TRANSMITTAL LETTER

ARCADIS Design & Consultancy for natural and built assets

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Copies:

Date:
July 31, 2018

Subject:
Livonia Transmission Plant
Q2 2018 Progress Report

Arcadis Project No.:
MI001454.0007

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Delivered to:	Receptionist/Front Desk
Service type:	FedEx Priority Overnight®
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ARCADIS Design & Consultancy for natural and built assets

FORD MOTOR COMPANY

QUARTERLY PROGRESS REPORT - 2Q 2018

Livonia Transmission Plant

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July 31, 2018

QUARTERLY PROGRESS REPORT - 2Q 2018

Livonia Transmission Plant

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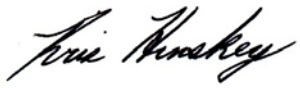

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MI001454.0007

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July 31, 2018

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2Q 2018: Activities

On-Site

1. Groundwater Sampling
2. Hydraulic Control System Performance Monitoring
   - ✓ Operating as Designed Since March 15, 2017
   - ✓ Discharge Compliance
3. LTP VI Mitigation System Design and Construction

Off-Site

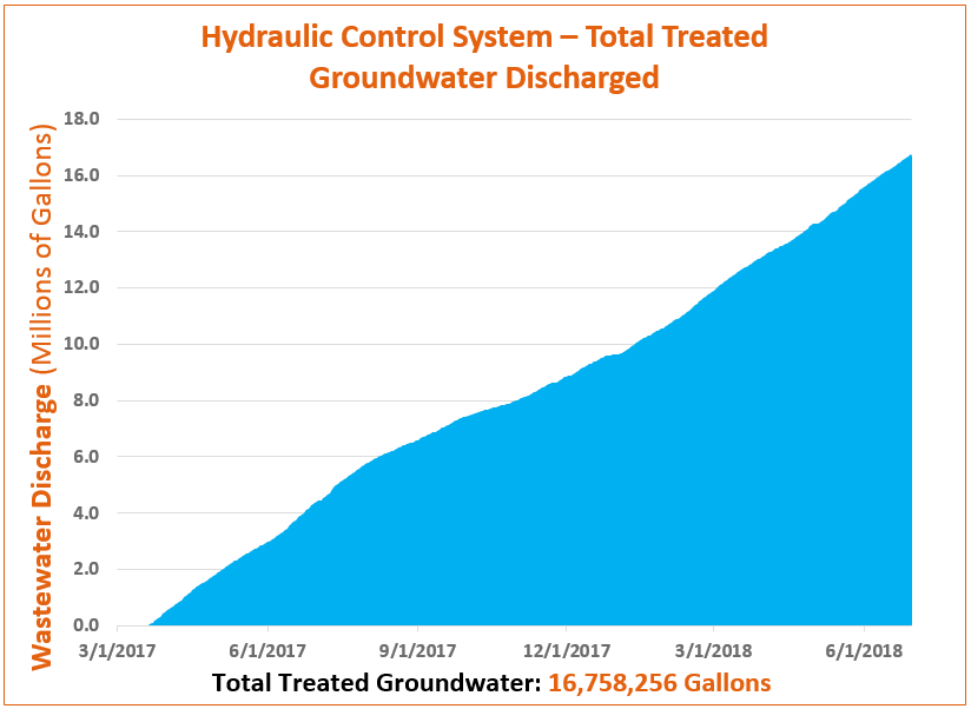
1. Groundwater Sampling
2. Soil Gas Sampling

Total On-Site Samples

Period	Groundwater / Water	Soil/ Sediment	Soil Gas
2Q 2018	68	0	0
Total since Oct. 2015	675	328	152

Total Off-Site Samples

Period	Groundwater	Soil Gas
2Q 2018	20	22
Total since Oct. 2015	371	153



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Key Dates

Document Submittal

Document	Date Submitted	Status
GW Work Plan	4/20/2017	Received
Off-Site VI Work Plan	4/21/2017	Received
Site Specific VIAC	8/9/2017	Approved
CSM	8/25/2017	Approved
QAPPs	8/25/2017	Received
HASP	8/25/2017	Received
Target Detection Limit Request RespAP	11/1717	Approved
3Q 2017 Progress Report	11/22/17	Received
Response to MDEQ Comments for the Conceptual Site Model	12/12/17	Received
Remedial Investigation RespAP	12/13/17	MDEQ Disapproved on March 9, 2018
4Q 2017 Progress Report	1/30/18	Received
RespAP Response to Comments Letter	4/13/18	Received
VI RespAP 6.6(b)(i) Revised	4/13/18	Received
RI RespAP 6.7 Revised	4/13/18	Received
1Q 2018 Progress Report	4/30/18	Received

Upcoming Dates

2018

August 6 On and Off-Site 3Q 2018 Groundwater Sampling

August 20 Off-Site 3Q 2018 Soil Gas Sampling

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Appendix B - Off-Site Groundwater Field Sampling Logs

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ACRONYMS AND ABBREVIATIONS

1,1-DCE	1,1-dichloroethene
1,4-d	1,4-dioxane
1Q 2018	first quarter of 2018
2Q 2018	second quarter of 2018
4Q 2017	fourth quarter of 2017
AOC	Area of Concern
ATNPC	Automatic Transmission New Product Center
CD	Consent Decree
Cis-1,2-DCE	cis-1,2-dichloroethene
COC	constituent of concern
CSM	conceptual site model
DO	dissolved oxygen
GLWA	Great Lakes Water Authority
gpd	gallons per day
gpm	gallons per minute
GWIC	groundwater in contact
HCS	hydraulic control system
LTP	Livonia Transmission Plant
µg/L	microgram per liter
MDEQ	Michigan Department of Environmental Quality
mg/L	milligram per liter
mL	milliliter
mL/min	milliliter per minute
ORP	oxidation-reduction potential
PCE	tetrachloroethene
PLC	programmable logic controller
RespAP	Remedial Investigation Response Activity
RI	Remedial Investigation
RIASL	Residential Interim Action Screening Level
RRD	Remediation and Redevelopment Division
SSD	sub-slab depressurization
SVMP	soil vapor monitoring point
SVOC	semi-volatile organic compound
TCE	trichloroethene
TDL	Target Detection Limit
trans-1,2-DCE	trans-1,2-dichloroethene

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TWM	Total Waste Manager
USEPA	United States Environmental Protection Agency
VC	vinyl chloride
VI	vapor intrusion
VOC	volatile organic compound
WWTP	Wastewater Pre-Treatment Plant

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1 INTRODUCTION

Purpose of This Report

Arcadis of Michigan LLC (Arcadis), on behalf of Ford Motor Company (Ford) has prepared this Progress Report (report) for the Livonia Transmission Plant (LTP) property (the site). This document was produced in compliance with a Consent Decree (CD) filed by the Michigan Department of Environmental Quality (MDEQ) on July 27, 2017 (No: 2:1712372-GAD-RSW). The purpose of this progress report is to summarize continued response activities completed voluntarily by Ford, both at the site and the area east of the site, since submittal of the conceptual site model (CSM) to the MDEQ on August 25, 2017, the initial Remedial Investigation Response Activity Plan (RespAP), submitted on December 13, 2017, and the revised RespAPs submitted to the MDEQ on April 13, 2018. This progress report includes activities completed from April 1 through June 30, 2018 (2Q 2018). Activities described in this 2Q 2018 report include:

- On- and off-site groundwater sampling
- Off-site soil gas sampling
- Hydraulic control system operation, evaluation, and optimization
- LTP sub-slab depressurization system

This quarterly report primarily focuses on the seven constituents of concern (COCs) for the site including: 1,1-dichloroethene (1,1-DCE), cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene, (trans-1,2-DCE), tetrachloroethene (PCE), trichloroethene (TCE), vinyl chloride (VC), and 1,4-dioxane.

Groundwater analytical results continue to be stable for both on-site and off-site samples, and soil gas samples collected from the soil vapor monitoring points (SVMPs) in the residential neighborhood continue to show no exceedances of the Recommended Interim Action Screening Levels (RIASLs).

Background

The LTP has been active in manufacturing in some capacity since the 1950s. The site is located at 36200 Plymouth Road, Livonia, Michigan (**Figure 1**) and occupies 178 acres of land. The LTP building covers approximately 3 million square feet. The area surrounding the site includes light industrial, commercial, and residential properties. For the purposes of this report, data are presented based on their location as either on-site or off-site (**Figure 2**). On-site area of concern (AOC) locations include all areas within the site boundary including the LTP, Test Track, Waste Water Pre-Treatment Plant (WWTP), Automatic Transmission Plant New Product Center (ATNPC), associated outbuildings, and the Plymouth Road right-of-way. Off-site AOC locations include commercial and residential properties located east of the site, from Belden Court west to Stark Road, and from Plymouth Road north to the railroad right-of-way (**Figure 2**).

2 SUMMARY OF RESPONSE ACTIVITIES

The following table summarizes all response activities at the AOC completed during 2Q 2018. Refer to the subsequent sections for further detail on each respective event and associated tables and figures.

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Date	Activity	Tables	Figures
May 2018	On-Site Groundwater Sampling	1, 2	3, 4, 5, 6, 7
May 2018	Off-Site Groundwater Sampling	3, 4	3, 8, 9
May 2018	Off-Site Residential Soil Gas Sampling	5, 6, 7	10, 11, 12, 13
April through June 2018	Hydraulic Control System Monitoring	8, 9	NA

On-Site Groundwater Sampling

Arcadis completed on-site gauging on May 7, 2018, which included 79 monitoring wells (**Figure 2**). Out of the 79 total monitoring wells on-site, 73 were successfully gauged. The remaining six monitoring wells either could not be located (LMW-15-05, LMW-15-07, and MW-27), were not gauged do to the presence of a newly installed transducer (MW-18), were inaccessible (MW-20), or were under equipment (MW-68) at the time of the gauging. Each monitoring well was gauged from the top of casing using an electronic water level meter to within 0.01 foot. A summary of the on-site 2Q 2018 groundwater elevations is included on the on-site quarterly groundwater elevation summary table (**Table 1)**. Groundwater elevation contours and apparent groundwater flow for the 2Q 2018 are provided on **Figure 3**.

On-site groundwater sampling was completed from May 7 through 15, 2018. Groundwater was purged from the well at a low flow rate (100 to 300 milliliters per minute [mL/min]) until field parameters (conductivity, pH, turbidity, temperature, dissolved oxygen [DO], and oxygen reduction potential [ORP]) stabilized. Once field parameters stabilized, groundwater samples were collected into laboratory supplied bottles. On-site groundwater field sampling logs are provided for reference in **Appendix A**.

A total of 77 groundwater samples were collected and submitted on ice under chain-of-custody seal to TestAmerica Laboratories in Canton, Ohio (TestAmerica), including four duplicate samples and five trip blanks. All groundwater samples were submitted for analysis of volatile organic compounds (VOCs) via United States Environmental Protection Agency (USEPA) Method 8260B and 1,4-dioxane via USEPA Method 8260B-SIM on a standard turnaround time of 10 business days. The groundwater analytical results are discussed below.

Off-Site Groundwater Sampling

Arcadis completed off-site gauging on May 7, 2018, which included 20 monitoring wells (MW-72 through MW-87, illustrated on **Figure 2**). Each monitoring well was gauged from the top of casing using an electronic water level meter accurate to within 0.01 foot. A summary of the 2Q 2018 groundwater elevations is included on the off-site quarterly groundwater elevation summary table (**Table 3)**. Groundwater elevation contours and apparent groundwater flow are provided on **Figure 3**.

Off-site groundwater sampling was completed from May 8 through 11, 2018. Groundwater was purged from the well at a low flow rate (100 to 300 mL/min) until field parameters (conductivity, pH, turbidity, temperature, DO, and ORP) had stabilized. Once field parameters were stable, groundwater samples

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were collected into laboratory supplied bottles. Off-site groundwater field sampling logs are provided for reference in **Appendix B**.

A total of 23 groundwater samples were collected and submitted on ice under chain-of-custody seal to TestAmerica, including one duplicate sample and two trip blanks. All groundwater samples were submitted for analysis of the specific list of VOCs via USEPA Method 8260B and 1,4-dioxane via USEPA Method 8260B-SIM based on a standard turnaround time of 10 business days. The groundwater analytical results are discussed below.

