58	928.00	6.31	926.27	3.95	928.63	3.57	929.01	2.69	929.89	3.88	928.70
MW-C	931.89	4.57	927.32	6.35	925.54	3.26	928.63	3.63	928.26	--	--	4.19	927.70
MW-D	941.90	--	--	--	--	3.86	938.04	6.59	935.31	--	--	3.58	938.32
MW-E	933.31	6.44	926.87	7.98	925.33	6.01	927.30	5.60	927.71	4.92	928.39	6.16	927.15
MW-F	933.83	7.76	926.07	9.02	924.81	7.21	926.62	7.41	926.42	--	--	7.38	926.45
MW-G	934.37	7.68	926.69	9.29	925.08	7.11	927.26	5.89	928.48	--	--	8.25	926.12
MW-H	933.63	--	--	--	--	7.88	925.75	7.19	926.44	--	--	8.61	925.02
TEC-1	932.51	4.08	928.43	4.95	927.56	3.54	928.97	4.29	928.22	3.29	929.22	3.34	929.17
TEC-1A	932.02	14.18	917.84	15.76	916.26	13.60	918.42	15.17	916.85	--	--	13.90	918.12
TEC-2	931.90	3.97	927.93	4.86	927.04	3.30	928.60	NA*	931.90	--	--	2.98	928.92
TEC-3	934.62	6.23	928.39	6.88	927.74	5.90	928.72	5.78	928.84	5.31	929.31	5.74	928.88
TEC-4	934.50	6.40	928.10	7.43	927.07	5.76	928.74	5.23	929.27	4.88	929.62	5.79	928.71

MSL - Mean Sea Level

NA* Well underwater and could

Table 2

Groundwater Analytical Results - Dissolved Chromium and Lead
Tecumseh Products Co. (Former)-Chromium Line
New Holstein, Wisconsin

WELL ID	Date Sampled	DISSOLVED METALS				UNDISSOLVED METALS	
		Hexavalent Chromium (CrVI)	Total Chromium[1]	Trivalent Chromium[2] (CrIII)	Lead	Ferrous Iron	Total Organic Carbon
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
NR 140	**PAL**	--	10	--	1.5	150	--
STANDARD	**ES**	--	100	--	15	300	--
TW-1	8/13/2002	5.0	3.6	NM	--	--	--
TW-2	8/13/2002	24	*33*	8.7	--	--	--
TW-3	8/13/2002	130	***110***	NM	--	--	--
TW-4	8/13/2002	7,900	***8,200***	NM	--	--	--
TW-5	8/13/2002	700	***640***	NM	--	--	--
TW-6	8/13/2002	5	1 U	NM	--	--	--
TW-7	8/13/2002	6.3	1 U	NM	--	--	--
TW-8	8/13/2002	6.3	1.9	NM	--	--	--
TW-9	8/13/2002	8.9	0.44 U	NM	--	--	--
TW-10	8/13/2002	3.6 U	1.3 U	NM	--	--	--
MW-1	8/13/2002	1,900	***1,700***	NM	--	--	--
	11/16/2005	4,600	***4,900***	300	--	--	--
	5/24/2007	2,800	***2,800***	NM	*0.24*	--	--
	6/9/2009	680	***738***	58 J	*1.7* J	--	--
	9/24/2009	1,700	***1,660***	200 U	3.3 J	--	--
	12/28/2009	3.90 U	9.2	9.2 J	*2.2* J	--	--
	3/29/2010	5.3	*57.6*	52.3	*2.2* J	--	--
	5/18/2011	50	*54.1*	4.1	--	--	--
	5/15/2012	4.4 J	*16.1*	11.7 J	--	--	--
	6/21/2013	33	*54.9*	NM	*2.3* J	--	--
	8/19/2014	--	4.1 J	--	*3* U	--	--
MW-2	8/13/2002	3.6 U	2.3	3.6 U	--	--	--
	11/16/2005	5.0 U	2.8	NM	--	--	--
NH-2	4/24/2012	--	<2.4	--	<1.4	--	--
	8/19/2014	--	2.1 J	--	*3* J	--	--
	4/26/2017	<3.9	3.7 J	NM	NM	<28	3,400
MW-3	8/13/2002	1,900	***1,700***	NM	--	--	--
MW-4	8/13/2002	3.7	0.44 U	NM	--	--	--
	11/15/2005	5.0 U	2.0	NM	--	--	--
	5/24/2007	3.4 U	0.63	NM	0.26	--	--
	6/9/2009	3.9 U	1.3 J	NM	*2.2* J	--	--
	9/24/2009	3.9 U	0.39 U	3.9 U	1.3	--	--
	12/28/2009	3.9 U	1.2 J	3.9 U	1.3	--	--
	3/29/2010	3.9 U	0.82 J	3.9 U	1.4 J	--	--
	5/18/2011	3.9 U	1.6 J	3.9 U	--	--	--
	5/15/2012	3.9 U	2.4 U	3.9 U	--	--	--
	6/20/2013	3.4 U	1.2 U	3.9 U	1.2 U	--	--
	8/19/2014	--	2.1 U	NM	*3* U	--	--

Notes:

ES = NR140 Enforcement Standard

PAL = NR140 Preventative Action Limit

ITALICIZE = Detection over NR140 PAL Limit

BOLD = Detection over NR140 ES Limit

U = Analyte not detected at or above reporting limit

J = Estimated value. Analyte detected at a level less than the reporting limit and greater than or equal to the detection limit.

"--" = Analyte was not sampled during sampling round

NM Not measured/calculated, due to Cr(VI) result greater than total Cr result.

1 = PAL and ES values are for total chromium. As such, these values are not applicable for hexavalent chromium.

2 = Trivalent chromium is the difference between total chromium and hexavalent chromium concentrations.

Table 2

Groundwater Analytical Results - Dissolved Chromium and Lead

Tecumseh Products Co. (Former)-Chromium Line

New Holstein, Wisconsin

WELL ID	DATE SAMPLED	DISSOLVED METALS				UNDISSOLVED METALS	
		HEXAVALENT CHROMIUM (CrVI)	TOTAL CHROMIUM[1]	TRIVALENT CHROMIUM[2] (CrIII)	Lead	Ferrous Iron	Total Organic Carbon
	UNITS	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
NR 140	PAL	--	10	--	1.5	--	-
STANDARD	ES	--	*100*	--	15	--	-
MW-5	8/13/2002	380	***390***	180 U	NM	--	--
	11/16/2005	330	***270***	NM	NM	--	--
	5/24/2007	1,100	***910***	NM	0.19	--	--
	6/9/2009	950	***938***	9.8 U	*3.2* J	--	--
	9/24/2009	3400	***3,510***	110	*2.6* J	--	--
	12/29/2009	240	***240***	3.9 U	*1.5* J	--	--
	3/30/2010	210	***202***	3.9 U	*2* J	--	--
	5/19/2011	140	***134***	NM	NM	--	--
	5/15/2012	350	***339***	NM	NM	--	--
	6/20/2013	290	***313***	NM	1.2 U	--	--
	8/18/2014	NM	***318***	--	*3* U	--	--
	3/21/2019	--	*81.6*	--	--	--	--
MW-6	8/13/2002	8.9	0.56 U	NM	NM	--	--
	11/15/2005	45	*65*	20	NM	--	--
	5/24/2007	3.4 U	2.6	NM	0.07	--	--
	6/9/2009	3.9 U	0.39 U	3.9	*2.6* J	--	--
	9/24/2009	3.9 U	5.0	5.0	*2* J	--	--
	12/28/2009	3.9 U	0.48 J	3.9	1.3 U	--	--
	3/29/2010	3.9 U	0.39 U	3.9	*2.3* J	--	--
	5/18/2011	3.9 U	1.2 J	3.9	NM	--	--
	5/15/2012	3.9 U	2.4 U	3.9	NM	--	--
	6/20/2013	3.4 U	1.2 U	NM	1.2 U	--	--
	8/19/2014	NM	2.1 U	NM	*3* U	--	--
NH-7	4/24/2012	NM	***261***	NM	*1.7* J	--	--
	6/20/2013	110	***111***	NM	1.2 U	--	--
	8/19/2014	NM	***114***	NM	*3* U	--	--
	3/21/2019	--	***279***	--	--	--	--
MW-8	8/13/2002	3,100	***3,200***	720 U	NM	--	--
	11/16/2005	3,000	***2,900***	NM	NM	--	--
	5/24/2007	1,900	***1,600***	NM	0.09	--	--
	6/9/2009	7,300	***8,730***	1400	*2.9* J	--	--
	9/24/2009	8,200	***8,470***	270	*2.6* J	--	--
	12/29/2009	5100	***5,150***	50 J	*1.9* J	--	--
	3/29/2010	1,900	***1,720***	180	*2.3* J	--	--
	5/19/2011	320	***330***	10	NM	--	--
	5/15/2012	3,100	***2,940***	NM	NM	--	--
	6/20/2013	860	***844***	NM	*1.8* J	--	--
	8/18/2014	NM	***1,320***	NM	*3* U	--	--
	4/22/2016	NM	*46.7*	NM	NM	--	--
	9/7/2016	NM	***725***	NM	NM	--	--
	4/26/2017	<3.9	<2.5	NM	NM	<28	4,500
	3/21/2019	--	5.2 J	--	--	--	--

Notes:

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ITALICIZE = Detection over NR140 PAL Limit

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J = Estimated value. Analyte detected at a level less than the reporting limit and greater than or equal to the detection limit.

"--" = Analyte was not sampled during sampling round

NM Not measured/calculated, due to Cr(VI) result greater than total Cr result.

1 = PAL and ES values are for total chromium. As such, these values are not applicable for hexavalent chromium.

2 = Trivalent chromium is the difference between total chromium and hexavalent chromium concentrations.