Off-Site Soil Gas Sampling

Arcadis completed off-site soil gas sampling between May 29 and 31, 2018. Of the 43 total soil gas monitoring points installed east of the site within the City of Livonia right of way, 22 soil gas samples were collected during the 2Q 2018 sampling event (**Figure 2**). Samples from SVMP-10, SVMP-13 through SVMP-16, SVMP-19, SVMP-22, and SVMP-23 could not be collected in 2Q 2018 due to saturated sample ports, and SVMP-20 could not be collected in 2Q 2018 due to a blockage in the tubing. Based on a comparison from the February 2018 groundwater elevation contour map to the May 2018 groundwater elevation contour map, groundwater elevations in the areas of SVMP-10, SVMP-13 through SVMP-16, SVMP-19, SVMP-22, and SVMP-23 is up about 2 feet. This is likely due to seasonal fluctuations and a series of rain events prior to the time of the sampling event. Approximately two to three 60mL syringes of air were pushed into the tubing to try to relieve the blockage at SVMP-20. However, no more than the inserted volume of air was able to be purged out of the point. SVMP-29 through SVMP-37 are located on residential properties and were not sampled in 2Q 2018, and SVMP-11 (installed in the City right-of-way) was abandoned at the request of the adjacent property owner. All SVMPs not sampled in the 2Q 2018 have been sampled during previous events (i.e., June, September, and November 2017, and/or February 2018). The next quarterly sampling event is scheduled for August 2018, and sampling will be attempted at all SVMPs except for SVMP-11 which was abandoned and SVMP-29 through SVMP-37 which are located on private property.

The 22 SVMPs along with two duplicate samples collected in May 2018 were collected using 1-liter summa canisters and 20-minute flow controllers. Each location was purged of approximately 120 milliliters (mL) of air before sampling.

Several technical quality controls were implemented to ensure that representative soil gas samples were collected from each sample point as described below.

- Tracer gas testing has been conducted during five rounds of soil gas sampling using a helium tracer at each location before sampling. Methods for tracer testing were the same as those presented in MDEQ VI Guidance Appendix F and in line with industry-accepted standards. As discussed in the MDEQ VI Guidance, a tracer gas can be used to verify that soil gas samples are from the installed point and not from leaks in the sampling train. No unacceptable helium leak test results were noted during the five rounds of soil gas sample collection through May 2018. Samples were deemed acceptable, as all exhibited concentrations of helium in purged soil gas less than 10% of the initial shroud concentration of helium, as presented in the MDEQ vapor intrusion (VI) guidance. Tracer gas testing results are presented in **Table 5**.
- Very small screened intervals (1-inch screen within a 3-inch sand pack) were installed to allow for a thicker bentonite seal to the ground surface at each location.

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- Soil gas sampling has been conducted very slowly (i.e., 20-minute sample using a 1-liter canister) to avoid short-circuiting. This flow rate is four times slower than the maximum 200 mL/min included in the 2013 MDEQ VI Guidance. MDEQ suggests that samples be collected at a flow rate at or below 200 mL/min "to minimize the potential for vacuum extraction of contaminants from the soil phase."
- Carbon dioxide and oxygen have been measured from each sample point directly after each round of sample collection. Concentrations of oxygen are slightly depressed from atmospheric conditions (i.e., 1 to 2% below atmospheric), while concentrations of carbon dioxide are slightly elevated (i.e., 3 to 6%). This is as expected due to the influence of microbial respiration in the vadose zone, which consumes oxygen and produces carbon dioxide (USEPA 2015[1]). Carbon dioxide and oxygen concentrations from the SVMPs are presented in **Table 6**.

Ambient air temperature, percent humidity, and barometric pressure were recorded during the field event and are presented on **Appendix C**.

A total of 24 soil gas samples, including two duplicate samples, were submitted under chain-of-custody protocols to Eurofins AirToxics Laboratory located in Folsom, California (Eurofins) for analysis of the specific list of volatile organic compounds (VOCs) (1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, PCE, TCE, VC, and 1,4-dioxane) via USEPA Method TO-15 based on a standard turnaround time of 10 business days. Soil gas analytical results are summarized in **Table 7,** and field sampling logs are provided for reference in **Appendix C**. The off-site soil gas results are discussed below.

Hydraulic Control System

System Overview

The hydraulic control system (HCS) was installed to intercept groundwater and mitigate the potential for impacted groundwater to continue migrating east of the HCS. HCS performance is monitored and evaluated in general accordance with the USEPA guidance – A Systematic Approach for Evaluation of Capture Zone at Pump and Treat Systems (USEPA 2008). Ford began operation of the HCS on March 15, 2017.

The system is designed to extract groundwater via four horizontal wells (ESD-1, ESD-2, ESD-3, and ESD-4; see **Figure 2**), each equipped with a groundwater extraction pump. Each extraction well screen is 400 to 600 feet long; the combined length of the four wells extends across approximately 2,000 linear feet on a line approximately perpendicular to groundwater flow. Extracted groundwater is pumped to an above-grade treatment system, where it is treated by bag filters, an air stripper, and granular-activated carbon filters, before being discharged to the sanitary sewer under a permit with the Great Lakes Water Authority (GLWA). Details regarding design and operation of the system are provided in the Remedial System Operation and Maintenance Manual dated June 29, 2017, and in the CSM dated August 25, 2017.

Remediation system equipment is operated by a programmable logic controller (PLC) unit that allows the remediation system to function without operator supervision. The HCS operates each horizontal well by

[1] United States Environmental Protection Agency (USEPA). 2015. Technical Guide for Addressing Petroleum Vapor Intrusion at Leaking Underground Storage Tank Sites. June.

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extracting groundwater to achieve the maximum drawdown available within each pumping well without dewatering the horizontal screen. Pumping in each well ceases when target drawdown is achieved and resumes when the water level begins to rebound.

System Operation and Performance Monitoring

The HCS performance is continually being evaluated and monitored. Treated water discharge volumes are documented daily and tabulated monthly (see **Table 8**). System shutdowns are documented and resolved as detailed below. Samples are collected each month to document permit compliance for sanitary discharge and air permitting.

As part of routine field activities, Arcadis periodically collects groundwater elevations from monitoring wells across the site, as well as pressure transducers installed at key monitoring wells and system well locations. Groundwater elevation trends, groundwater horizontal gradient, along with long-term groundwater analytical trends, will be the primary lines of evidence used to demonstrate effectiveness of the HCS.

3 SUMMARY OF RESPONSE ACTIVITY RESULTS

On-Site Groundwater Sampling

The results of the on-site monitoring well gauging indicate an apparent groundwater flow direction from west to east, locally influenced by the HCS. On-site groundwater elevation contours are presented on **Figure 3**. Additional monitoring wells are recommended to enable a better resolution of the hydraulic gradient. Details regarding HCS performance are provided below.

The on-site monitoring well groundwater results are compared to Michigan Part 201 Non-residential Generic Cleanup Criteria (December 2013). Comprehensive analytical results are summarized in **Table 2**. Compound concentrations of COCs exceeding Part 201 Criteria from the 2Q 2018 sampling event include cis-1,2-DCE, trans-1,2-DCE, TCE, VC, and 1,4-D. Figures summarizing the exceedances of cis-1,2-DCE, trans-1,2-DCE, TCE, and VC from the four most recent quarters of data (July 2017, November 2017, February 2018, and May 2018) are provided on **Figures 4 through 7**, respectively. All other site-specific compounds (1,1-DCE and PCE) were either not detected at concentrations above the reporting limits or were detected at concentrations below Part 201 Criteria.

Off-Site Groundwater Sampling

The results of the off-site monitoring well gauging indicate an apparent groundwater flow direction from west to east. Off-site groundwater elevation contours are included on **Figure 3.**

The off-site monitoring well groundwater results are compared to the Part 201 Residential Generic Cleanup Criteria (December 2013) and the site-specific groundwater VI screening levels included as part of the CD, which became effective on July 27, 2017. However, the site-specific screening levels provided for TCE and VC where groundwater may be in contact (GWIC) with a structure are below typical target detection limits (TDLs) for these compounds. Therefore, Ford requested the use of the MDEQ Remediation and Redevelopment Division (RRD) TDLs for TCE and VC of 1.0 microgram per liter (µg/L) as the groundwater screening level protective of VI at residential structures where there is potential for

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GWIC on November 17, 2017. The MDEQ approved the use of the TDLs for TCE and VC on December 20, 2017.

Comprehensive off-site groundwater analytical results are summarized in **Table 4**. Only VC was detected in off-site monitoring wells at concentrations above the 1.0 µg/L TDL from the 2Q 2018 sampling event. The results for TCE and VC from the four most recent quarters of data (July 2017, November 2017, February 2018, and May 2018) are provided on **Figures 8 and 9**, respectively. All other site-specific compounds (1,1-DCE, cis-DCE, trans-DCE, PCE, and 1,4-dioxane) were either not detected at concentrations above the reporting limits or were detected at concentrations below respective Part 201 Residential Criterion.

Off-Site Soil Gas Monitoring

The soil gas analytical results from 2Q 2018 sampling are compared to site-specific RIASLs for residential properties provided by the MDEQ. Comprehensive analytical results are summarized in **Table 7.** There were no off-site exceedances of the RIASLs for any of the site COCs from the 2Q 2018 sampling event. Compound-specific results for detections of cis-DCE, PCE, TCE, and VC from the four most recent quarters of data (September 2017, November 2017, February 2018, and May 2018) are provided on **Figures 10, 11, 12** and **13,** respectively. All other site-specific compounds (1,1-DCE, trans-DCE, and 1,4-dioxane) were not detected at concentrations above laboratory reporting limits; therefore, no figures were produced for these COCs.

Through 2Q 2018, five rounds of soil gas sampling (June 2017, September 2017, November 2017, February 2018, and May 2018) have been completed from the SVMP locations since the inception of the sampling program in June 2016, totaling 153 soil gas samples. Although sporadic low-level VOC detections have been noted, there have been no exceedances of the residential RIASLs provided by MDEQ for the site in any off-site soil gas sample collected from any depth interval. Based on the results of the helium tracer testing, carbon dioxide, and oxygen sampling conducted during each round of sampling, Ford believes that the results are representative and provide an accurate interpretation of off-site soil gas conditions. These soil gas sample results, coupled with the groundwater monitoring results for the site, continue to demonstrate that a clean water lens is present in most of the off-site area.

To enable the collection of building-specific information at select off-site locations, a VI RespAP was developed to evaluate the volatilization to indoor air pathway consistent with MDEQ VI guidance (2013). This VI RespAP was submitted under separate cover on April 13, 2018 and is specifically designed to follow the process laid out in section 6.6(b)(i) of the CD, which requires a RespAP to "assess VI risks to identify any unacceptable human health risks from volatilization to indoor air." The RespAP is currently in review and pending MDEQ approval.

Hydraulic Control System Operation and Performance Monitoring

System Operation

The HCS operated with minimal maintenance downtime. **Exhibit 1** below describes the system shutdowns, approximate durations, and dates.

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Exhibit 1: HCS Shutdown Summary

Date of Shutdown	Duration of Shutdowns	Summary of Shutdown
8- Apr-18 14- Apr-18 15- Apr-18 26- Apr-18 10- Jun-18	Less than 24 hours per day	Fouled discharge pump and bag filters led to a high scrubber sump alarm, shutting the system down. Field staff replaced the bag filters and pumped treated water in the sump through the system. System restarted, and operation resumed within 24 hours of shutdown. Total shutdown time was approximately 41 hours total for the 5 days.
12-Apr-18	Less than 24 hours	Pumps offline intermittently while field staff tested electrical components. Total shutdown time was approximately 2.25 hours.
16-Apr-18 5-Jun-18	Less than 24 hours per day	Field staff manually shut down system to perform routine cleaning activities to optimize system performance. System restarted, and operation resumed on the same day as the shutdown. Total shutdown time was approximately 11.5 hours total for the 2 days.
19-Apr-18	Less than 24 hours	Field staff manually turned off the pumps (ESD-1, 2, 3, and 4) to change fouled pressure gauges. Normal operation resumed the same day. Total shutdown time was approximately 0.5 hour.
20-Apr-18	Less than 24 hours	System shut down due to blown fuse in 480V panel outside system. Restart of system occurred the following day. The HCS continued operation uncontrolled until the catalytic oxidizer's heating element could be replaced. Total shutdown time was approximately 5.5 hours.
30-Apr-18	Less than 24 hours	System shut down to replace catalytic oxidizer's control module. System restarted, and operation resumed on the same day as the shutdown. Total shutdown time was approximately 1.25 hours.
2-May-18 - 4-May-18	~3 days	System shut down to complete a carbon change out. Total shutdown time was approximately 64 hours. The HCS resumed normal operation on May 4, 2018.
7-May-18 14-May-18 15-May-18	Less than 24 hours per day	Field staff manually turned off the pumps (ESD-1, 2, 3, and 4) to pump the water from the backwash tote through the system and to perform routine bag filter replacement. Normal operation resumed the same day. Total shutdown time was approximately 3.25 hours total for the 3 days.
10-May-18	Less than 24 hours	System offline due to Catox temperature alarm. System inspected, and HCS resumed normal operation the same day. Total shutdown time was approximately 0.75 hour.
15-Jun-18	Less than 24 hours	Fouled discharge pump and bag filters led to a high scrubber sump alarm the night before, shutting the system down. Field staff cleaned pump, check valve, and replaced impeller in the transfer pump. Normal operation resumed the same day. Total shutdown time was approximately 17.5 hours.

During the reporting period, groundwater was extracted from the horizontal wells in a manner to maintain continuous and consistent drawdown in each horizontal well. Discharge volumes and flowrates tabulated monthly during the reporting period are summarized in **Exhibit 2** below. Daily HCS discharge volumes and monthly discharge totals are provided in **Table 8** for the 2Q 2018 reporting period. The total volume of water collected and treated from March 15, 2017 through the 2Q 2018 is 16,758,256 gallons. Discharge has generally remained consistent through the most recent 3 months of operation (April through June).

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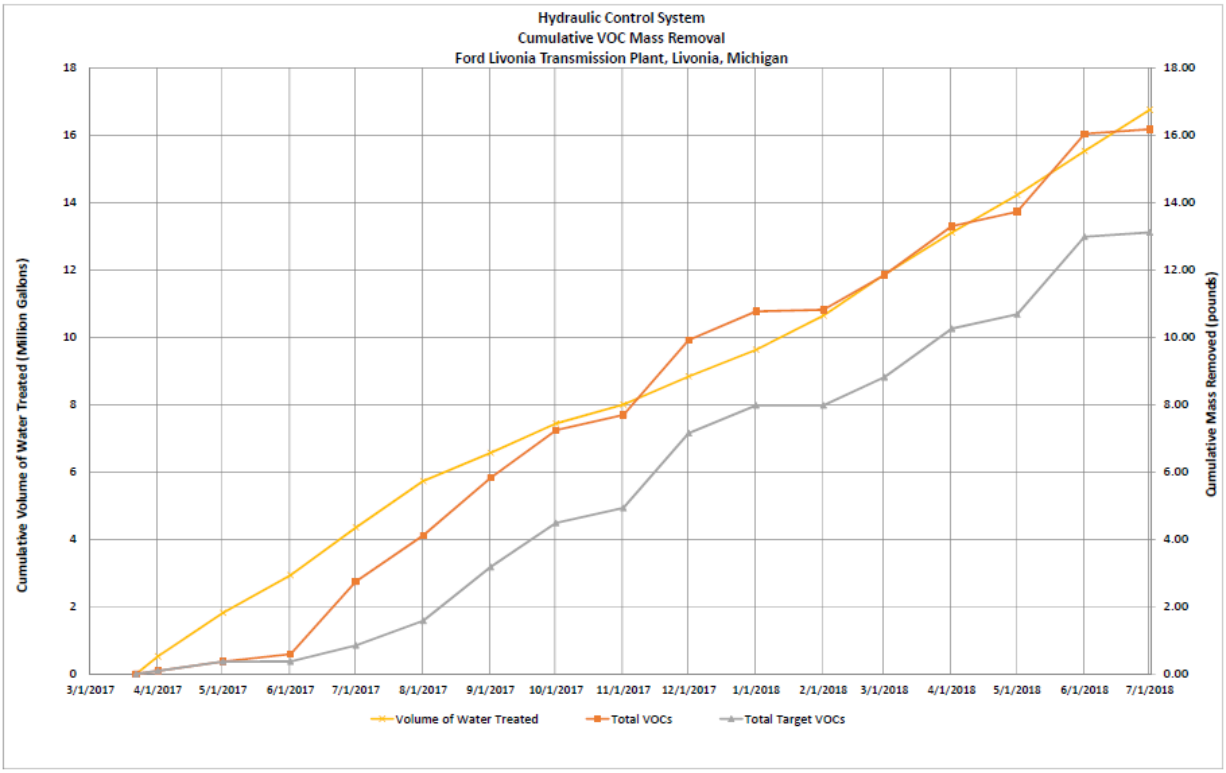
Exhibit 2: HCS Treated Discharge Water Volume and Flowrate Summary – 2Q 2018

Month	Volume Treated (Gallons)	Average Flowrate (GPM)
April	1,117,566	26
May	1,306,244	29
June	1,225,831	28

GPM = gallons per minute

Exhibit 3 below depicts the cumulative constituent-specific mass removal of the VOCs identified above through the 2Q 2018 reporting period. Vapor analytical concentrations are provided in **Table 9**.

Exhibit 3: HCS Mass Removal – 2Q 2018



Hydraulic Capture

HCS performance is being evaluated in general accordance with USEPA guidance – A Systematic Approach for Evaluation of Capture Zone at Pump and Treat Systems (USEPA 2008) to determine if the system is capturing groundwater as designed and mitigating additional migration of impacted groundwater to the east of the HCS. Two lines of evidence will be used to evaluate system performance: groundwater elevation and groundwater analytical trends.

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A groundwater elevation contour map, including the area around the HCS system, is provided as **Figure 3**. The May contour map uses a calculated pumping water level at each of the HCS wells (ESD-1 through ESD-4) to help determine groundwater gradient. The pumping water level is calculated using a pressure transducer reading collected at the southern end of each ESD relative to the groundwater elevation measured at each well prior to system startup.

As shown on **Figure 3**, there is a relatively steep gradient observed west of the HCS as groundwater moves into the zone of influence and captured by the system. The HCS operates relative to a set target drawdown. The system pumps until the target level is reached and then reduces to maintain the pumping water level. Due to seasonal fluctuations, the elevation of groundwater near the HCS varies. The average monthly pumping rates (~10 to 30 gpm) are consistent with the ambient groundwater flux values calculated for the site. There is an apparent groundwater divide beneath and/or east of the ATNPC building, with groundwater west of the divide flowing to the HCS and groundwater east of the divide flowing east; however, at this time the extent of downgradient capture cannot be calculated due to limited performance well network coverage in this area.

Pressure transducers have been installed in MW-18, MW-45, MW-46, MW-48, MW-50, MW-71, at the ESD pumps, and within the well vaults located at the north end of each ESD well to monitor the system performance and influence on the aquifer in the area. Below is a summary of the monitoring wells that currently have transducers installed:

- MW-50 monitors water levels near the northern most section of system.
- MW-48 and MW-46 monitor water levels near the center section of the system.
- MW-45 and MW-71 monitor water levels near the southern section of system.
- The transducers located within the ESD well vaults monitor water levels across the screened section in conjunction with the transducers located near each of the pumps located at the opposite end.
- The transducer located at MW-18 provides background data necessary for calibration.

The transducer data are used to evaluate pumping water levels within the ESD wells and evaluate the response to pumping in the nearby monitoring wells. The water level data collected indicates there is communication between system operation and the nearby monitoring wells, but a more robust performance well network is necessary. The transducer data and associated responses are provided in **Appendix D**. An example of the communication is seen from early to mid-June 2018, as the ESD pumps have cycled on and off for maintenance, the water levels within the nearby monitoring wells show recovery and drawdown consistent with the ESD wells. Installation of additional performance wells is being evaluated for the area around the HCS system to provide monitoring in areas where existing wells are sparse. Additional performance wells and groundwater elevation data will further support the evaluation of aquifer hydraulic response and HCS groundwater capture. Currently, the total groundwater extraction rates (**Exhibit 2**) are consistent with the calculated groundwater flux used as a basis of the HCS system design.

Groundwater Analytical Trends

To date, five rounds of groundwater samples have been collected from the performance monitoring wells since the HCS startup (April 2017, July 2017, November 2017, February 2018, and May 2018). Analytical results from the four most recent quarters of data are included on **Figures 4 through 9**. To date,

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analytical results indicates that concentrations are stable downgradient of the HCS. As additional samples are collected, Ford will evaluate analytical trends in key monitoring wells downgradient of the HCS system. Observations and measurements to date indicate that the HCS system operates as designed and prevents further migration of groundwater impacts to the east of the HCS.

Summary of Compliance Actions

Monthly compliance sampling for the HCS GLWA discharge permit was completed each month. Samples were collected after treatment and before discharge. Samples were analyzed for constituents required by the discharge permit. **Exhibit 4** below depicts the sampling parameters, methods, and discharge limits monitored for compliance with the GLWA discharge permit.

Exhibit 4: GLWA Discharge Limitations for HCS

Parameter	Analytical Method	Discharge Limit
Cadmium (Cd)	USEPA 200.7 – Metals	1.0 milligrams per liter (mg/L)
Chromium (Cr)	USEPA 200.7 – Metals	25 mg/L
Copper (Cu)	USEPA 200.7 – Metals	2.5 mg/L
Lead (Pb)	USEPA 200.7 – Metals	1.0 mg/L
Nickel (Ni)	USEPA 200.7 – Metals	5.0 mg/L
Mercury (Hg)	USEPA 245.1 - Mercury	Non-Detect
Silver (Ag)	USEPA 200.7	1.0 mg/L
Zinc (Zn)	USEPA 200.7	7.3 mg/L
Total PCB	USEPA 608	Non-Detect
Total Toxic Organics	USEPA 624 - VOCs USEPA 625 – Semi-Volatile Organic Compounds (SVOCs) USEPA 625 Dioxin Screen USEPA 1613B – Dioxins and Furans	20 µg/L

In addition, the GLWA discharge permit limits discharge to 100,800 gallons per day (gpd) and/or 70 gpm. Discharge volumes are documented daily and tabulated monthly. Discharge volumes were within discharge limits during 2Q 2018. Tabulated discharge volumes for the 2Q 2018 reporting period are presented in **Table 8**.

During the reporting period, Arcadis collected vapor samples from the air stripper effluent before vapor treatment by the catalytic oxidizer. These samples were analyzed for VOCs using the USEPA Air Method TO-15 for documenting compliance with the Rule 290 air permitting exemption of the Michigan Air Pollution Control Rules. The vapor analytical data from the air stripper effluent are summarized in **Table 9**. The June 2018 vapor sample exhibited lower than normal VOC concentrations. The 6-month compliance report was completed and submitted to the GLWA. To date there has been no violations in compliance sample results or reporting.

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Livonia Transmission Plant Vapor Mitigation System

In response to the presence of VOCs beneath the LTP building, Ford has designed and begun the installation of an SSD system.

Construction of the SSD system began in September 2017. To date, the completed construction consists of nine sub-grade suction pits and associated above-grade vertical riser piping. Currently, the sub-grade suction pits are attached to a capped riser pipe with a closed valve. On May 24, 2018, the SSD system arrived on-site and was placed in position on the east site of LTP near the powerhouse. The installation of the horizontal overhead piping was installed by the United Auto Workers and completed on July 13, 2018. The SSD system is currently connected to the interior piping. The SSD system is scheduled to be in operation during the 3Q 2018. Further information regarding the progress of the construction of the SSD system will be included in subsequent progress reports.

4 ACCESS AGREEMENTS

No additional agreements were needed to achieve Ford's objectives during the 2Q 2018 reporting period.

5 OTHER RELEVANT INFORMATION

Due Care Obligations

Response activities are ongoing and maintaining the due care obligation.

Official Communications

No meetings with the MDEQ occurred during the 2Q 2018 reporting period. Ford is currently waiting for the MDEQ to approve the RespAPs prior to implementing the defined scope to address data gap identified in the CSM.

Public Outreach

Ford currently has an active website that allows the general public access to project updates. The website link is: http://www.fordlivoniabostonbeaconproject.com. Ford is currently working to update the existing website to organize the documents in a manner that matches the CD. Ford is also working on completing a Public Outreach Plan as described in Section 6.9 of the CD.

List of Reporting Documents

A list of all reporting documents submitted through the 2Q 2018 reporting period is included in **Exhibit 5** below.