Table 2

Groundwater Analytical Results - Dissolved Chromium and Lead

Tecumseh Products Co. (Former)-Chromium Line

New Holstein, Wisconsin

WELL ID	DATE SAMPLED	DISSOLVED METALS				UNDISSOLVED METALS	
		HEXAVALENT CHROMIUM (CrVI)	TOTAL CHROMIUM[1]	TRIVALENT CHROMIUM[2] (CrIII)	Lead	Ferrous Iron	Total Organic Carbon
	UNITS	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
NR 140 STANDARD	PAL	--	10	--	1.5	--	-
	ES	--	100	--	15	--	-
MW-9	8/13/2002	3.6 U	0.44 U	3.6	NM	--	--
	11/15/2005	5.0 U	1.7	NM	*1.8*	--	--
	5/24/2007	5.4	0.44	NM	0.06	--	--
	6/9/2009	3.9 U	0.39 U	3.9 U	*2.2* J	--	--
	9/24/2009	3.9 U	0.39 U	3.9 U	*2.1* J	--	--
	12/28/2009	3.9 U	0.39 U	3.9 U	*1.7* J	--	--
	3/29/2010	3.9 U	4.9 J	4.9 J	*2.4* J	--	--
NH-10	4/23/2012	NM	4.1 J	NM	*1.9* J	--	--
	8/19/2014	NM	2.1 U	NM	*3* U	--	--
MW-24	8/19/2014	NM	3.7 J	NM	*3* U	--	--
NH-25	4/23/2012	NM	***1,220***	NM	*1.6* J	--	--
	6/20/2013	3,100	***3,330***	NM	*2.8* J	--	--
	8/19/2014	NM	***895***	--	3 U	--	--
NH-26	4/23/2012	--	***470***	--	<1.4	--	--
	6/20/2013	480	***510***	NM	1.2 U	--	--
	8/19/2014	--	***284***	--	3 U	--	--
	4/26/2017	1,500	***1,400***	NM	NM	<28	7,400
	3/21/2019	--	***763***	--	--	--	--
MW-A	5/24/2007	4,000	***4,100***	100	***27.0***	--	--
	6/8/2009	1,500	***1,510***	20 U	*2.1* J	--	--
	9/24/2009	3,600	***3,710***	110	*1.5* J	--	--
	12/28/2009	1,900	***1,870***	20 U	*2.1* J	--	--
	3/29/2010	1,500	***1,390***	110	*2.3* J	--	--
	5/18/2011	590	***594***	4	--	--	--
	5/15/2012	440	***417***	NM	--	--	--
	6/21/2013	520	***484***	NM	*2.3* J	--	--
	8/19/2014	--	*18.1*	--	*3*	--	--
	4/22/2016	--	***307***	--	--	--	--
	9/7/2016	NM	*60.1*	NM	NM	--	--
	4/26/2017	330	***295***	NM	NM	<28	5,800
	3/21/2019	--	***458***	--	--	--	--
MW-B	5/24/2007	910	***780***	NM	0.044 U	--	--
	6/9/2009	570	***533***	20 U	*2.2* J	--	--
	9/24/2009	1,300	***1,200***	100 U	*1.6* J	--	--
	12/28/2009	740	***649***	20 U	*2.4* J	--	--
	3/29/2010	270	***263***	20 U	*2.2* J	--	--
	5/18/2011	68	*64*	NM	--	--	--
	5/15/2012	5.5 J	*10.2*	4.7 J	--	--	--
	6/20/2013	74	*73.8*	NM	1.2 U	--	--
	8/19/2014	--	*47.1*	--	*3* U	--	--
	4/22/2016	NM	*20.1*	NM	NM	--	--
	9/7/2016	NM	***585***	NM	NM	--	--
	4/26/2017	<3.9	4.7 J	NM	NM	<28	910
	3/21/2019	--	*79.6*	--	--	--	--

Notes:

ES = NR140 Enforcement Standard

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ITALICIZE = Detection over NR140 PAL Limit

BOLD = Detection over NR140 ES Limit

U = Analyte not detected at or above reporting limit

J = Estimated value. Analyte detected at a level less than the reporting limit and greater than or equal to the detection limit.

"--" = Analyte was not sampled during sampling round

NM Not measured/calculated, due to Cr(VI) result greater than total Cr result.

1 = PAL and ES values are for total chromium. As such, these values are not applicable for hexavalent chromium.

2 = Trivalent chromium is the difference between total chromium and hexavalent chromium concentrations.

Table 2

Groundwater Analytical Results - Dissolved Chromium and Lead

Tecumseh Products Co. (Former)-Chromium Line

New Holstein, Wisconsin

WELL ID	DATE SAMPLED	DISSOLVED METALS				UNDISSOLVED METALS	
		HEXAVALENT CHROMIUM (CrVI)	TOTAL CHROMIUM[1]	TRIVALENT CHROMIUM[2] (CrIII)	Lead	Ferrous Iron	Total Organic Carbon
	UNITS	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
NR 140 STANDARD	PAL	--	10	--	1.5	--	
	ES	--	100	--	15		
MW-C	5/24/2007	3.4 U	1.3	NM	0.07	--	--
	6/9/2009	3.9 U	1.1 J	3.9 U	*2.4* J	--	--
	9/24/2009	3.9 U	0.39 U	3.9 U	*4.1* J	--	--
	12/28/2009	3.9 U	4.5 J	4.5 J	*1.9* J	--	--
	3/29/2010	3.9 U	4.2 J	4.2 J	1.4 J	--	--
	5/18/2011	3.9 U	2.3 J	3.9 U	--	--	--
	5/15/2012	3.9 U	2.4 U	3.9 U	--	--	--
	6/20/2013	3.4 U	1.2 U	NM	1.2 U	--	--
	8/19/2014	--	2.1 U	--	*3* U	--	--
MW-D	5/25/2007	3.4 U	1.9	NM	0.1	--	--
	6/9/2009	3.9 U	2.4 J	3.9 U	*1.7* J	--	--
	9/24/2009	3.9 U	0.42 J	3.9 U	*3* J	--	--
	12/29/2009	3.9 U	1.9 J	3.9 U	*2.5* J	--	--
	3/29/2010	3.9 U	1.0 J	3.9 U	1.4 J	--	--
MW-E	6/9/2009	290	**268**	3.9 U	*2* J	--	--
	9/24/2009	340	**353**	20 U	*2* J	--	--
	12/29/2009	870	**814**	39 U	*3.9* J	--	--
	3/30/2010	890	**808**	39 U	*1.9* J	--	--
	5/19/2011	1,000	**963**	NM	--	--	--
	5/15/2012	1,000	**920**	NM	--	--	--
	6/20/2013	1,200	**1,150**	NM	*2.9* J	--	--
	8/19/2014	--	**1,290**	--	*3* U	--	--
	4/22/2016	NM	***594***	NM	NM	--	--
	9/7/2016	NM	***507***	NM	NM	--	--
	4/26/2017	550	***533***	NM	NM	<28	6,200
	3/21/2019	--	**628**	--	--	--	--
MW-F	6/8/2009	3.9 U	0.46 J	3.9 U	*2.2* J	--	--
	9/23/2009	3.9 U	0.39 U	3.9 U	*2.4* J	--	--
	12/28/2009	3.9 U	1.8 J	3.9 U	*1.6* J	--	--
	3/29/2010	3.9 U	1.4 J	3.9 U	*2.2* J	--	--
	5/18/2011	3.9 U	1.7 J	3.9 U	--	--	--
	5/15/2012	3.9 U	2.4 U	3.9 U	--	--	--
	6/21/2013	3.9 U	1.2 U	NM	1.2 U	--	--
	8/19/2014	3.9 U	2.1 U	--	3 U	--	--
	3/21/2019	--	2.5 U	--	--	--	--
MW-G	6/8/2009	3.9 U	0.7 J	3.9 U	1.3	--	--
	9/23/2009	3.9 U	0.39 U	3.9 U	*4.9* J	--	--
	12/28/2009	3.9 U	0.39 J	3.9 U	*1.9* J	--	--
	3/29/2010	3.9 U	0.39 U	3.9 U	*3* J	--	--
	5/18/2011	3.9 U	1.1 J	3.9 U	--	--	--
	5/15/2012	3.9 U	2.4 U	3.9 U	--	--	--
	6/21/2013	3.4 U	1.2 U	NM	*3.1* J	--	--
	8/19/2014	--	2.1 U	--	3 U	--	--

Notes:

ES = NR140 Enforcement Standard

PAL = NR140 Preventative Action Limit

ITALICIZE = Detection over NR140 PAL Limit

BOLD = Detection over NR140 ES Limit

U = Analyte not detected at or above reporting limit

J = Estimated value. Analyte detected at a level less than the reporting limit and greater than or equal to the detection limit.

"--" = Analyte was not sampled during sampling round

NM Not measured/calculated, due to Cr(VI) result greater than total Cr result.

1 = PAL and ES values are for total chromium. As such, these values are not applicable for hexavalent chromium.

2 = Trivalent chormium is the difference between total chromium and hexavalent chromium concentrations.