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Exhibit 5: Submitted Reporting Documents – 2Q 2018

Report Title	Submission Date
RespAP Response to Comments Letter	April 13, 2018
VI RespAP 6.6(b)(i) Revised	April 13, 2018
RI RespAP 6.7 Revised	April 13, 2018
1Q 2018 Progress Report	April 30, 2018

6 WASTE MANAGEMENT

All investigation-derived waste, construction debris, or other waste is properly stored in labelled containers (e.g., 55-gallon drum, frac tank) pending off-site disposal. All waste is managed by Ford and Veolia Environmental Services (Veolia). Veolia is the Total Waste Manager (TWM) for the site. All purge water generated during the groundwater sampling event is containerized in buckets and passed through the groundwater treatment system on-site.

7 PROPOSED SCHEDULE

Future response activities are scheduled as follows:

Exhibit 6: Response Activity Schedule

Response Activity	Proposed Schedule	Anticipated Completion
3Q 2018 On-site groundwater sampling	Week of August 6, 2018	August 17, 2018
3Q 2018 Off-site groundwater sampling	Week of August 6, 2018	August 17, 2018
3Q 2018 Off-site soil gas sampling	Week of August 20, 2018	August 24, 2018
HCS performance monitoring	Monthly intervals	Ongoing
SSD System Installation	Monthly Intervals	August 2018

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TABLES

Table 1
On-Site Groundwater Elevations
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Well ID	TOC Elevation [1] (ft. amsl)	Screen Interval (ft. bgs)	Gauging Date	Depth to LNAPL (ft. btoc)	Depth to Water (ft. btoc)	Total Depth (ft.)	LNAPL Thickness (ft.)	Corrected Groundwater Elevation (ft. amsl)
LMW-15-01	673.98	7-12	11/16/15	8.42	11.36	12	2.94	664.97
			11/25/15	8.44	11.35	12	2.91	664.96
			11/30/15	8.38	11.36	12	2.98	665.01
			12/08/15	8.35	11.35	12	3.00	665.03
			11/06/17	Could Not Open				
			02/05/18					
			05/07/18	8.34	10.44	NM	2.10	665.22
LMW-15-02	673.90	7-12	11/16/15	7.70	10.10	12	2.40	665.72
			11/25/15	7.68	9.83	12	2.15	665.79
			11/30/15	7.66	9.84	12	2.18	665.80
			12/09/15	7.60	9.76	12	2.16	665.86
			11/06/17	8.39	11.13	NM	2.74	664.96
			02/05/18	8.54	11.02	NM	2.48	664.86
			05/07/18	8.31	9.91	NM	1.60	665.27
LMW-15-03	670.18	7-12	11/16/15	6.01	7.46	12	1.45	663.88
			11/25/15	5.92	7.04	12	1.12	664.04
			11/30/15	5.81	6.94	12	1.13	664.14
			12/11/15	5.83	7.26	12	1.43	664.06
			11/06/17	6.36	7.49	NM	1.13	663.59
			02/05/18	6.62	8.41	NM	1.79	663.20
			05/07/18	6.03	7.06	NM	1.03	663.94
LMW-15-04	673.92	6-11	11/16/15	7.10	8.79	11	1.69	666.48
			11/25/15	7.10	8.79	11	1.69	666.48
			11/30/15	7.06	8.79	11	1.73	666.52
			12/09/15	7.00	8.86	11	1.86	666.55
			11/06/17	Could Not Open				
			02/05/18					
			05/07/18	7.68	9.20	NM	1.52	665.94
LMW-15-05	673.93	7-12	11/16/15	8.50	10.20	12	1.70	665.09
			11/25/15	8.50	9.99	12	1.49	665.14
			11/30/15	8.47	9.98	12	1.51	665.16
			12/08/15	8.42	9.92	12	1.50	665.21
			11/06/17	Could Not Locate				
			02/05/18					
			05/07/18					
LMW-15-06	673.93	7-12	11/16/15	6.92	8.82	12	1.90	666.63
			11/25/15	6.89	8.52	12	1.63	666.72
			11/30/15	6.74	8.39	12	1.65	666.86
			12/09/15	6.62	8.40	12	1.78	666.96
			11/06/17	Could Not Open				
			02/05/18					
			05/07/18	6.57	8.16	NM	1.59	667.05
LMW-15-07	673.52	7-12	11/16/15	NP	7.70	12	NM	665.82
			11/25/15	NP	7.32	12	NM	666.20
			11/30/15	7.14	7.15	12	0.01	666.38
			12/11/15	7.08	7.09	12	0.01	666.44
			11/06/17	7.43	7.53	NM	0.10	666.07
			02/05/18	Could Not Locate				
			05/07/18					

See Notes on Last Page.

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LMW-15-08	673.88	7.5-12.5	11/16/15	NP	6.30	12.5	NM	667.58
			11/25/15	6.25	6.26	12.5	0.01	667.63
			11/30/15	6.12	6.13	12.5	0.01	667.76
			12/11/15	6.09	6.10	12.5	0.01	667.79
			11/06/17	Could Not Open				
			02/05/18					
			05/07/18	5.72	7.35	NM	1.63	667.84
LMW-15-09	673.93	7-12	11/16/15	7.82	10.62	12	2.80	665.55
			11/25/15	7.76	10.51	12	2.75	665.62
			11/30/15	7.72	10.32	12	2.60	665.69
			12/10/15	7.73	10.38	12	2.65	665.67
			11/06/17	8.29	NA	11.75	3.71	NA**
			02/05/18	8.58	10.50	NM	1.92	664.96
			05/07/18	7.95	9.39	NM	1.44	665.69
LMW-15-10	673.89	7-12	11/16/15	8.40	9.26	12	0.86	665.32
			11/25/15	8.32	9.13	12	0.81	665.41
			11/30/15	8.24	8.96	12	0.72	665.51
			12/10/15	8.18	8.79	12	0.61	665.59
			11/06/17	8.69	9.50	NM	0.81	665.04
			02/05/18	8.50	8.58	NM	0.08	665.38
			05/07/18	8.15	8.28	NM	0.13	665.72
MW-15-59D	675.17	94-99	01/07/16	NP	21.83	99	NM	653.34
			01/19/16	NP	21.91	99	NM	653.26
			04/19/17	NP	21.37	99.37	NM	653.80
			07/24/17	NP	28.71	100.80	NM	646.46
			11/06/17	NP	24.48	100.65	NM	650.69
			02/05/18	NP	21.44	100.01	NM	653.73
			05/07/18	NP	23.48	NM	NM	651.69
MW-15-60D	675.75	93-98	01/07/16	NP	19.47	100	NM	656.28
			01/19/16	NP	19.71	100	NM	656.04
			04/19/17	NP	18.65	99.50	NM	657.10
			07/24/17	NP	24.09	99.92	NM	651.66
			11/06/17	NP	20.63	99.92	NM	655.12
			02/05/18	NP	19.61	99.42	NM	656.14
			05/07/18	NP	19.31	NM	NM	656.44
MW-15-61D	670.03	88-93	01/07/16	NP	76.49	93	NM	593.54
			01/08/16	NP	88.02	93	NM	582.01
			01/19/16	NP	73.23	93	NM	596.80
			01/20/16	NP	89.31	93	NM	580.72
			01/26/16	NP	84.09	93	NM	585.94
			01/27/16	NP	82.42	93	NM	587.61
			01/28/16	NP	80.71	93	NM	589.32
			04/19/17	NP	24.71	93.87	NM	645.32
			07/24/17	NP	24.74	94.09	NM	645.29
			11/06/17	NP	26.58	94.72	NM	643.45
			02/06/18	NP	25.79	94.71	NM	644.24
			05/07/18	NP	25.63	94.24	NM	644.40

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MW-1	670.77	14-19	04/17/17	NP	3.82	18.61	NM	666.95
			07/24/17	NP	3.57	18.44	NM	667.20
			11/06/17	NP	3.93	18.78	NM	666.84
			02/05/18	NP	NM[2]	NM[2]	NM[2]	NM[2]
			05/07/18	NP	3.88	18.60	NM	666.89
MW-2	673.80	15.5-20.5	05/12/16	NP	6.35	19.52	NM	667.45
			04/17/17	NP	6.91	19.45	NM	666.89
			07/24/17	NP	6.99	19.44	NM	666.81
			11/06/17	NP	7.24	19.50	NM	666.56
			02/05/18	NP	7.42	19.55	NM	666.38
			05/07/18	NP	6.92	19.47	NM	666.88
MW-3	673.61	14-19	05/12/16	NP	5.82	18.79	NM	667.79
			04/17/17	NP	7.09	18.72	NM	666.52
			07/24/17	NP	7.29	18.43	NM	666.32
			11/06/17	NP	7.61	18.80	NM	666.00
			02/05/18	NP	7.70	18.87	NM	665.91
			05/07/18	NP	7.23	18.74	NM	666.38
MW-4	673.85	15.5-20.5	05/13/16	NP	7.15	20.20	NM	666.70
			04/17/17	NP	7.57	20.09	NM	666.28
			07/24/17	NP	7.61	19.93	NM	666.24
			11/06/17	NP	7.94	20.05	NM	665.91
			02/05/18	NP	8.50	20.16	NM	665.35
			05/07/18	NP	7.60	20.12	NM	666.25
MW-5*	674.40	15.5-20.5	05/13/16	NP	6.49	21.73	NM	667.91
			07/24/17	NP	NM	NM	NM	NM
			11/06/17	NP	7.51	19.71	NM	666.89
			02/05/18	NP	7.70	19.54	NM	666.70
			05/07/18	NP	7.26	19.63	NM	667.14
MW-7	670.89	18-23	07/24/17	NP	4.79	22.39	NM	666.10
			11/06/17	NP	5.24	22.56	NM	665.65
			02/06/18	NP	4.48	22.50	NM	666.41
			05/07/18	NP	4.54	22.35	NM	666.35
MW-9	671.18	19.5-24.5	05/09/16	NP	5.82	24.34	NM	665.36
			04/17/17	NP	6.79	24.34	NM	664.39
			07/24/17	NP	5.88	24.29	NM	665.30
			11/06/17	NP	6.38	24.53	NM	664.80
			02/05/18	NP	6.40	24.35	NM	664.78
			05/07/18	NP	5.65	24.20	NM	665.53
MW-10	673.78	16.5-21.5	05/13/16	NP	8.16	20.81	NM	665.62
			04/17/17	NP	8.15	20.81	NM	665.63
			07/24/17	NP	8.58	20.76	NM	665.20
			11/06/17	NP	6.00	20.84	NM	667.78
			02/05/18	NP	9.01	15.89	NM	664.77
			05/07/18	NP	8.68	20.24	NM	665.10
MW-14	671.24	15-20	07/24/17	NP	6.63	19.53	NM	664.61
			11/06/17	NP	7.01	19.61	NM	664.23
			02/05/18	NP	7.29	19.80	NM	663.95
			05/07/18	NP	6.14	19.65	NM	665.10

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Livonia, Michigan

Well ID	TOC Elevation [1] (ft. amsl)	Screen Interval (ft. bgs)	Gauging Date	Depth to LNAPL (ft. btoc)	Depth to Water (ft. btoc)	Total Depth (ft.)	LNAPL Thickness (ft.)	Corrected Groundwater Elevation (ft. amsl)
MW-18	670.41	13-18	05/09/16	NP	6.29	17.89	NM	664.12
			04/17/17	NP	6.67	17.90	NM	663.74
			07/24/17	NP	6.92	17.70	NM	663.49
			11/06/17	NP	7.31	17.80	NM	663.10
			02/06/18	NP	7.45	17.85	NM	662.96
			05/04/18	NP	6.53	18.01	NM	663.88
MW-19	669.65	15-20	05/13/16	LNAPL				
			04/17/17					
			07/24/17					
			11/06/17	NP	5.91	19.85	NM	663.74
			02/05/18	NP	6.23	19.84	NM	663.42
			05/07/18	NP	5.51	19.98	NM	664.14
MW-20	669.33	13.5-18.5	07/24/17	NP	6.29	16.98	NM	663.04
			11/06/17	NP	6.52	16.84	NM	662.81
			02/05/18	NP	6.68	16.62	NM	662.65
			05/11/18	NP	5.95	16.48	NM	663.38
MW-21*	670.76	13.5-18.5	05/13/16	Could Not Open				
			04/17/17					
			07/24/17					
			11/06/17					
			02/06/18	NP	7.95	17.74	NM	662.81
			05/07/18	NP	7.15	17.60	NM	663.61
MW-22	670.18	16.5-21.5	05/10/16	NP	6.18	20.83	NM	664.00
			04/17/17	NP	7.13	21.41	NM	663.05
			07/24/17	NP	7.53	20.42	NM	662.65
			11/06/17	NP	7.51	20.51	NM	662.67
			02/05/18	NP	7.61	20.48	NM	662.57
			05/07/18	NP	6.66	20.50	NM	663.52
MW-23	669.24	15-20	05/09/16	NP	6.23	19.82	NM	663.01
			04/17/17	NP	6.67	19.79	NM	662.57
			07/24/17	NP	6.69	19.72	NM	662.55
			11/06/17	NP	6.60	19.72	NM	662.64
			02/06/18	NP	6.93	NM	NM	662.31
			05/07/18	NP	5.67	19.70	NM	663.57
MW-24	675.48	19-24	04/17/17	NP	9.32	23.85	NM	666.16
			07/24/17	NP	10.01	23.90	NM	665.47
			11/06/17	NP	10.40	23.76	NM	665.08
			02/05/18	NP	10.37	23.99	NM	665.11
			05/07/18	NP	9.38	23.70	NM	666.10
MW-25	675.04	16-21	04/17/17	NP	5.35	20.54	NM	669.69
			07/24/17	NP	6.34	20.52	NM	668.70
			11/06/17	NP	6.51	20.38	NM	668.53
			02/05/18	NP	6.55	20.52	NM	668.49
			05/07/18	NP	4.98	20.25	NM	670.06
MW-26	673.39	4.5-14.5	07/24/17	NP	5.96	14.09	NM	667.43
			11/06/17	NP	6.09	14.10	NM	667.30
			02/05/18	NP	6.08	14.05	NM	667.31
			05/07/18	NP	5.24	13.90	NM	668.15

See Notes on Last Page.