Table 2

Groundwater Analytical Results - Dissolved Chromium and Lead

Tecumseh Products Co. (Former)-Chromium Line

New Holstein, Wisconsin

WELL ID	DATE SAMPLED	DISSOLVED METALS				UNDISSOLVED METALS	
		HEXAVALENT CHROMIUM (CrVI)	TOTAL CHROMIUM[1]	TRIVALENT CHROMIUM[2] (CrIII)	Lead	Ferrous Iron	Total Organic Carbon
	UNITS	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
NR 140	PAL	--	10	--	1.5	--	-
STANDARD	ES	--	100	--	15	--	-
MW-H	6/8/2009	3.9 U	0.89 J	3.9 U	1.3	--	--
	9/23/2009	3.9 U	3.9 U	3.9 U	*2.1* J	--	--
	12/28/2009	3.9 U	3.9 U	3.9 U	*2.7* J	--	--
	3/29/2010	3.9 U	3.9 U	3.9 U	*1.6* J	--	--
TEC-1	8/13/2002	500	**490**	NM	--	--	--
	11/16/2005	4,300	**3,800**	NM	*1.9*	--	--
	5/23/2007	790	**670**	NM	***20***	--	--
	6/10/2009	11,400	**12,000**	600 J	*3.5* J	--	--
	9/24/2009	3,000	**3,120**	120	*3.8* J	--	--
	12/29/2009	7,900	**7,430**	200 U	*3.3* J	--	--
	3/30/2010	6,700	**6,710**	200 U	*3.3* J	--	--
	5/19/2011	2,400	**2,620**	220	--	--	--
	5/15/2012	2,300	**2,190**	NM	--	--	--
	6/20/2013	2,300	**2,250**	NM	*4.3* J	--	--
	8/18/2014	--	**1,250**	--	*3* U	--	--
	4/26/2017	650	***598***	NM	NM	<28	2,100
	3/21/2019	--	**315**	--	--	--	--
TEC-1A	8/13/2002	14	0.52 U	NM	--	--	--
	3/6/2006	5.0 U	2.8	NM	--	--	--
	5/23/2007	3.4 U	0.43 U	NM	0.07	--	--
	6/9/2009	14 J	*22.6*	9 J	*2.2* J	--	--
	9/24/2009	3.9 U	1.1 J	3.9 U	*2.1* J	--	--
	12/29/2009	3.9 U	4.3 J	4.3 J	*2* J	--	--
	3/29/2010	3.9 U	5.1	5.1	*1.5* J	--	--
	5/19/2011	32	38.7	6.7	--	--	--
	5/15/2012	3.9 U	8.2	8.2	--	--	--
	6/20/2013	3.4 U	1.2 U	NM	1.2 U	--	--
	8/18/2014	--	2.1 U	--	*3* U	--	--
TEC-2	8/13/2002	16	0.44 U	NM	--	--	--
	11/16/2005	5.0 U	0.78	NM	--	--	--
	5/24/2007	3.4 U	0.94	--	0.13	--	--
	6/9/2009	3.9 U	1.2 J	3.9 U	*2.5* J	--	--
	9/24/2009	3.9 U	0.68 J	3.9 U	*3.1* J	--	--
	12/29/2009	3.9 U	1.1 J	3.9 U	*3.2* J	--	--
	3/30/2010	3.9 U	2.7 J	3.9 U	*2.3* J	--	--
	5/19/2011	3.9 U	1.3 J	3.9 U	--	--	--
	5/15/2012	3.9 U	2.4 U	3.9 U	--	--	--
	6/20/2013	3.4 U	1.2 U	NM	*2.8* J	--	--
	8/18/2014	--	2.1 U	--	*3.0* U	--	--

Notes:

ES = NR140 Enforcement Standard

PAL = NR140 Preventative Action Limit

ITALICIZE = Detection over NR140 PAL Limit

BOLD = Detection over NR140 ES Limit

U = Analyte not detected at or above reporting limit

J = Estimated value. Analyte detected at a level less than the reporting limit and greater than or equal to the detection limit.

"--" = Analyte was not sampled during sampling round

NM Not measured/calculated, due to Cr(VI) result greater than total Cr result.

1 = PAL and ES values are for total chromium. As such, these values are not applicable for hexavalent chromium.

2 = Trivalent chromium is the difference between total chromium and hexavalent chromium concentrations.

Table 2

Groundwater Analytical Results - Dissolved Chromium and Lead

Tecumseh Products Co. (Former)-Chromium Line

New Holstein, Wisconsin

WELL ID	DATE SAMPLED	DISSOLVED METALS				UNDISSOLVED METALS	
		HEXAVALENT	TOTAL	TRIVALENT	Lead	Ferrous Iron	Total Organic
	UNITS	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
NR 140	PAL	--	10	--	1.5	--	-
STANDARD	ES	--	100	--	15	--	-
TEC-3	9/23/2003	270	***310***	40	--	--	--
	11/16/2005	540	***490***	NM	--	--	--
	5/24/2007	1,000	***910***	NM	0.17	--	--
	6/10/2009	400	***789***	390	*3.5* J	--	--
	9/24/2009	99	***99***	20 U	*1.8* J	--	--
	12/29/2009	190	***201***	11 J	*2.2* J	--	--
	3/30/2010	470	***445***	20 U	1.3 J	--	--
	5/19/2011	580	***585***	5	--	--	--
	5/15/2012	250	***227***	NM	--	--	--
	6/20/2013	1,200	***1,260***	NM	1.2 U	--	--
	8/19/2014	--	***2,100***	--	*3* U	--	--
	4/22/2016	NM	***5,650***	NM	NM	--	--
	9/7/2016	NM	***2,820***	NM	NM	--	--
	4/26/2017	5,300	***5,040***	NM	NM	<28	5,800
	3/21/2019	--	***1,080***	--	--	--	--
TEC-4	9/23/2003	1,200	***1,300***	100	--	--	--
	11/16/2005	2,800	***2,700***	NM	0.40 U	--	--
	5/24/2007	4,800	***4,000***	NM	0.06	--	--
	6/10/2009	13,300	***12,500***	200 U	*2.3* J	--	--
	9/24/2009	5,500	***5,220***	500 U	*2.3* J	--	--
	12/29/2009	5,200	***5,360***	160 J	*3* J	--	--
	3/30/2010	14,300	***12,900***	390 U	*2.5* J	--	--
	5/19/2011	29,000	***29,200***	200	--	--	--
	5/15/2012	21,300	***20,300***	NM	--	--	--
	6/20/2013	33,600	***32,200***	NM	*14* U	--	--
	8/19/2014	--	***6,880***	--	*3* U	--	--
	4/22/2016	NM	***65,100***	NM	NM	--	--
	9/7/2016	NM	***33,100***	NM	NM	--	--
	4/26/2017	16,200	***15,400***	NM	NM	<28	13,400
	3/21/2019	--	***16,900***	--	--	--	--

Notes:

ES = NR140 Enforcement Standard

PAL = NR140 Preventative Action Limit

ITALICIZE = Detection over NR140 PAL Limit

BOLD = Detection over NR140 ES Limit

U = Analyte not detected at or above reporting limit

J = Estimated value. Analyte detected at a level less than the reporting limit and greater than or equal to the detection limit.

"--" = Analyte was not sampled during sampling round

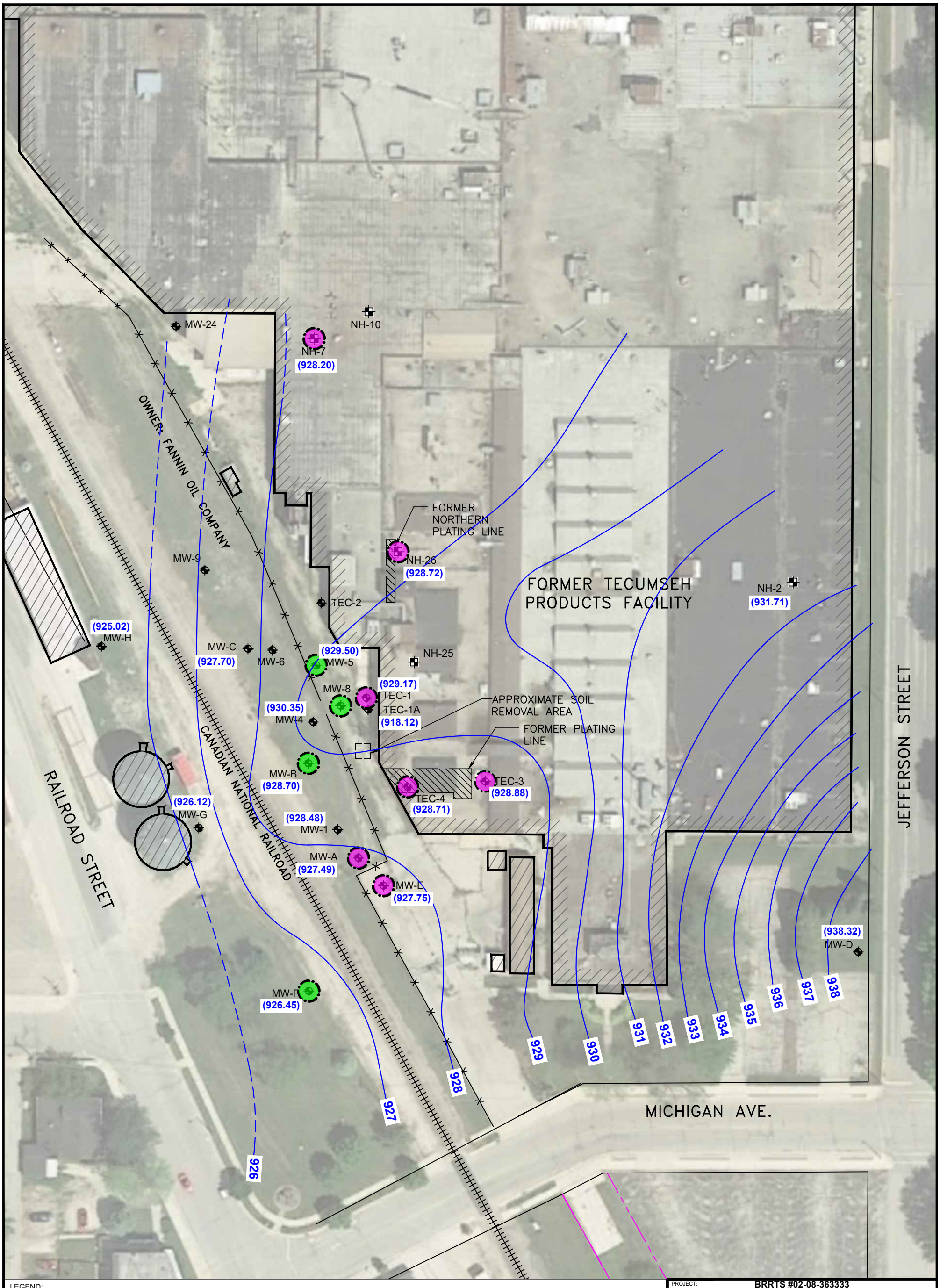
NM Not measured/calculated, due to Cr(VI) result greater than total Cr result.