Table 1
On-Site Groundwater Elevations
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Well ID	TOC Elevation [1] (ft. amsl)	Screen Interval (ft. bgs)	Gauging Date	Depth to LNAPL (ft. btoc)	Depth to Water (ft. btoc)	Total Depth (ft.)	LNAPL Thickness (ft.)	Corrected Groundwater Elevation (ft. amsl)
MW-27*	671.66	4-14	07/24/17	Could Not Locate				
			11/06/17					
			02/05/18					
			05/07/18					
MW-28	668.15	2-12	05/09/16	NP	3.21	11.81	NM	664.94
			04/17/17	NP	3.78	11.69	NM	664.37
			07/24/17	NP	4.61	11.73	NM	663.54
			11/06/17	NP	4.81	11.68	NM	663.34
			02/05/18	NP	4.63	11.65	NM	663.52
			05/07/18	NP	3.67	11.67	NM	664.48
MW-29	669.45	5-15	05/13/16	NP	4.10	14.85	NM	665.35
			04/17/17	NP	4.53	14.84	NM	664.92
			07/24/17	NP	5.41	14.90	NM	664.04
			11/06/17	NP	6.65	15.81	NM	662.80
			02/05/18	NP	5.52	14.84	NM	663.93
			05/07/18	NP	4.64	14.80	NM	664.81
MW-30	670.70	19-24	05/09/16	NP	9.37	24.82	NM	661.33
			04/17/17	NP	9.86	24.78	NM	660.84
			07/24/17	NP	9.93	24.73	NM	660.77
			11/06/17	NP	10.47	24.84	NM	660.23
			02/05/18	NP	10.31	24.69	NM	660.39
			05/07/18	NP	9.03	24.70	NM	661.67
MW-31	670.82	17-22	05/09/16	NP	9.96	21.75	NM	660.86
			04/17/17	NP	10.13	21.78	NM	660.69
			07/24/17	NP	10.19	21.69	NM	660.63
			11/06/17	NP	10.65	21.92	NM	660.17
			02/05/18	NP	10.70	21.48	NM	660.12
			05/07/18	NP	9.23	21.67	NM	661.59
MW-32	670.43	18-23	05/09/16	NP	9.64	22.92	NM	660.79
			04/17/17	NP	9.52	22.91	NM	660.91
			07/24/17	NP	9.71	22.71	NM	660.72
			11/06/17	NP	10.18	23.03	NM	660.25
			02/05/18	NP	10.17	22.78	NM	660.26
			05/07/18	NP	8.73	22.83	NM	661.70
MW-33	669.94	14-19	05/09/16	NP	8.68	18.76	NM	661.26
			04/17/17	NP	8.76	18.75	NM	661.18
			07/24/17	NP	8.84	19.72	NM	661.10
			11/06/17	NP	8.58	19.08	NM	661.36
			02/05/18	NP	8.63	18.74	NM	661.31
			05/07/18	NP	7.34	18.66	NM	662.60
MW-34	670.49	16.5-21.5	05/09/16	NP	7.98	21.21	NM	662.51
			04/17/17	NP	8.83	21.30	NM	661.66
			07/24/17	NP	9.45	21.23	NM	661.04
			11/06/17	NP	10.02	21.65	NM	660.47
			02/05/18	NP	9.73	21.35	NM	660.76
			05/07/18	NP	8.34	21.26	NM	662.15

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Table 1
On-Site Groundwater Elevations
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Well ID	TOC Elevation [1] (ft. amsl)	Screen Interval (ft. bgs)	Gauging Date	Depth to LNAPL (ft. btoc)	Depth to Water (ft. btoc)	Total Depth (ft.)	LNAPL Thickness (ft.)	Corrected Groundwater Elevation (ft. amsl)
MW-35	669.44	19.5-24.5	05/09/16	NP	6.62	24.48	NM	662.82
			04/17/17	NP	7.16	24.63	NM	662.28
			07/24/17	NP	8.55	24.44	NM	660.89
			11/06/17	NP	9.11	24.45	NM	660.33
			02/05/18	NP	8.63	24.50	NM	660.81
			05/07/18	NP	7.03	24.40	NM	662.41
MW-36	676.39	20-25	07/24/17	NP	9.49	24.75	NM	666.90
			11/06/17	NP	10.98	24.88	NM	665.41
			02/05/18	NP	10.15	24.91	NM	666.24
			05/07/18	NP	9.28	24.72	NM	667.11
MW-37	671.24	18-23	07/24/17	NP	8.14	24.75	NM	663.10
			11/06/17	NP	8.26	23.18	NM	662.98
			02/05/18	NP	8.33	22.80	NM	662.91
			05/07/18	NP	7.01	22.76	NM	664.23
MW-38	671.79	15-20	04/17/17	NP	8.23	19.55	NM	663.56
			07/24/17	NP	8.69	23.69	NM	663.10
			11/06/17	NP	8.53	19.75	NM	663.26
			02/05/18	NP	8.67	19.65	NM	663.12
			05/07/18	NP	7.28	19.50	NM	664.51
MW-39	672.19	19.5-24.5	04/19/17	NP	11.08	24.14	NM	661.11
			07/24/17	NP	11.41	23.92	NM	660.78
			11/06/17	NP	11.64	24.36	NM	660.55
			02/05/18	NP	11.63	24.30	NM	660.56
			05/07/18	NP	10.25	24.16	NM	661.94
MW-40	670.65	15-20	05/09/16	NP	9.94	19.72	NM	660.71
			04/19/17	NP	9.98	19.72	NM	660.67
			07/24/17	NP	10.10	19.66	NM	660.55
			11/06/17	NP	10.58	19.75	NM	660.07
			02/05/18	NP	10.62	19.43	NM	660.03
			05/07/18	NP	9.15	19.64	NM	661.50
MW-41	670.34	16-21	05/09/16	NP	8.20	20.97	NM	662.14
			04/19/17	NP	8.97	20.99	NM	661.37
			07/24/17	NP	9.39	20.78	NM	660.95
			11/06/17	NP	9.96	21.25	NM	660.38
			02/05/18	NP	9.75	20.85	NM	660.59
			05/07/18	NP	8.35	20.94	NM	661.99
MW-42	670.10	16-21	05/09/16	NP	7.29	11.52	NM	662.81
			04/19/17	NP	8.01	20.48	NM	662.09
			07/24/17	NP	9.13	20.43	NM	660.97
			11/06/17	NP	9.76	20.77	NM	660.34
			02/05/18	NP	9.32	20.55	NM	660.78
			05/07/18	NP	7.81	20.43	NM	662.29
MW-43	669.24	17-22	05/09/16	NP	6.34	21.85	NM	662.90
			04/19/17	NP	6.80	26.82	NM	662.44
			07/24/17	NP	8.34	21.79	NM	660.90
			11/06/17	NP	8.92	21.98	NM	660.32
			02/05/18	NP	8.42	21.80	NM	660.82
			05/07/18	NP	6.78	21.76	NM	662.46

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Table 1
On-Site Groundwater Elevations
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

ARCADIS Design & Consultancy for natural and built assets

Well ID	TOC Elevation [1] (ft. amsl)	Screen Interval (ft. bgs)	Gauging Date	Depth to LNAPL (ft. btoc)	Depth to Water (ft. btoc)	Total Depth (ft.)	LNAPL Thickness (ft.)	Corrected Groundwater Elevation (ft. amsl)
MW-44	671.48	16-21	05/09/16	NP	6.59	17.42	NM	664.89
			04/19/17	NP	7.48	19.95	NM	664.00
			07/24/17	NP	8.38	20.93	NM	663.10
			11/06/17	NP	8.55	20.74	NM	662.93
			02/05/18	NP	8.51	20.90	NM	662.97
			05/07/18	NP	7.40	20.75	NM	664.08
MW-45	670.83	15-20	05/09/16	NP	14.22	19.81	NM	656.61
			04/19/17	NP	11.45	19.67	NM	659.38
			07/24/17	NP	11.07	19.76	NM	659.76
			11/06/17	NP	9.82	19.75	NM	661.01
			02/05/18	NP	10.30	19.72	NM	660.53
			05/07/18	NP	9.43	19.99	NM	661.40
MW-46	670.84	16-21	05/09/16	NP	8.42	20.45	NM	662.42
			04/19/17	NP	10.61	20.30	NM	660.23
			07/24/17	NP	10.33	19.78	NM	660.51
			11/06/17	NP	9.76	19.81	NM	661.08
			02/05/18	NP	10.20	19.81	NM	660.64
			05/07/18	NP	9.84	19.94	NM	661.00
MW-47	671.33	16-21	05/09/16	NP	7.53	11.92	NM	663.80
			04/19/17	NP	9.88	20.76	NM	661.45
			07/24/17	NP	10.11	19.96	NM	661.22
			11/06/17	NP	9.87	19.98	NM	661.46
			02/05/18	NP	10.11	19.98	NM	661.22
			05/07/18	NP	9.49	19.94	NM	661.84
MW-48	670.98	17-22	05/09/16	NP	6.33	21.76	NM	664.65
			04/19/17	NP	8.93	21.62	NM	662.05
			07/24/17	NP	9.70	20.42	NM	661.28
			11/06/17	NP	9.33	20.34	NM	661.65
			02/05/18	NP	10.08	20.35	NM	660.90
			05/07/18	NP	8.84	20.60	NM	662.14
MW-49	669.07	12.5-17.5	05/12/16	NP	6.57	17.31	NM	662.50
			04/19/17	NP	7.03	17.31	NM	662.04
			07/24/17	NP	6.94	17.37	NM	662.13
			11/06/17	NM	NM	NM	NM	NM
			02/05/18	NP	7.32	17.44	NM	661.75
			05/07/18	NP	6.88	17.28	NM	662.19
MW-50	670.16	16-21	05/09/16	NP	5.42	20.34	NM	664.74
			04/19/17	NP	6.77	20.23	NM	663.39
			07/24/17	NP	8.16	18.42	NM	662.00
			11/06/17	NP	8.15	18.81	NM	662.01
			02/05/18	NP	8.47	18.44	NM	661.69
			05/07/18	NP	6.81	19.00	NM	663.35
MW-51	671.07	15-20	04/19/17	NP	6.12	19.04	NM	664.95
			07/24/17	NP	7.82	18.92	NM	663.25
			11/06/17	NP	7.58	18.91	NM	663.49
			02/05/18	NP	7.89	18.95	NM	663.18
			05/07/18	NP	6.24	18.85	NM	664.83