1 = PAL and ES values are for total chromium. As such, these values are not applicable for hexavalent chromium.

2 = Trivalent chromium is the difference between total chromium and hexavalent chromium concentrations.

FIGURES

PLOT DATA
Drawing Name: S:\PROJECTS\Tecumseh\Chromium Line Project - 107927\107927-15(CR LINE).dwg
Operator Name: ALBERTS, SCOTT
Drawing Size: 11x17
Layout: FIGURE 1
File Size: 0.69 Mb
Plot Date: April 24, 2019
Plot Time: 3:37 PM
Attached Xref's:
Attached Images: Tecumseh aerials;



LEGEND:

- MONITORING WELL LOCATION
- MONITORING WELL INSTALLED BY ROBERT E. LEE & ASSOCIATES IN 2012
- RAILROAD TRACKS
- FENCE
- (926.45) GROUNDWATER ELEVATION
- GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER ELEVATION CONTOUR - ESTIMATED
- TOTAL CHROMIUM BELOW ENFORCEMENT STANDARD
- TOTAL CHROMIUM ABOVE ENFORCEMENT STANDARD
- WELLS SAMPLED IN 2019.

NOTE: MW-24 WAS FOUND TO BE DESTROYED DURING THE MARCH 2019 GROUNDWATER EVENT

0 60 120
SCALE IN FEET

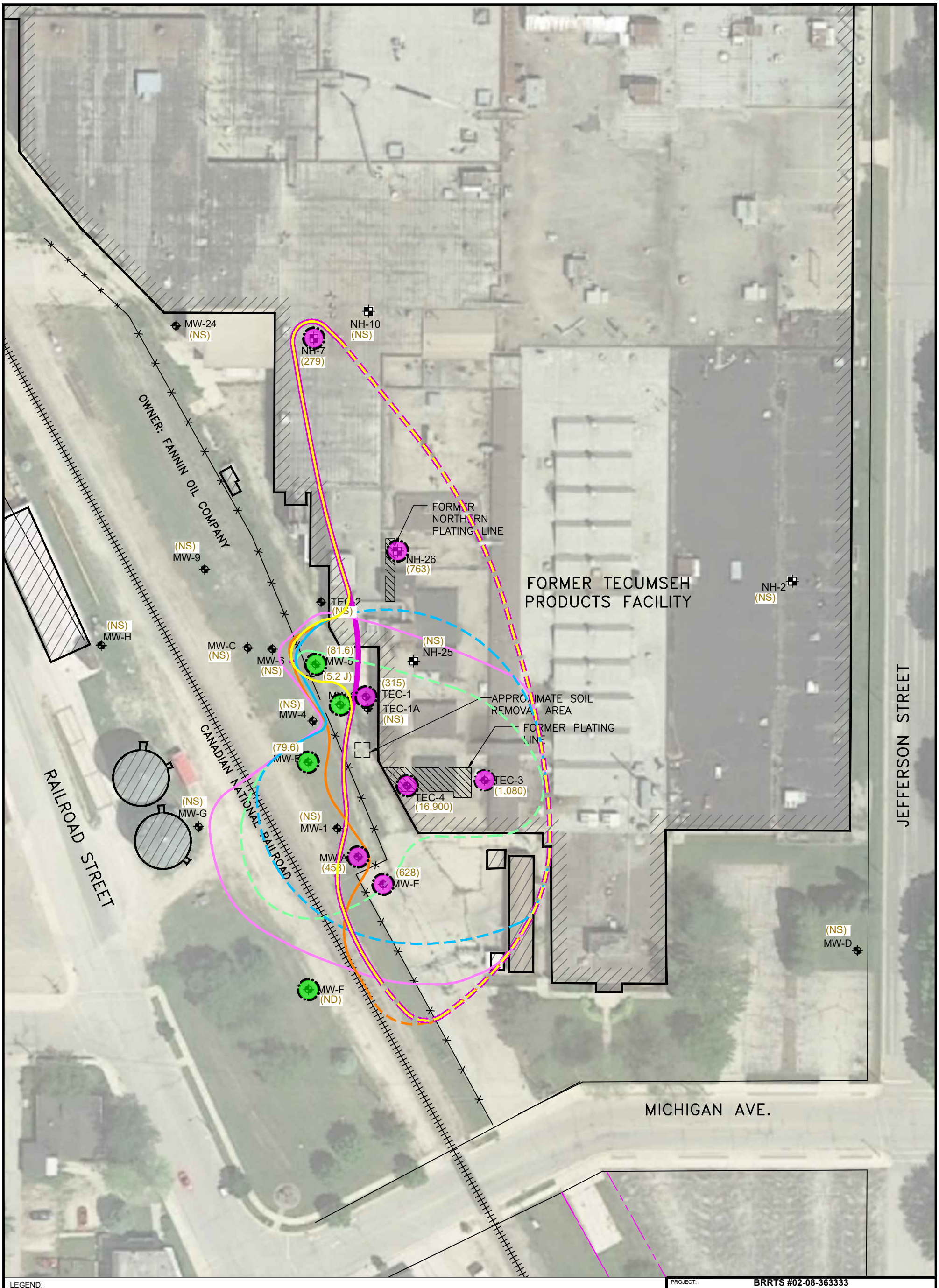
PROJECT: BRRTS #02-08-363333
TECUMSEH PRODUCTS CO. (FORMER) - CHROMIUM LINE
NEW HOLSTEIN, WISCONSIN

TITLE:
GROUNDWATER ISOCONCENTRATION MAP - MARCH 2019

DRAWN BY:	S.ALBERTS	SCALE:	PROJ. NO. 107927
CHECKED BY:	T.GOMOLL	AS SHOWN	FILE NO. 107927-15(CR LINE).dwg
APPROVED BY:	C.HARVEY	DATE PRINTED:	FIGURE 1
DATE:	APRIL 2019		

TRC
230 West Monroe St.
Suite 630
Chicago, IL 60606
Phone: 312.578.0870

PLOT DATA
Drawing Name: S:\PROJECTS\Tecumseh\Chromium Line Project - 107927\107927-16(CR LINE).dwg
Operator Name: ALBERTS, SCOTT
Drawing Size: 11x17
Layout: FIGURE 2
File Size: 0.90 Mb
Plot Date: May 10, 2019
Plot Time: 4:08 PM
Attached Xref's:
Attached Images: Tecumseh aerials;



LEGEND:

- MONITORING WELL LOCATION
- MONITORING WELL INSTALLED BY ROBERT E. LEE & ASSOCIATES IN 2012
- RAILROAD TRACKS
- FENCE
- (65) TOTAL DISSOLVED CHROMIUM (ug/L)
- (NS) NOT SAMPLED
- (ND) CHROMIUM NOT DETECTED
- TOTAL CHROMIUM BELOW ENFORCEMENT STANDARD
- TOTAL CHROMIUM ABOVE ENFORCEMENT STANDARD

ENFORCEMENT STANDARD POINT-OF-COMPLIANCE FOR TOTAL DISSOLVED CHROMIUM (100 ug/L) BY YEAR
DASHED WHERE INFERRED

- 2019
- 2017
- 2014
- 2009
- 2005
- 2003/2002

NOTES:

1. SAMPLES COLLECTED MARCH 2019.
2. TEC-1A IS A DEEP WELL.

0 60 120
SCALE IN FEET

PROJECT: BRRTS #02-08-363333
TECUMSEH PRODUCTS CO. (FORMER) - CHROMIUM LINE
NEW HOLSTEIN, WISCONSIN

TITLE: GROUNDWATER ISOCONCENTRATION MAP BY YEAR

DRAWN BY:	S.ALBERTS	SCALE:		PROJ. NO.	107927
CHECKED BY:	T.GOMOLL		AS SHOWN	FILE NO.	107927-16(CR LINE).dwg
APPROVED BY:	C.HARVEY	DATE PRINTED:			FIGURE 2
DATE:	APRIL 2019				

TRC
230 West Monroe St.
Suite 630
Chicago, IL 60606
Phone: 312.578.0870

ATTACHMENT A

TRC

Well	TEC-3
Date	3/21/2019
Location	New Holstein, WI
Site	Tecumseh / HARP

Static Depth to Water (ft)	5.74	Sample Collection Time	0915
Total Purge Volume (gal)		Purge Method	Peristaltic Pump
Total Depth (ft)		Sample Method	Low-Flow Through Flow Cell
Screen Depth Interval (ft)		Water Description	Clear, no odor
LNAPL (in)	—	Sampling Personnel	AJ / TG

Time (min)	Volume Purged (L)	Flow Rate (L/min)	Depth to Water (ft)	Drawdown (ft)	pH (SU) (±0.1 units)	Temp (°C) (± 3%)	Conductivity (mS/cm) (±3%)		ORP (mV) (±10 mV)	Dissolved Oxygen (mg/L) (±10%)	Turbidity (NTUs) (±10% for >1)
0854		100	5.83	0.09	7.18	6.02	0.855		190	3.61	8.1
0858			5.86	0.12	7.22	6.00	0.840		195	3.93	7.1
0902			5.86	0.12	7.29	5.89	0.848		204	3.78	6.1
0906			5.86	0.12	7.29	5.67	0.858		208	3.90	5.0
0910			5.86	0.12	7.29	5.49	0.861		212	3.96	4.5
Stable											

Form Date:

Page _____ of _____

TRC

Well	TEC-4
Date	3/21/2019
Location	New Holstein, WI
Site	Tecumseh / HARP

Static Depth to Water (ft)	5.75	Sample Collection Time	1120
Total Purge Volume (gal)		Purge Method	Peristaltic Pump
Total Depth (ft)		Sample Method	Low-Flow Through Flow Cell
Screen Depth Interval (ft)		Water Description	Clear, no odor
LNAPL (in)	–	Sampling Personnel	AJ / TG

Time (min)	Volume Purged (L)	Flow Rate (L/min)	Depth to Water (ft)	Drawdown (ft)	pH (SU) (±0.1 units)	Temp (°C) (± 3%)	Conductivity (mS/cm) (±3%)		ORP (mV) (±10 mV)	Dissolved Oxygen (mg/L) (±10%)	Turbidity (NTUs) (±10% for >1)
1057	0.5	0.100	5.86	0.11	7.43	3.11	1.10		278	9.75	2.6
1101		0.100	5.86	0.11	7.36	3.30	1.10		281	9.73	2.6
1105		0.100	5.87	0.12	7.30	3.57	1.09		283	9.84	2.9
1109		0.100	5.87	0.12	7.28	3.70	1.09		284	9.89	2.7
1113		0.100	5.87	0.12	7.27	3.78	1.09		285	9.91	2.3
Stable											

Form Date:

TRC

Well	NH-26
Date	3/21/2019
Location	New Holstein, WI
Site	Tecumseh / HARP

Static Depth to Water (ft)	6.04	Sample Collection Time	1200
Total Purge Volume (gal)		Purge Method	Peristaltic Pump
Total Depth (ft)		Sample Method	Low-Flow Through Flow Cell
Screen Depth Interval (ft)		Water Description	Clear, no odor
LNAPL (in)	-	Sampling Personnel	AJ / TG

Time (min)	Volume Purged (L)	Flow Rate (L/min)	Depth to Water (ft)	Drawdown (ft)	pH (SU) (±0.1 units)	Temp (°C) (± 3%)	Conductivity (mS/cm) (±3%)	[redacted]	ORP (mV) (±10 mV)	Dissolved Oxygen (mg/L) (±10%)	Turbidity (NTUs) (±10% for >1)
1132	0.50	0.100	6.11	0.07	7.42	3.34	1.01		283	5.52	2.4
1136		0.100	6.11	0.07	7.39	3.61	1.00		280	5.35	1.9
1140		0.100	6.11	0.07	7.36	3.69	1.00		279	5.36	1.4
1144		0.100	6.11	0.07	7.32	3.78	0.998		279	5.36	1.5
1148		0.100	6.11	0.07	7.31	3.83	0.999		278	5.37	1.8
5466											

Form Date:

TRC

Well	MW-E
Date	3/21/2019
Location	New Holstein, WI
Site	Tecumseh / HARP

Static Depth to Water (ft)	6.16	Sample Collection Time	~~1345~~ 1351
Total Purge Volume (gal)		Purge Method	Peristaltic Pump
Total Depth (ft)		Sample Method	Low-Flow Through Flow Cell
Screen Depth Interval (ft)		Water Description	Clear, no odor
LNAPL (in)	—	Sampling Personnel	AJ / TG

Time (min)	Volume Purged (L)	Flow Rate (L/min)	Depth to Water (ft)	Drawdown (ft)	pH (SU) (±0.1 units)	Temp (°C) (± 3%)	Conductivity (mS/cm) (±3%)	[redacted]	ORP (mV) (±10 mV)	Dissolved Oxygen (mg/L) (±10%)	Turbidity (NTUs) (±10% for >1)
1323	0.50	0.10	6.24	0.08	7.42	3.22	0.897		291	4.19	31.8
1327		0.10	6.27	0.11	7.32	4.07	0.870		288	3.86	15.9
1331		0.10	6.28	0.12	7.30	4.33	0.863		279	4.17	15.3
1335		0.10	6.28	0.12	7.28	4.65	0.860		271	4.15	10.2
1339		0.10	6.28	0.12	7.26	4.92	0.862		262	4.12	6.9
1343		0.10	6.28		7.26	5.26	0.855		249	4.12	4.8
1347			6.28		7.26	5.20	0.858		243	4.20	4.3
1351					7.26	5.24	0.851		239	4.19	3.5

Form Date:

TRC

Well	TEC-1 (DUP-1)
Date	3/21/2019
Location	New Holstein, WI
Site	Tecumseh / HARP

Static Depth to Water (ft)	3.22	Sample Collection Time	1435
Total Purge Volume (gal)		Purge Method	Peristaltic Pump
Total Depth (ft)		Sample Method	Low-Flow Through Flow Cell
Screen Depth Interval (ft)		Water Description	Clear, no odor
LNAPL (in)	—	Sampling Personnel	AJ / TG

Time (min)	Volume Purged (L)	Flow Rate (L/min)	Depth to Water (ft)	Drawdown (ft)	pH (SU) (±0.1 units)	Temp (°C) (± 3%)	Conductivity (mS/cm) (±3%)	[redacted]	ORP (mV) (±10 mV)	Dissolved Oxygen (mg/L) (±10%)	Turbidity (NTUs) (±10% for >1)
1405	0.50	0.10	3.58	0.36	7.98	5.96	0.394		246	7.09	8.9
1409		0.10	3.62	0.40	7.99	5.78	0.395		235	7.03	10.1
1413		0.10	3.68	0.46	7.96	5.68	0.392		236	7.04	7.8
1417		0.10	3.69	0.47	7.93	5.61	0.390		238	7.03	6.9
1421		0.10	3.71	0.49	7.95	5.66	0.389		239	7.02	7.5
Stop											

Well	MW-8	
Date	3/21/2019	
Location	New Holstein, WI	
Site	Tecumseh / HARP	

Static Depth to Water (ft)	1.54	Sample Collection Time	1456
Total Purge Volume (gal)		Purge Method	Peristaltic Pump
Total Depth (ft)		Sample Method	Low-Flow Through Flow Cell
Screen Depth Interval (ft)		Water Description	clear
LNAPL (in)	—	Sampling Personnel	AJ / TG

Time (min)	Volume Purged (L)	Flow Rate (L/min)	Depth to Water (ft)	Drawdown (ft)	pH (SU) (±0.1 units)	Temp (°C) (± 3%)	Conductivity (mS/cm) (±3%)		ORP (mV) (±10 mV)	Dissolved Oxygen (mg/L) (±10%)	Turbidity (NTUs) (±10% for >1)
1440			1.88		7.65	6.36	0.351		252	4.49	7.6
1444			1.85		7.52	6.51	0.345		250	4.23	9.1
1448			1.85		7.45	6.49	0.340		246	4.15	7.8
1452			1.85		7.37	6.67	0.336		242	4.10	9.2
1456			1.85		7.35	6.70	0.328		237	4.06	9.0

Form Date:

TRC

Well	MW-5
Date	3/21/2019
Location	New Holstein, WI
Site	Tecumseh / HARP

Static Depth to Water (ft)	2.81	Sample Collection Time	1522
Total Purge Volume (gal)		Purge Method	Peristaltic Pump
Total Depth (ft)		Sample Method	Low-Flow Through Flow Cell
Screen Depth Interval (ft)		Water Description	
LNAPL (in)	—	Sampling Personnel	AJ / TG

Time (min)	Volume Purged (L)	Flow Rate (L/min)	Depth to Water (ft)	Drawdown (ft)	pH (SU) (±0.1 units)	Temp (°C) (± 3%)	Conductivity (mS/cm) (±3%)		ORP (mV) (±10 mV)	Dissolved Oxygen (mg/L) (±10%)	Turbidity (NTUs) (±10% for >1)
1506			2.66		7.23	5.78	0.553		255	4.14	2.4
1510			2.63		7.18	6.17	0.543		247	3.76	1.4
1514			2.62		7.11	6.31	0.533		239	3.65	1.9
1518			2.61		7.14	6.22	0.511		228	3.61	1.6
1522			2.61		7.12	6.10	0.499		218	3.95	1.0

Form Date:

TRC

Well	NH-7
Date	3/21/19
Location	New Holstein, WI
Site	Tecumseh / HARP

Static Depth to Water (ft)	7.22	Sample Collection Time	1605
Total Purge Volume (gal)		Purge Method	Peristaltic Pump
Total Depth (ft)		Sample Method	Low-Flow Through Flow Cell
Screen Depth Interval (ft)		Water Description	
LNAPL (in)	—	Sampling Personnel	AJ / TG

Time (min)	Volume Purged (L)	Flow Rate (L/min)	Depth to Water (ft)	Drawdown (ft)	pH (SU) (±0.1 units)	Temp (°C) (± 3%)	Conductivity (mS/cm) (±3%)	[redacted]	ORP (mV) (±10 mV)	Dissolved Oxygen (mg/L) (±10%)	Turbidity (NTUs) (±10% for >1)
1540	0.50	0.16	7.36	0.14	7.15	7.25	0.844		272	8.50	15.4
1544		0.16	7.39	0.17	7.27	7.31	0.810		265	8.25	11.9
1548		0.10	7.39	0.17	7.26	7.36	0.821		265	7.90	13.4
1552		0.10	7.39	0.17	7.26	7.42	0.837		266	7.76	17.9
1556		0.18	7.39	0.17	7.26	6.96	0.834		267	8.07	16.6
Stable											

Form Date:

TRC

Well	MW-F (MS/MSD)
Date	3/21/2019
Location	New Holstein, WI
Site	Tecumseh / HARP

Static Depth to Water (ft)	7.38	Sample Collection Time	1700
Total Purge Volume (gal)		Purge Method	Peristaltic Pump
Total Depth (ft)		Sample Method	Low-Flow Through Flow Cell
Screen Depth Interval (ft)		Water Description	
LNAPL (in)	—	Sampling Personnel	AJ / TG