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Table 1
On-Site Groundwater Elevations
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Well ID	TOC Elevation [1] (ft. amsl)	Screen Interval (ft. bgs)	Gauging Date	Depth to LNAPL (ft. btoc)	Depth to Water (ft. btoc)	Total Depth (ft.)	LNAPL Thickness (ft.)	Corrected Groundwater Elevation (ft. amsl)
MW-52	669.16	15-20	05/09/16	NP	6.39	19.81	NM	662.77
			04/19/17	NP	6.59	19.76	NM	662.57
			07/24/17	NP	8.33	19.75	NM	660.83
			11/06/17	NP	8.87	19.83	NM	660.29
			02/05/18	NP	8.43	19.57	NM	660.73
			05/07/18	NP	6.57	19.76	NM	662.59
MW-53	668.59	16-21	05/09/16	NP	6.05	20.85	NM	662.54
			04/18/17	NP	6.03	20.83	NM	662.56
			07/24/17	NP	7.92	20.63	NM	660.67
			11/06/17	NP	8.35	21.08	NM	660.24
			02/05/18	NP	7.98	20.68	NM	660.61
			05/07/18	NP	6.08	20.81	NM	662.51
MW-54	668.49	16-21	04/19/17	NP	6.01	20.86	NM	662.48
			07/24/17	NP	8.08	20.52	NM	660.41
			11/06/17	NP	8.17	20.71	NM	660.32
			02/05/18	NP	7.96	20.56	NM	660.53
			05/07/18	NP	6.09	20.82	NM	662.40
MW-55	670.04	15-20	04/19/17	NP	6.84	19.82	NM	663.20
			07/24/17	NP	8.95	19.56	NM	661.09
			11/06/17	NP	8.98	20.03	NM	661.06
			02/05/18	NP	8.78	19.64	NM	661.26
			05/07/18	NP	6.91	19.74	NM	663.13
MW-56	670.26	16-21	04/19/17	NP	6.67	20.69	NM	663.59
			07/24/17	NP	8.18	20.58	NM	662.08
			11/06/17	NP	8.37	20.76	NM	661.89
			02/05/18	NP	8.08	20.59	NM	662.18
			05/07/18	NP	6.62	26.44	NM	663.64
MW-57	668.93	17-22	04/19/17	NP	5.89	21.72	NM	663.04
			07/24/17	NP	7.83	21.63	NM	661.10
			11/06/17	NP	8.12	21.83	NM	660.81
			02/06/18	NP	7.86	21.80	NM	661.07
			05/07/18	NP	5.79	21.73	NM	663.14
MW-58	668.73	15-20	05/09/16	NP	3.51	19.74	NM	665.22
			04/19/17	NP	4.28	19.72	NM	664.45
			07/24/17	NP	5.68	18.70	NM	663.05
			11/06/17	NP	5.78	19.69	NM	662.95
			02/05/18	NP	5.63	19.40	NM	663.10
			05/07/18	NP	4.01	19.68	NM	664.72
MW-62	671.06	16.3-21.3	04/20/17	NP	7.89	21.13	NM	663.17
			07/24/17	NP	10.11	21.01	NM	660.95
			11/06/17	NP	9.43	21.14	NM	661.63
			02/05/18	NP	9.46	21.15	NM	661.60
			05/07/18	NP	7.72	21.15	NM	663.34
MW-63	669.96	7-12	04/20/17	NP	7.32	11.75	NM	662.64
			07/24/17	NP	8.45	11.78	NM	661.51
			11/06/17	NP	8.18	11.80	NM	661.78
			02/05/18	NP	8.77	11.80	NM	661.19
			05/07/18	NP	7.24	11.80	NM	662.72

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Table 1
On-Site Groundwater Elevations
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Well ID	TOC Elevation [1] (ft. amsl)	Screen Interval (ft. bgs)	Gauging Date	Depth to LNAPL (ft. btoc)	Depth to Water (ft. btoc)	Total Depth (ft.)	LNAPL Thickness (ft.)	Corrected Groundwater Elevation (ft. amsl)
MW-64	671.09	15-20	04/20/17	NP	8.55	21.1	NM	662.54
			07/24/17	NP	9.83	20.05	NM	661.26
			11/06/17	NP	10.20	20.36	NM	660.89
			02/06/18	NP	10.14	20.19	NM	660.95
			05/07/18	NP	8.44	20.05	NM	662.65
MW-65	671.98	16-21	04/20/17	NP	8.26	21.18	NM	663.72
			07/24/17	NP	9.87	21.11	NM	662.11
			11/06/17	NP	9.68	21.11	NM	662.30
			02/05/18	NP	10.05	21.16	NM	661.93
			05/07/18	NP	8.37	21.04	NM	663.61
MW-66	669.83	15-20	04/20/17	NP	6.55	19.49	NM	663.28
			07/24/17	NP	7.81	19.35	NM	662.02
			11/06/17	NP	7.51	19.23	NM	662.32
			02/05/18	NP	8.03	19.06	NM	661.80
			05/07/18	NP	6.79	19.02	NM	663.04
MW-67	671.32	9-14	04/20/17	NP	9.44	13.97	NM	661.88
			07/24/17	NP	9.84	13.84	NM	661.48
			11/06/17	NP	9.76	14.01	NM	661.56
			02/05/18	NP	10.00	14.02	NM	661.32
			05/07/18	NP	9.14	14.01	NM	662.18
MW-68	670.71	15-20	04/20/17	NP	9.39	21.85	NM	661.32
			07/24/17	NP	9.55	19.86	NM	661.16
			11/06/17	NP	9.51	19.85	NM	661.20
			02/05/18	NP	9.68	19.85	NM	661.03
			05/15/18	NP	8.68	19.82	NM	662.03
MW-69	670.27	15-20	04/20/17	NP	9.71	19.91	NM	660.56
			07/24/17	NP	NM	NM	NM	NM
			11/06/17	NP	9.91	19.98	NM	660.36
			02/05/18	NP	9.78	20.01	NM	660.49
			05/07/18	NP	14.78	19.91	NM	655.49
MW-70	671.36	15-20	04/20/17	NP	11.46	20.14	NM	659.90
			07/24/17	NP	11.02	20.18	NM	660.34
			11/06/17	NP	10.23	20.15	NM	661.13
			02/05/18	NP	10.74	20.12	NM	660.62
			05/07/18	NP	9.72	20.13	NM	661.64
MW-71	671.04	15-20	04/20/17	NP	12.45	20.16	NM	658.59
			07/24/17	NP	11.84	20.22	NM	659.20
			11/06/17	NP	10.74	20.21	NM	660.30
			02/05/18	NP	11.13	20.18	NM	659.91
			05/07/18	NP	10.23	20.35	NM	660.81
PW-16-01	670.23	9.7-19.7	07/24/17	NP	9.04	21.58	NM	661.19
			11/06/17	NP	8.45	21.58	NM	661.78
			02/05/18	NP	8.70	21.62	NM	661.53
			05/07/18	NP	7.24	21.44	NM	662.99
PW-16-02	669.97	6-21	07/24/17	NP	6.77	8.36	NM	663.20
			11/06/17	NP	6.54	23.79	NM	663.43
			02/05/18	NP	6.65	24.55	NM	663.32
			05/07/18	NP	4.85	23.65	NM	665.12

See Notes on Last Page.

Table 1
On-Site Groundwater Elevations
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Well ID	TOC Elevation [1] (ft. amsl)	Screen Interval (ft. bgs)	Gauging Date	Depth to LNAPL (ft. btoc)	Depth to Water (ft. btoc)	Total Depth (ft.)	LNAPL Thickness (ft.)	Corrected Groundwater Elevation (ft. amsl)
TW-16-01	669.53	12-17	07/24/17	NP	8.36	16.80	NM	661.17
			11/06/17	NP	7.68	16.64	NM	661.85
			02/05/18	NP	7.91	16.87	NM	661.62
			05/07/18	NP	6.87	16.64	NM	662.66
TW-16-02	669.43	12-17	04/20/17	NP	4.48	18.85	NM	664.95
			07/24/17	NP	8.00	17.14	NM	661.43
			11/06/17	NP	7.48	17.17	NM	661.95
			02/05/18	NP	7.71	17.15	NM	661.72
			05/07/18	NP	6.85	16.91	NM	662.58
TW-16-03	669.34	9-19	07/24/17	NP	6.10	18.65	NM	663.24
			11/06/17	NP	6.00	18.65	NM	663.34
			02/05/18	NP	6.05	18.75	NM	663.29
			05/07/18	NP	4.29	18.72	NM	665.05
TW-16-04	669.80	9-19	04/20/17	NP	4.90	19.02	NM	664.90
			07/24/17	NP	6.46	18.93	NM	663.34
			11/06/17	NP	6.36	18.93	NM	663.44
			02/05/18	NP	6.43	18.73	NM	663.37
			05/07/18	NP	4.65	18.90	NM	665.15

Notes:
Water level measurements collected from top of well casing.
[1] TOC elevation re-surveyed on October 12-13, and/or November 20, 2017 by Geodetic Designs Inc.
[2] MW-1 submerged under water during the 1Q 2018 sampling event.
* Monitoring well TOC could not be re-surveyed due to access.
** Unable to calculate a corrected groundwater elevation due LNAPL thickness throughout well screen.

Abbreviations:
ft. Feet
ft. amsl Feet above mean sea level
ft. bgs Feet below ground surface
ft. btoc Feet below top of casing
LNAPL Light non-aqueous phase liquid
NM Not measured
NP No product detected
TOC Top of casing