Time (min)	Volume Purged (L)	Flow Rate (L/min)	Depth to Water (ft)	Drawdown (ft)	pH (SU) (±0.1 units)	Temp (°C) (± 3%)	Conductivity (mS/cm) (±3%)		ORP (mV) (±10 mV)	Dissolved Oxygen (mg/L) (±10%)	Turbidity (NTUs) (±10% for >1)
1634	0.50	0.15	7.57	0.19	7.35	6.93	0.935		269	5.33	12.3
1638		0.15	7.66	0.28	7.31	6.67	0.937		262	5.05	12.4
1642		0.15	7.74	0.36	7.22	6.56	0.901		259	5.23	13.2
1646		0.15	7.82	0.44	7.19	6.52	0.838		257	5.56	9.2
1650		0.15	7.89	0.51	7.15	6.45	0.783		257	5.84	5.6
Stable											

Form Date:

Page ____ of ____

TRC

Well	MW-A
Date	3/21/2019
Location	New Holstein, WI
Site	Tecumseh / HARP

Static Depth to Water (ft)	5.34	Sample Collection Time	1725
Total Purge Volume (gal)		Purge Method	Peristaltic Pump
Total Depth (ft)		Sample Method	Low-Flow Through Flow Cell
Screen Depth Interval (ft)		Water Description	Clear, no odor
LNAPL (in)	—	Sampling Personnel	AJ / TG

Time (min)	Volume Purged (L)	Flow Rate (L/min)	Depth to Water (ft)	Drawdown (ft)	pH (SU) (±0.1 units)	Temp (°C) (± 3%)	Conductivity (mS/cm) (±3%)		ORP (mV) (±10 mV)	Dissolved Oxygen (mg/L) (±10%)	Turbidity (NTUs) (±10% for >1)
1702	0.50	0.15	5.53	1.19	7.07	7.54	0.909		285	3.63	115
1706		0.15	5.55	1.21	7.15	7.25	0.828		277	3.84	49.4
1710		0.15	5.62	1.28	7.21	7.11	0.617		271	6.01	20.0
1714		0.15	5.64	1.30	7.24	6.98	0.546		270	7.17	14.7
1718		0.15	5.64	1.30	7.23	7.22	0.531		271	6.82	13.0
1722		0.15	5.64	1.30	7.21	7.28	0.532		273	6.69	10.9

Form Date:

Page _____ of _____

TRC

Well	MW-B
Date	3/28/2019
Location	New Holstein, WI
Site	Tecumseh / HARP

Static Depth to Water (ft)	3.88	Sample Collection Time	1800
Total Purge Volume (gal)		Purge Method	Peristaltic Pump
Total Depth (ft)		Sample Method	Low-Flow Through Flow Cell
Screen Depth Interval (ft)		Water Description	
LNAPL (in)	—	Sampling Personnel	AJ / TG

Time (min)	Volume Purged (L)	Flow Rate (L/min)	Depth to Water (ft)	Drawdown (ft)	pH (SU) (±0.1 units)	Temp (°C) (± 3%)	Conductivity (mS/cm) (±3%)	ORP (mV) (±10 mV)	Dissolved Oxygen (mg/L) (±10%)	Turbidity (NTUs) (±10% for >1)
1732			4.11		7.37	6.77	0.508	283	7.50	115
1736			4.16		7.40	6.50	0.509	282	7.35	53.9
1740			4.18		7.39	6.23	0.508	283	7.37	35.8
1744			4.19		7.41	6.28	0.507	284	7.16	13.4
1748			4.21		7.40	6.29	0.509	285	7.02	10.3
1752			4.22		7.39	6.26	0.510	286	6.93	5.5
1756			4.23		7.39	6.26	0.512	287	6.83	3.7

Form Date:

ATTACHMENT B

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

March 29, 2019

Chris Harvey
TRC Environmental
230 W. Monroe St
Suite 630
Chicago, IL 60606

RE: Project: TECUMSEH CR LINE
Pace Project No.: 40184671

Dear Chris Harvey:
Enclosed are the analytical results for sample(s) received by the laboratory on March 23, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Laurie Woelfel

Laurie Woelfel
laurie.woelfel@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Tyler Gomoll, TRC Solutions
Tanner Hess, TRC

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: TECUMSEH CR LINE
Pace Project No.: 40184671

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: TECUMSEH CR LINE
Pace Project No.: 40184671

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40184671001	**TEC-3**	Water	03/21/19 09:15	03/23/19 08:15
40184671002	**TEC-4**	Water	03/21/19 11:20	03/23/19 08:15
40184671003	**NH-26**	Water	03/21/19 12:00	03/23/19 08:15
40184671004	**MW-E**	Water	03/21/19 13:51	03/23/19 08:15
40184671005	**TEC-1**	Water	03/21/19 14:35	03/23/19 08:15
40184671006	**DUP-1**	Water	03/21/19 00:00	03/23/19 08:15
40184671007	**MW-8**	Water	03/21/19 14:56	03/23/19 08:15
40184671008	**MW-5**	Water	03/21/19 15:22	03/23/19 08:15
40184671009	**NH-7**	Water	03/21/19 16:05	03/23/19 08:15
40184671010	**MW-F**	Water	03/21/19 17:00	03/23/19 08:15
40184671011	**MW-A**	Water	03/21/19 17:25	03/23/19 08:15
40184671012	**MW-B**	Water	03/21/19 18:00	03/23/19 08:15

Pace Analytical Services, LLC
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Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: TECUMSEH CR LINE
Pace Project No.: 40184671

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40184671001	**TEC-3**	EPA 6010	TXW	1	PASI-G
40184671002	**TEC-4**	EPA 6010	TXW	1	PASI-G
40184671003	**NH-26**	EPA 6010	TXW	1	PASI-G
40184671004	**MW-E**	EPA 6010	TXW	1	PASI-G
40184671005	**TEC-1**	EPA 6010	TXW	1	PASI-G
40184671006	**DUP-1**	EPA 6010	TXW	1	PASI-G
40184671007	**MW-8**	EPA 6010	TXW	1	PASI-G
40184671008	**MW-5**	EPA 6010	TXW	1	PASI-G
40184671009	**NH-7**	EPA 6010	TXW	1	PASI-G
40184671010	**MW-F**	EPA 6010	TXW	1	PASI-G
40184671011	**MW-A**	EPA 6010	TXW	1	PASI-G
40184671012	**MW-B**	EPA 6010	TXW	1	PASI-G

Pace Analytical Services, LLC
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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: TECUMSEH CR LINE
Pace Project No.: 40184671

Sample: TEC-3 **Lab ID: 40184671001** Collected: 03/21/19 09:15 Received: 03/23/19 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**1080**	ug/L	10.0	2.5	1		03/25/19 23:22	7440-47-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: TECUMSEH CR LINE
Pace Project No.: 40184671

Sample: TEC-4 **Lab ID: 40184671002** Collected: 03/21/19 11:20 Received: 03/23/19 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**16900**	ug/L	10.0	2.5	1		03/25/19 23:25	7440-47-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: TECUMSEH CR LINE
Pace Project No.: 40184671

Sample: NH-26 **Lab ID: 40184671003** Collected: 03/21/19 12:00 Received: 03/23/19 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**763**	ug/L	10.0	2.5	1		03/25/19 23:27	7440-47-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: TECUMSEH CR LINE
Pace Project No.: 40184671

Sample: MW-E **Lab ID: 40184671004** Collected: 03/21/19 13:51 Received: 03/23/19 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**628**	ug/L	10.0	2.5	1		03/25/19 23:30	7440-47-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: TECUMSEH CR LINE
Pace Project No.: 40184671

Sample: TEC-1 **Lab ID: 40184671005** Collected: 03/21/19 14:35 Received: 03/23/19 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**315**	ug/L	10.0	2.5	1		03/25/19 23:32	7440-47-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: TECUMSEH CR LINE
Pace Project No.: 40184671

Sample: DUP-1 **Lab ID: 40184671006** Collected: 03/21/19 00:00 Received: 03/23/19 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**319**	ug/L	10.0	2.5	1		03/25/19 23:35	7440-47-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: TECUMSEH CR LINE
Pace Project No.: 40184671

Sample: MW-8 **Lab ID: 40184671007** Collected: 03/21/19 14:56 Received: 03/23/19 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**5.2J**	ug/L	10.0	2.5	1		03/25/19 23:37	7440-47-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: TECUMSEH CR LINE
Pace Project No.: 40184671

Sample: MW-5 **Lab ID: 40184671008** Collected: 03/21/19 15:22 Received: 03/23/19 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**81.6**	ug/L	10.0	2.5	1		03/25/19 23:40	7440-47-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: TECUMSEH CR LINE
Pace Project No.: 40184671

Sample: NH-7 **Lab ID: 40184671009** Collected: 03/21/19 16:05 Received: 03/23/19 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**279**	ug/L	10.0	2.5	1		03/25/19 23:42	7440-47-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: TECUMSEH CR LINE
Pace Project No.: 40184671

Sample: MW-F **Lab ID: 40184671010** Collected: 03/21/19 17:00 Received: 03/23/19 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**<2.5**	ug/L	10.0	2.5	1		03/25/19 23:10	7440-47-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: TECUMSEH CR LINE
Pace Project No.: 40184671

Sample: MW-A **Lab ID: 40184671011** Collected: 03/21/19 17:25 Received: 03/23/19 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**458**	ug/L	10.0	2.5	1		03/25/19 23:45	7440-47-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: TECUMSEH CR LINE
Pace Project No.: 40184671

Sample: MW-B **Lab ID: 40184671012** Collected: 03/21/19 18:00 Received: 03/23/19 08:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**79.6**	ug/L	10.0	2.5	1		03/25/19 23:52	7440-47-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: TECUMSEH CR LINE
Pace Project No.: 40184671