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Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:				MW-1				MW-2					MW-3				
Screen Interval (ft. bgs):				14-19				15.5-20.5					14-19				
Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	4/26/2017	7/28/2017	11/10/2017	5/11/2018	4/27/2017	8/3/2017	11/9/2017	2/13/2018	5/10/2018	4/27/2017	8/3/2017	11/9/2017	2/13/2018	5/10/2018
Semi-volatile Organic Compounds (SVOCs)																	
1,4-Dioxane	µg/L	37	2,800	< 2.0	< 2.0	< 2.0	< 2.0	1.5 J	1.8 J	4.5	4.4	5.7	0.67 J	0.79 J	0.57 J	< 2.0	0.50 J
Volatile Organic Compounds (VOCs)																	
1,1,1-Trichloroethane	µg/L	200	89	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/L	5.0	330	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/L	2,500	740	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/L	7.0	130	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trimethylbenzene	µg/L	130	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 130	< 250	< 330	< 330	< 130	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/L	70	99	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/L	63	17	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/L	0.05	5.7	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/L	600	13	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/L	5.0	360	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/L	5.0	230	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/L	72	45	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/L	19	28	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/L	75	17	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
-2Butanone (MEK)	µg/L	38,000	2,200	< 10	1.0 J	< 10	< 10	< 250	< 500	< 670	< 670	< 250	< 10	< 10	< 10	< 10	< 10
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 10	< 10	< 10	< 10	< 250	< 500	< 670	< 670	< 250	< 10	< 10	< 10	< 10	< 10
Acetone	µg/L	2,100	1,700	< 10	4.0 J	< 10	2.8 J	< 250	< 500	< 670	< 670	< 250	< 10	< 10	< 10	< 10	< 10
Benzene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/L	29	35	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide	µg/L	2,300	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 130	< 250	< 330	< 330	< 130	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon Tetrachloride	µg/L	5.0	45	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-11	µg/L	7,300	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-12	µg/L	4,800	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/L	100	25	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorodibromomethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/L	1,700	1,100	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	µg/L	80	350	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane	µg/L	1,100	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	< 1.0	< 1.0	< 1.0	< 1.0	**630**	**1,200**	**1,000**	**1,400**	**1,700 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	µg/L	NA	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichloromethane	µg/L	5.0	1,500	< 5.0	< 5.0	< 5.0	< 5.0	< 130	< 250	< 330	< 330	< 130	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Diethyl ether	µg/L	10	ID	< 2.0	< 2.0	< 2.0	< 2.0	< 50	< 100	< 130	< 130	< 50	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene	µg/L	74	18	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/L	2,300	28	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Acetate	µg/L	NA	NA	< 10	< 10	< 10	< 10	< 250	< 500	< 670	< 670	< 250	< 10	< 10	< 10	< 10	< 10
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 10	< 10	< 10	< 10	< 250	< 500	< 670	< 670	< 250	< 10	< 10	< 10	< 10	< 10
Methylcyclohexane	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:		Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-1				MW-2					MW-3				
Screen Interval (ft. bgs):				14-19				15.5-20.5					14-19				
Date:	Unit			4/26/2017	7/28/2017	11/10/2017	5/11/2018	4/27/2017	8/3/2017	11/9/2017	2/13/2018	5/10/2018	4/27/2017	8/3/2017	11/9/2017	2/13/2018	5/10/2018
Methyl-tert-butylether	µg/L	40	7,100	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene (Monomer)	µg/L	100	80	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/L	790	270	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Xylenes	µg/L	280	41	< 2.0	< 2.0	< 2.0	< 2.0	< 50	< 100	< 130	< 130	< 50	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
trans-1,2-Dichloroethene	µg/L	100	1,500	< 1.0	< 1.0	< 1.0	< 1.0	**200**	**270**	**260**	**390**	**510**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 25	< 50	< 67	< 67	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	2.0	13	< 1.0	< 1.0	< 1.0	< 1.0	**200**	**160**	**140**	**210**	**190**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Gases																	
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other																	
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																	
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:				MW-4					MW-5				MW-7			
Screen Interval (ft. bgs):		Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	15.5-20.5					15.5-20.5				18-23			
Date:	Unit			4/27/2017	8/3/2017	11/9/2017	2/13/2018	5/10/2018	8/3/2017	11/9/2017	2/13/2018	5/10/2018	7/31/2017	11/10/2017	2/12/2018	5/11/2018
Semi-volatile Organic Compounds (SVOCs)																
1,4-Dioxane	µg/L	37	2,800	1.1 J	0.78 J	< 20	0.38 J	0.76 J	0.35 J	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Volatile Organic Compounds (VOCs)																
1,1,1-Trichloroethane	µg/L	200	89	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/L	5.0	330	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/L	2,500	740	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/L	7.0	130	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trimethylbenzene	µg/L	130	ID	< 5,000	< 5,000	< 5,000	< 8,300	< 5,000 J	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/L	70	99	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/L	63	17	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/L	0.05	5.7	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/L	600	13	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/L	5.0	360	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/L	5.0	230	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/L	72	45	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/L	19	28	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/L	75	17	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
-2Butanone (MEK)	µg/L	38,000	2,200	< 10,000	< 10,000	< 10,000	< 17,000	< 10,000 J	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 10,000	< 10,000	< 10,000	< 17,000	< 10,000 J	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	µg/L	2,100	1,700	< 10,000	< 10,000	< 10,000	< 17,000	< 10,000 J	< 10	< 10	< 10	1.9 J	< 10	< 10	< 10	< 10
Benzene	µg/L	5.0	200	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/L	80	ID	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	µg/L	80	ID	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/L	29	35	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide	µg/L	2,300	ID	< 5,000	< 5,000	< 5,000	< 8,300	< 5,000 J	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon Tetrachloride	µg/L	5.0	45	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-11	µg/L	7,300	ID	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-12	µg/L	4,800	ID	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/L	100	25	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorodibromomethane	µg/L	80	ID	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/L	1,700	1,100	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	µg/L	80	350	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane	µg/L	1,100	ID	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	**32,000**	**27,000**	**21,000**	**26,000**	**21,000 J**	< 1.0	< 1.0	< 1.0	0.58 J	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	µg/L	NA	NA	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	µg/L	NA	ID	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichloromethane	µg/L	5.0	1,500	< 5,000	< 5,000	< 5,000	< 8,300	< 5,000 J	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Diethyl ether	µg/L	10	ID	< 2,000	< 2,000	< 2,000	< 3,300	< 2,000 J	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene	µg/L	74	18	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/L	2,300	28	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Acetate	µg/L	NA	NA	< 10,000	< 10,000	< 10,000	< 17,000	< 10,000 J	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 10,000	< 10,000	< 10,000	< 17,000	< 10,000 J	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methylcyclohexane	µg/L	NA	NA	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-4 15.5-20.5					MW-5 15.5-20.5				MW-7 18-23			
				4/27/2017	8/3/2017	11/9/2017	2/13/2018	5/10/2018	8/3/2017	11/9/2017	2/13/2018	5/10/2018	7/31/2017	11/10/2017	2/12/2018	5/11/2018
Methyl-tert-butylether	µg/L	40	7,100	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene (Monomer)	µg/L	100	80	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/L	790	270	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Xylenes	µg/L	280	41	< 2,000	< 2,000	< 2,000	< 3,300	< 2,000 J	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
trans-1,2-Dichloroethene	µg/L	100	1,500	**1,200**	**1,100**	**850 J**	**1,100 J**	**860 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	µg/L	NA	NA	< 1,000	< 1,000	< 1,000	< 1,700	< 1,000 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	5.0	200	**21,000**	**18,000**	**19,000**	**23,000**	**23,000 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	2.0	13	**570 J**	**640 J**	**470 J**	< 1,700	**610 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Gases																
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other																
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:				MW-9				MW-10					MW-14			
Screen Interval (ft. bgs):				19.5-24.5				16.5-21.5					15-20			
Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	7/28/2017	11/10/2017	2/12/2018	5/11/2018	4/27/2017	8/4/2017	11/9/2017	2/13/2018	5/10/2018	7/28/2017	11/10/2017	2/12/2018	5/11/2018
Semi-volatile Organic Compounds (SVOCs)																
1,4-Dioxane	µg/L	37	2,800	8.6	11	12	3.6	5.9	4.5	5.6	4.4	4.4	< 2.0	< 2.0	< 2.0	< 2.0
Volatile Organic Compounds (VOCs)																
1,1,1-Trichloroethane	µg/L	200	89	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/L	5.0	330	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/L	2,500	740	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/L	7.0	130	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trimethylbenzene	µg/L	130	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 250	< 330	< 500	< 1,000	< 500	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/L	70	99	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/L	63	17	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/L	0.05	5.7	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/L	600	13	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/L	5.0	360	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/L	5.0	230	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/L	72	45	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/L	19	28	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/L	75	17	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
-2Butanone (MEK)	µg/L	38,000	2,200	< 10	< 10	< 10	< 10	< 500	< 670	< 1,000	< 2,000	< 1,000	< 10	< 10	< 10	< 10
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 10	< 10	< 10	< 10	< 500	< 670	< 1,000	< 2,000	< 1,000	< 10	< 10	< 10	< 10
Acetone	µg/L	2,100	1,700	< 10	< 10	< 10	< 10	< 500	< 670	< 1,000	< 2,000	< 1,000	< 10	< 10	< 10	3.0 J
Benzene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/L	29	35	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide	µg/L	2,300	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 250	< 330	< 500	< 1,000	< 500	< 5.0	< 5.0	< 5.0	< 5.0
Carbon Tetrachloride	µg/L	5.0	45	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
CFC-11	µg/L	7,300	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
CFC-12	µg/L	4,800	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/L	100	25	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
Chlorodibromomethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/L	1,700	1,100	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	µg/L	80	350	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane	µg/L	1,100	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	µg/L	NA	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
Dichloromethane	µg/L	5.0	1,500	< 5.0	< 5.0	< 5.0	< 5.0	< 250	< 330	< 500	< 1,000	< 500	< 5.0	< 5.0	< 5.0	< 5.0
Diethyl ether	µg/L	10	ID	< 2.0	< 2.0	< 2.0	< 2.0	< 100	< 130	< 200	< 400	< 200	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene	µg/L	74	18	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/L	2,300	28	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Acetate	µg/L	NA	NA	< 10	< 10	< 10	< 10	< 500	< 670	< 1,000	< 2,000	< 1,000	< 10	< 10	< 10	< 10
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 10	< 10	< 10	< 10	< 500	< 670	< 1,000	< 2,000	< 1,000	< 10	< 10	< 10	< 10
Methylcyclohexane	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0

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Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:				MW-9				MW-10					MW-14			
Screen Interval (ft. bgs):				19.5-24.5				16.5-21.5					15-20			
Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	7/28/2017	11/10/2017	2/12/2018	5/11/2018	4/27/2017	8/4/2017	11/9/2017	2/13/2018	5/10/2018	7/28/2017	11/10/2017	2/12/2018	5/11/2018
Methyl-tert-butylether	µg/L	40	7,100	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
Styrene (Monomer)	µg/L	100	80	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/L	790	270	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
Total Xylenes	µg/L	280	41	< 2.0	< 2.0	< 2.0	< 2.0	< 100	< 130	< 200	< 400	< 200	< 2.0	< 2.0	< 2.0	< 2.0
trans-1,2-Dichloroethene	µg/L	100	1,500	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 50	< 67	< 100	< 200	< 100	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	2.0	13	**5.5**	**7.1**	**4.6**	**2.2**	**1,200**	**2,100**	**2,000**	**1,900**	**3,100**	< 1.0	< 1.0	< 1.0	< 1.0
Gases																
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other																
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-15-59D 94-99					MW-15-60D 93-98					MW-15-61D 88-93				
				4/26/2017	8/1/2017	11/15/2017	2/6/2018	5/15/2018	4/26/2017	8/1/2017	11/15/2017	2/6/2018	5/11/2018	4/26/2017	8/1/2017	11/15/2017	2/6/2018	5/15/2018
Semi-volatile Organic Compounds (SVOCs)																		
1,4-Dioxane	µg/L	37	2,800	NA	< 2.0	< 2.0	< 2.0	< 2.0	NA	< 2.0	< 2.0	< 2.0	< 2.0	NA	< 2.0	< 2.0	< 2.0	< 2.0
Volatile Organic Compounds (VOCs)																		
1,1,1-Trichloroethane	µg/L	200	89	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/L	5.0	330	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/L	2,500	740	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/L	7.0	130	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trimethylbenzene	µg/L	130	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/L	70	99	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/L	63	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/L	0.05	5.7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/L	600	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/L	5.0	360	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/L	5.0	230	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/L	72	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/L	19	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/L	75	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
-2Butanone (MEK)	µg/L	38,000	2,200	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	µg/L	2,100	1,700	< 10	< 10	< 10	< 10	3.3 J	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	12
Benzene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.57 J	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/L	29	35	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide	µg/L	2,300	ID	1.6 J	< 5.0	< 5.0	< 5.0	< 5.0	0.51 J	< 5.0	< 5.0	< 5.0	< 5.0	0.91 J	0.58 J	< 5.0	< 5.0	< 5.0
Carbon Tetrachloride	µg/L	5.0	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-11	µg/L	7,300	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-12	µg/L	4,800	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/L	100	25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorodibromomethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/L	1,700	1,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	µg/L	80	350	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane	µg/L	1,100	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	µg/L	NA	ID	0.86 J	0.58 J	0.62 J	0.76 J	0.69 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.48 J	< 1.0	< 1.0	< 1.0	< 1.0
Dichloromethane	µg/L	5.0	1,500	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Diethyl ether	µg/L	10	ID	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene	µg/L	74	18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.50 J	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/L	2,300	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Acetate	µg/L	NA	NA	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methylcyclohexane	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	0.62 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.47 J