QC Batch: 316402 Analysis Method: EPA 6010
QC Batch Method: EPA 6010 Analysis Description: ICP Metals, Trace, Dissolved
Associated Lab Samples: 40184671001, 40184671002, 40184671003, 40184671004, 40184671005, 40184671006, 40184671007, 40184671008, 40184671009, 40184671010, 40184671011, 40184671012

METHOD BLANK: 1840267 Matrix: Water
Associated Lab Samples: 40184671001, 40184671002, 40184671003, 40184671004, 40184671005, 40184671006, 40184671007, 40184671008, 40184671009, 40184671010, 40184671011, 40184671012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Dissolved	ug/L	<2.5	10.0	03/25/19 23:05	

LABORATORY CONTROL SAMPLE: 1840268

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Dissolved	ug/L	500	502	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1840269 1840270

Parameter	Units	40184671010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Dissolved	ug/L	<2.5	500	500	504	504	101	101	75-125	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALIFIERS

Project: TECUMSEH CR LINE
Pace Project No.: 40184671

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: TECUMSEH CR LINE
Pace Project No.: 40184671

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40184671001	**TEC-3**	EPA 6010	316402		
40184671002	**TEC-4**	EPA 6010	316402		
40184671003	**NH-26**	EPA 6010	316402		
40184671004	**MW-E**	EPA 6010	316402		
40184671005	**TEC-1**	EPA 6010	316402		
40184671006	**DUP-1**	EPA 6010	316402		
40184671007	**MW-8**	EPA 6010	316402		
40184671008	**MW-5**	EPA 6010	316402		
40184671009	**NH-7**	EPA 6010	316402		
40184671010	**MW-F**	EPA 6010	316402		
40184671011	**MW-A**	EPA 6010	316402		
40184671012	**MW-B**	EPA 6010	316402		

Pace Analytical®
www.pacelabs.com

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

CHAIN OF CUSTODY

4018467 1

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

(Please Print Clearly)	
Company Name:	TRC
Branch/Location:	Chicago
Project Contact:	Tyler Gomoll
Phone:	312-800-5907
Project Number:	
Project Name:	Tecumseh Cr Line
Project State:	WI
Sampled By (Print):	Tyler Gomoll
Sampled By (Sign):	
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	TRC
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes
A = Air, W = Water
B = Biota, DW = Drinking Water
C = Charcoal, GW = Ground Water
O = Oil, SW = Surface Water
S = Soil, WW = Waste Water
SI = Sludge, WP = Wipe

FILTERED? (YES/NO) Y/N: Y
PRESERVATION (CODE)* Pick Letter: D

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	Analyses Requested: Dissolved Cr	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	TEC-3	3/21/19	0915	GW	X			
002	TEC-4		1120		X			
003	NH-26		1200		X			
004	MW-E		1351		X			
005	TEC-1		1435		X			
006	Dup-1				X			
007	MW-8		1456		X			
008	MW-5		1522		X			
009	NH-7		1605		X			
010	MW-F		1700		X			
011	MS/MSD		1700		X			
12 012	MW-A		1725		X			
13 013	MW-B		1806		X			

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed: 3-25-19

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Tyler Gomoll	3/22/19 0540	Kathy McDonald	3/22/19 0830
Kathy McDonald	3/22/19 1700	CS Logistics	3/22/19
CS Logistics	3.23.19 0815		

PACE Project No.: 4018467 1

Receipt Temp = R01 °C

Sample Receipt pH: OK / Adjusted

Cooler Custody Seal: Present / Not Present; Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

Pace Analytical Services, LL
1241 Bellevue Street, Suite
Green Bay, WI 54302

Sample Preservation Receipt Form

Client Name: TRC Project # 40184671

All containers needing preservation have been checked and noted below: ☐Yes ☐No ☐N/A

Lab Lot# of pH paper: 203581 Lab Std #ID of preservation (if pH adjusted):

Initial when completed: AG Date/ Time:

	Glass							Plastic							Vials						Jars			General								
Pace Lab #	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001													1																	X		2.5 / 5 / 10
002													1																	X		2.5 / 5 / 10
003													1																	X		2.5 / 5 / 10
004													1																	X		2.5 / 5 / 10
005													1																	X		2.5 / 5 / 10
006													1																	X		2.5 / 5 / 10
007													1																	X		2.5 / 5 / 10
008													1																	X		2.5 / 5 / 10
009													1																	X		2.5 / 5 / 10
010													3																	X		2.5 / 5 / 10
011													1																	X		2.5 / 5 / 10
012													1																	X		2.5 / 5 / 10
013																																2.5 / 5 / 10
014																																2.5 / 5 / 10
015																																2.5 / 5 / 10
016																																2.5 / 5 / 10
017																																2.5 / 5 / 10
018																																2.5 / 5 / 10
019																																2.5 / 5 / 10
020																																2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm) : ☐Yes ☐No ☐N/A ***If yes look in headspace column**

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	DG9A	40 mL amber ascorbic	JGFU	4 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP2N	500 mL plastic HNO3	DG9T	40 mL amber Na Thio	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH, Znact	VG9U	40 mL clear vial unpres	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3U	250 mL plastic unpres	VG9H	40 mL clear vial HCL		
AG5U	100 mL amber glass unpres	BP3C	250 mL plastic NaOH	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres	BP3S	250 mL plastic H2SO4			GN:	

Pace Analytical 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 25Apr2018
	Document No.: F-GB-C-031-Rev.07	Issuing Authority: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #: WO#: 40184671

Client Name: TRC

Courier: ☑ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco ☐ Client ☐ Pace Other: _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☐ no Seals intact: ☐ yes ☐ no

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other _____

Thermometer Used SR - N/A **Type of Ice:** (Wet) Blue Dry None ☑ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: RDI /Corr: _____

Temp Blank Present: ☑ yes ☐ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C.

Person examining contents:
Date: 3.23.19
Initials: PB

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☐Yes ☑No ☐N/A	2. No seal 3.23.19 PB
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume:		8.
For Analysis: ☑Yes ☐No MS/MSD:	☑Yes ☐No ☐N/A	
Correct Containers Used:	☑Yes ☐No	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☑Yes ☐No ☐N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12. 009 / NH-7 time unlegible - 3.23.19 PB
-Includes date/time/ID/Analysis Matrix: W		
Trip Blank Present:	☐Yes ☐No ☑N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: _____ Date/Time: _____

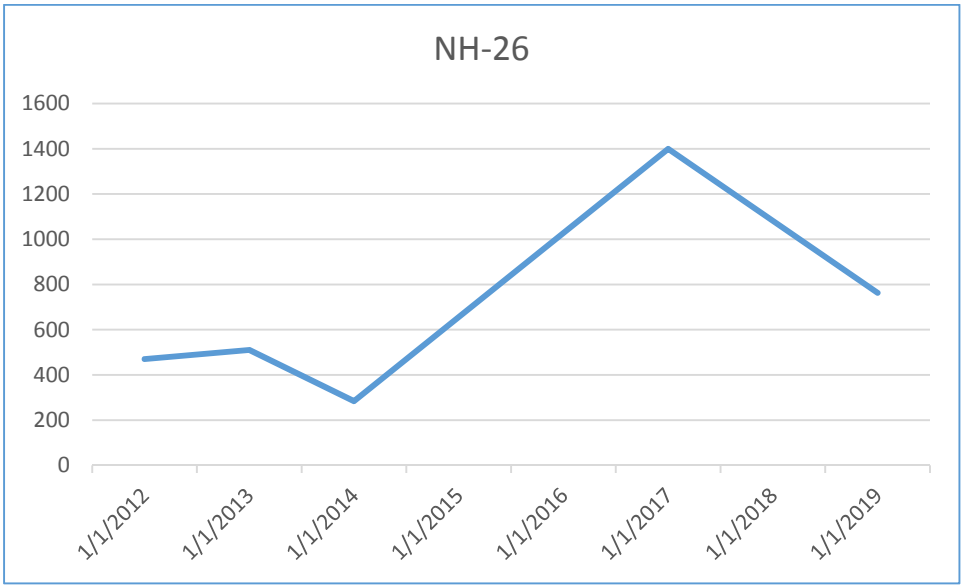
Comments/ Resolution: Client returned (1) 8oz BP3N bottle unused. 3.23.19 PB

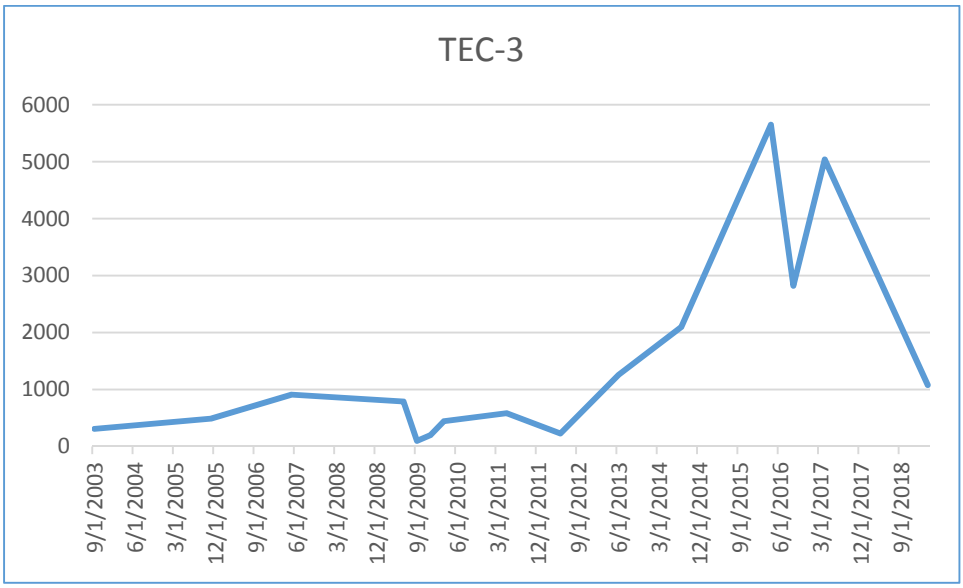
Project Manager Review: _____ **Date:** 3/23/19

ATTACHMENT C

Attachment C – Trend Analysis Charts

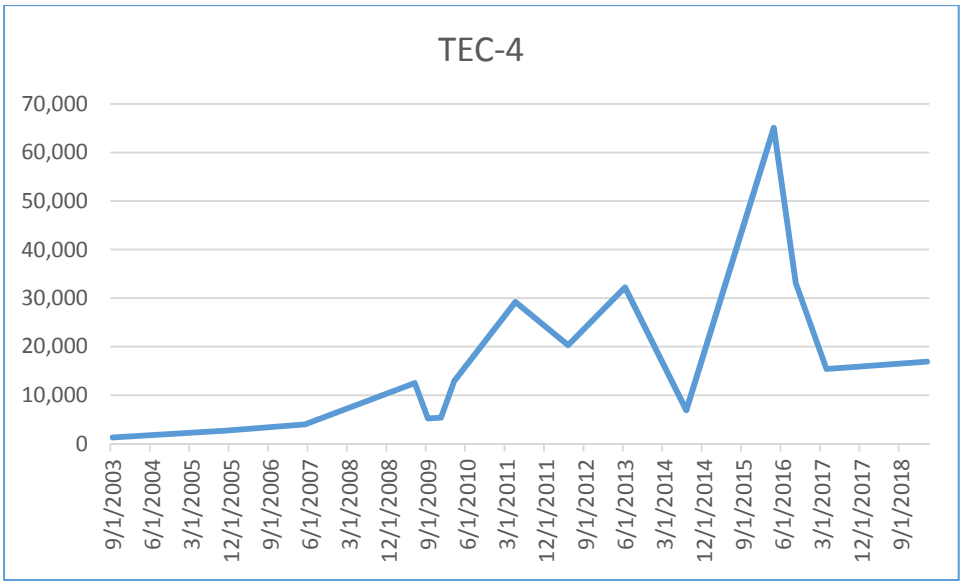
Source Area Monitoring Wells



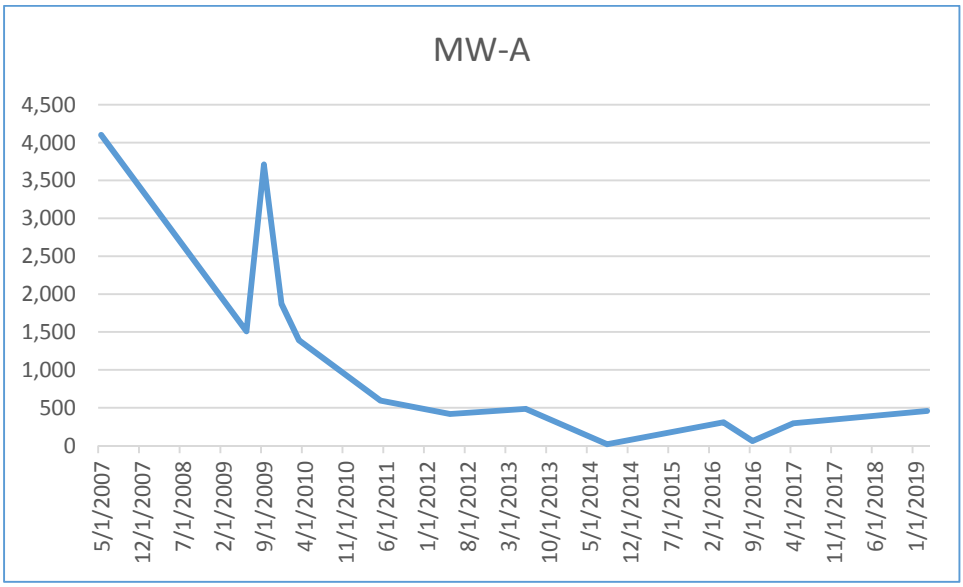


Trends depict sample date verses chromium concentration in micrograms per liter (ug/L)

Attachment C – Trend Analysis Charts

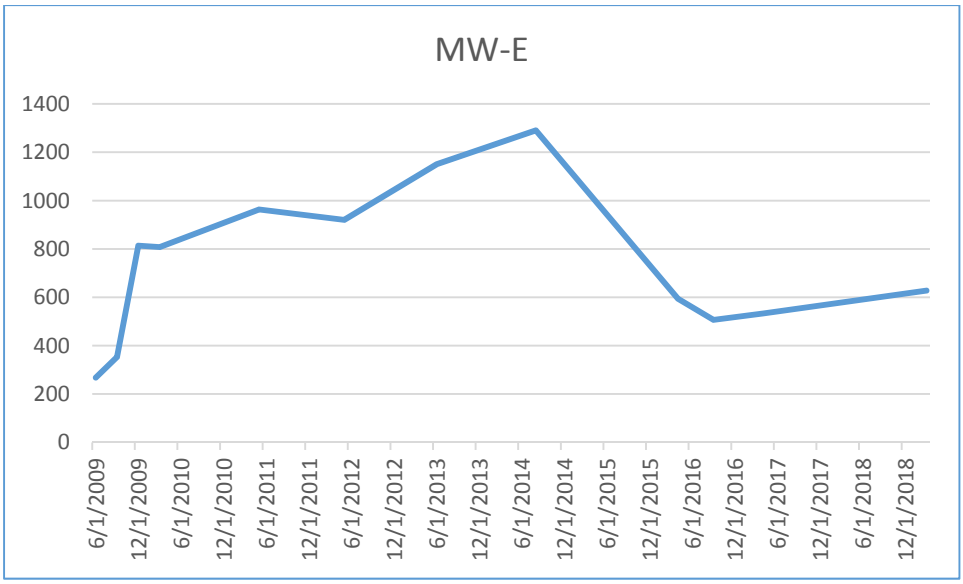


Down-gradient - Southwest

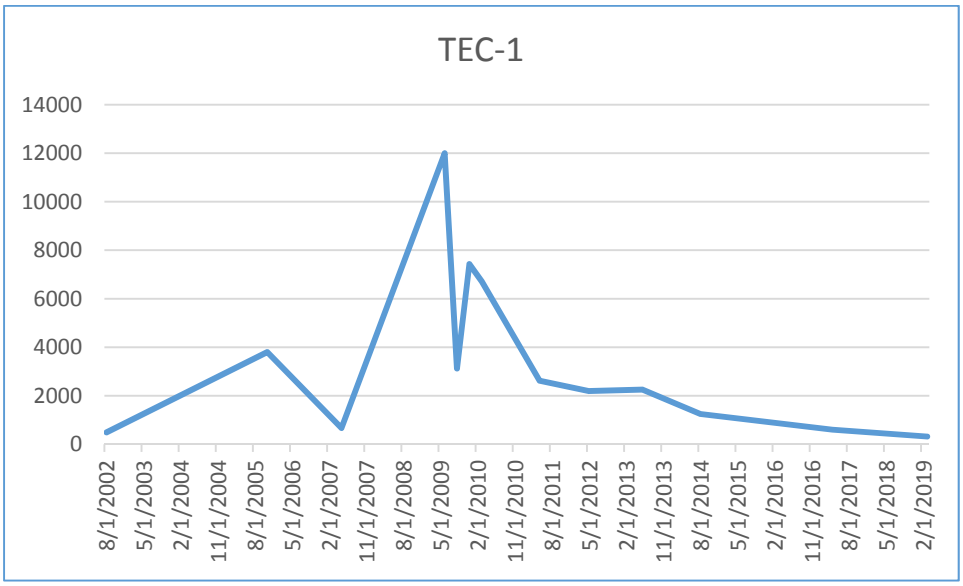


Trends depict sample date verses chromium concentration in micrograms per liter (ug/L)

Attachment C – Trend Analysis Charts



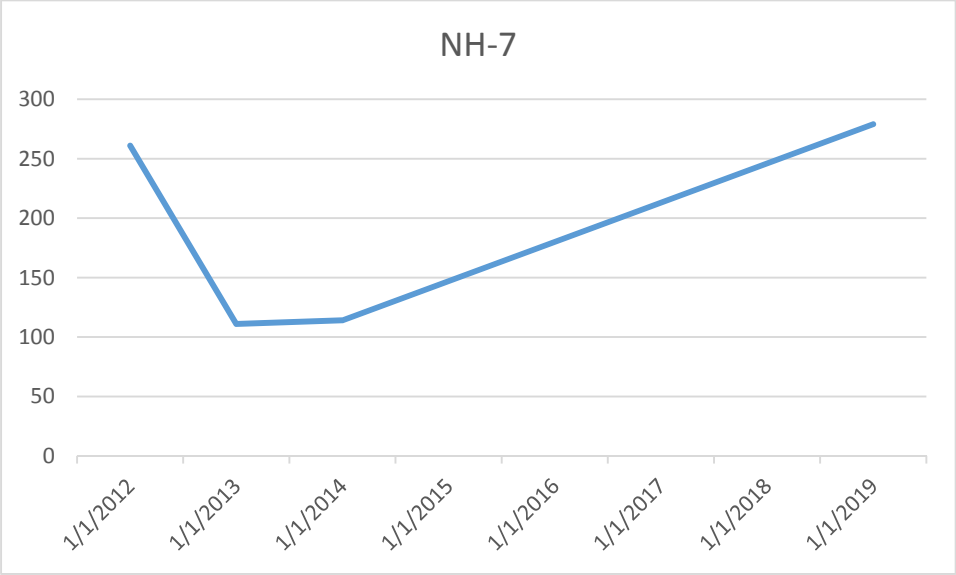
Down-gradient – West



Trends depict sample date verses chromium concentration in micrograms per liter (ug/L)

Attachment C – Trend Analysis Charts

Down-gradient - Northwest



Trends depict sample date verses chromium concentration in micrograms per liter (ug/L)