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-15-59D 94-99					MW-15-60D 93-98					MW-15-61D 88-93				
				4/26/2017	8/1/2017	11/15/2017	2/6/2018	5/15/2018	4/26/2017	8/1/2017	11/15/2017	2/6/2018	5/11/2018	4/26/2017	8/1/2017	11/15/2017	2/6/2018	5/15/2018
Methyl-tert-butylether	µg/L	40	7,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.27 J	< 1.0	< 1.0	< 1.0	< 1.0
Styrene (Monomer)	µg/L	100	80	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/L	790	270	0.35 J	0.46 J	0.30 J	0.31 J	< 1.0	< 1.0	0.33 J	< 1.0	< 1.0	< 1.0	< 1.0	0.28 J	< 1.0	< 1.0	< 1.0
Total Xylenes	µg/L	280	41	< 2.0	0.25 J	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
trans-1,2-Dichloroethene	µg/L	100	1,500	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	2.0	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Gases																		
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other																		
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																		
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:				MW-18					MW-19			MW-20				MW-21	
Screen Interval (ft. bgs):				13-18					15-20			13.5-18.5				13.5-18.5	
Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	4/21/2017	7/28/2017	11/10/2017	2/14/2018	5/8/2018	11/14/2017	2/14/2018	5/14/2018	7/31/2017	11/10/2017	2/12/2018	5/11/2018	2/13/2018	5/15/2018
Semi-volatile Organic Compounds (SVOCs)																	
1,4-Dioxane	µg/L	37	2,800	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	**120**	**130**	**140**	< 2.0	< 2.0	< 2.0	< 2.0	25	5.3
Volatile Organic Compounds (VOCs)																	
1,1,1-Trichloroethane	µg/L	200	89	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
1,1,2-Trichloroethane	µg/L	5.0	330	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
1,1-Dichloroethane	µg/L	2,500	740	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	6.3	4.8	3.6	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
1,1-Dichloroethene	µg/L	7.0	130	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
1,2,3-Trimethylbenzene	µg/L	130	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA*	< 5.0	< 5.0	< 5.0	< 5.0	< 5,000	< 5,000
1,2,4-Trichlorobenzene	µg/L	70	99	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
1,2,4-Trimethylbenzene	µg/L	63	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
1,2-Dibromoethane	µg/L	0.05	5.7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
1,2-Dichlorobenzene	µg/L	600	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
1,2-Dichloroethane	µg/L	5.0	360	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.49 J	0.52 J	0.36 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
1,2-Dichloropropane	µg/L	5.0	230	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
1,3,5-Trimethylbenzene	µg/L	72	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
1,3-Dichlorobenzene	µg/L	19	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
1,4-Dichlorobenzene	µg/L	75	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
-2Butanone (MEK)	µg/L	38,000	2,200	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	1.4 J	< 10,000	< 10,000
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	0.81 J	2.0 J	< 10,000	< 10,000
Acetone	µg/L	2,100	1,700	< 10	< 10	< 10	< 10	< 10	< 10	< 10	3.2 J	< 10	< 10	2.2 J	3.8 J	< 10,000	2,100 J
Benzene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
Bromodichloromethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
Bromoform	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
Bromomethane	µg/L	29	35	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
Carbon Disulfide	µg/L	2,300	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5,000	< 5,000
Carbon Tetrachloride	µg/L	5.0	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
CFC-11	µg/L	7,300	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
CFC-12	µg/L	4,800	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
Chlorobenzene	µg/L	100	25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
Chlorodibromomethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
Chloroethane	µg/L	1,700	1,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	8.9	6.5	1.7	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
Chloroform	µg/L	80	350	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
Chloromethane	µg/L	1,100	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
cis-1,2-Dichloroethene	µg/L	70	620	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.1	0.94 J	0.71 J	< 1.0	< 1.0	< 1.0	< 1.0	**20,000**	**18,000**
cis-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
Cyclohexane	µg/L	NA	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
Dichloromethane	µg/L	5.0	1,500	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5,000	**560 J**
Diethyl ether	µg/L	10	ID	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2,000	< 2,000
Ethylbenzene	µg/L	74	18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
Isopropylbenzene	µg/L	2,300	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
Methyl Acetate	µg/L	NA	NA	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10,000	< 10,000
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10,000	< 10,000
Methylcyclohexane	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000

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Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-18 13-18 4/21/2017	MW-18 13-18 7/28/2017	MW-18 13-18 11/10/2017	MW-18 13-18 2/14/2018	MW-18 13-18 5/8/2018	MW-19 15-20 11/14/2017	MW-19 15-20 2/14/2018	MW-19 15-20 5/14/2018	MW-20 13.5-18.5 7/31/2017	MW-20 13.5-18.5 11/10/2017	MW-20 13.5-18.5 2/12/2018	MW-20 13.5-18.5 5/11/2018	MW-21 13.5-18.5 2/13/2018	MW-21 13.5-18.5 5/15/2018
Methyl-tert-butylether	µg/L	40	7,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000 J
Styrene (Monomer)	µg/L	100	80	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
Tetrachloroethene	µg/L	5.0	60	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
Toluene	µg/L	790	270	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
Total Xylenes	µg/L	280	41	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2,000	< 2,000
trans-1,2-Dichloroethene	µg/L	100	1,500	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
trans-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000
Trichloroethene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.1	1.0	0.91 J	< 1.0	< 1.0	< 1.0	< 1.0	**460 J**	< 1,000
Vinyl chloride	µg/L	2.0	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.8	1.5	1.3	< 1.0	< 1.0	< 1.0	< 1.0	**5,400**	**3,700**
Gases																	
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other																	
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																	
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:				MW-22					MW-23				MW-24				
Screen Interval (ft. bgs):				16.5-21.5					15-20				19-24				
Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	4/25/2017	8/2/2017	11/7/2017	2/6/2018	5/10/2018	8/3/2017	11/7/2017	2/6/2018	5/7/2018	4/26/2017	8/2/2017	11/10/2017	2/14/2018	5/14/2018
Semi-volatile Organic Compounds (SVOCs)																	
1,4-Dioxane	µg/L	37	2,800	32	26	**49**	22	34	0.50 J	< 20	< 20	< 2.0	< 2.0	0.26 J	< 2.0	< 2.0	< 2.0
Volatile Organic Compounds (VOCs)																	
1,1,1-Trichloroethane	µg/L	200	89	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/L	5.0	330	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/L	2,500	740	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/L	7.0	130	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trimethylbenzene	µg/L	130	ID	< 310	< 500	< 250	< 710	< 330	< 5,000	< 10,000	< 5,000	< 500	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/L	70	99	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/L	63	17	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/L	0.05	5.7	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/L	600	13	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/L	5.0	360	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/L	5.0	230	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/L	72	45	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/L	19	28	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/L	75	17	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
-2Butanone (MEK)	µg/L	38,000	2,200	< 630	< 1,000	< 500	< 1,400	< 670	< 10,000	< 20,000	< 10,000	< 1,000	< 10	< 10	< 10	< 10	< 10
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 630	< 1,000	< 500	< 1,400	< 670	< 10,000	< 20,000	< 10,000	< 1,000	< 10	< 10	< 10	< 10	< 10
Acetone	µg/L	2,100	1,700	< 630	< 1,000	< 500	< 1,400	< 670	< 10,000	< 20,000	< 10,000	< 1,000	< 10	< 10	< 10	< 10	< 10
Benzene	µg/L	5.0	200	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/L	80	ID	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	µg/L	80	ID	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/L	29	35	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide	µg/L	2,300	ID	< 310	< 500	< 250	< 710	< 330	< 5,000	< 10,000	< 5,000	< 500	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon Tetrachloride	µg/L	5.0	45	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-11	µg/L	7,300	ID	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-12	µg/L	4,800	ID	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/L	100	25	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorodibromomethane	µg/L	80	ID	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/L	1,700	1,100	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	µg/L	80	350	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane	µg/L	1,100	ID	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	**130**	**210**	25 J	**200**	**180**	**21,000**	**78,000**	**33,000**	**2,400**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	µg/L	NA	NA	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	µg/L	NA	ID	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichloromethane	µg/L	5.0	1,500	**140 J**	< 500	< 250	**120 J**	< 330	< 5,000	< 10,000	**750 J**	< 500	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Diethyl ether	µg/L	10	ID	< 130	< 200	< 100	< 290	< 130	< 2,000	< 4,000	< 2,000	< 200	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene	µg/L	74	18	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/L	2,300	28	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Acetate	µg/L	NA	NA	< 630	< 1,000	< 500	< 1,400	< 670	< 10,000	< 20,000	< 10,000	< 1,000	< 10	< 10	< 10	< 10	< 10
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 630	< 1,000	< 500	< 1,400	< 670	< 10,000	< 20,000	< 10,000	< 1,000	< 10	< 10	< 10	< 10	< 10
Methylcyclohexane	µg/L	NA	NA	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:		Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-22					MW-23				MW-24				
Screen Interval (ft. bgs):				16.5-21.5					15-20				19-24				
Date:	Unit			4/25/2017	8/2/2017	11/7/2017	2/6/2018	5/10/2018	8/3/2017	11/7/2017	2/6/2018	5/7/2018	4/26/2017	8/2/2017	11/10/2017	2/14/2018	5/14/2018
Methyl-tert-butylether	µg/L	40	7,100	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene (Monomer)	µg/L	100	80	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/L	790	270	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Xylenes	µg/L	280	41	< 130	< 200	< 100	< 290	< 130	< 2,000	< 4,000	< 2,000	< 200	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
trans-1,2-Dichloroethene	µg/L	100	1,500	< 63	< 100	< 50	< 140	< 67	**1,200**	**4,100**	**1,800**	**180**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	µg/L	NA	NA	< 63	< 100	< 50	< 140	< 67	< 1,000	< 2,000	< 1,000	< 100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	5.0	200	< 63	< 100	< 50	< 140	< 67	**5,300**	**25,000**	**11,000**	**1,000**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	2.0	13	**2,300**	**2,100**	**1,600**	**1,500**	**2,400**	**1,100**	**2,400**	**820 J**	**77 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Gases																	
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other																	
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																	
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-25 16-21 4/21/2017	MW-25 16-21 8/2/2017	MW-25 16-21 11/14/2017	MW-25 16-21 2/13/2018	MW-25 16-21 5/9/2018	MW-26 4.5-14.5 8/4/2017	MW-26 4.5-14.5 11/14/2017	MW-26 4.5-14.5 5/15/2018	MW-28 2-12 8/3/2017	MW-28 2-12 11/8/2017	MW-28 2-12 2/7/2018	MW-28 2-12 5/15/2018
Semi-volatile Organic Compounds (SVOCs)															
1,4-Dioxane	µg/L	37	2,800	0.75 J	1.1 J	0.86 J	0.68 J	0.99 J	0.25 J	< 2.0	< 2.0	0.44 J	< 2.0	< 2.0	< 2.0
Volatile Organic Compounds (VOCs)															
1,1,1-Trichloroethane	µg/L	200	89	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	28	26	25	24
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/L	5.0	330	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/L	2,500	740	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	14	12	10	13
1,1-Dichloroethene	µg/L	7.0	130	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.71 J	1.6	0.90 J	0.57 J
1,2,3-Trimethylbenzene	µg/L	130	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/L	70	99	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/L	63	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/L	0.05	5.7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/L	600	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/L	5.0	360	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/L	5.0	230	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/L	72	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/L	19	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/L	75	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
-2Butanone (MEK)	µg/L	38,000	2,200	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	µg/L	2,100	1,700	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/L	29	35	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide	µg/L	2,300	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon Tetrachloride	µg/L	5.0	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-11	µg/L	7,300	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-12	µg/L	4,800	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/L	100	25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorodibromomethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/L	1,700	1,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	µg/L	80	350	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane	µg/L	1,100	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.1	0.91 J	0.50 J	0.43 J
cis-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	µg/L	NA	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichloromethane	µg/L	5.0	1,500	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Diethyl ether	µg/L	10	ID	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene	µg/L	74	18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/L	2,300	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Acetate	µg/L	NA	NA	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methylcyclohexane	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-25 16-21 4/21/2017	MW-25 16-21 8/2/2017	MW-25 16-21 11/14/2017	MW-25 16-21 2/13/2018	MW-25 16-21 5/9/2018	MW-26 4.5-14.5 8/4/2017	MW-26 4.5-14.5 11/14/2017	MW-26 4.5-14.5 5/15/2018	MW-28 2-12 8/3/2017	MW-28 2-12 11/8/2017	MW-28 2-12 2/7/2018	MW-28 2-12 5/15/2018
Methyl-tert-butylether	µg/L	40	7,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 J	< 1.0	< 1.0	< 1.0	< 1.0 J
Styrene (Monomer)	µg/L	100	80	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/L	790	270	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Xylenes	µg/L	280	41	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
trans-1,2-Dichloroethene	µg/L	100	1,500	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.68 J	0.59 J	0.45 J	0.51 J
Vinyl chloride	µg/L	2.0	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Gases															
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other															
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals															
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:				MW-29					MW-30					MW-31				
Screen Interval (ft. bgs):				5-15					19-24					17-22				
Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	4/26/2017	8/4/2017	11/14/2017	2/14/2018	5/14/2018	4/25/2017	7/27/2017	11/9/2017	2/13/2018	5/8/2018	4/21/2017	7/28/2017	11/10/2017	2/14/2018	5/8/2018
Semi-volatile Organic Compounds (SVOCs)																		
1,4-Dioxane	µg/L	37	2,800	1.4 J	3.8	9.0	0.90 J	0.47 J	10	11	13	12	14	< 2.0	0.47 J	< 2.0	< 2.0	< 2.0
Volatile Organic Compounds (VOCs)																		
1,1,1-Trichloroethane	µg/L	200	89	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/L	5.0	330	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/L	2,500	740	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/L	7.0	130	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trimethylbenzene	µg/L	130	ID	< 5.0	< 5.0	< 5.0	< 5.0	NA*	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/L	70	99	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.1
1,2,4-Trimethylbenzene	µg/L	63	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/L	0.05	5.7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/L	600	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/L	5.0	360	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/L	5.0	230	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/L	72	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/L	19	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/L	75	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
-2Butanone (MEK)	µg/L	38,000	2,200	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	µg/L	2,100	1,700	< 10	< 10	< 10	< 10	4.4 J	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/L	29	35	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide	µg/L	2,300	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon Tetrachloride	µg/L	5.0	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-11	µg/L	7,300	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-12	µg/L	4,800	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/L	100	25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorodibromomethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/L	1,700	1,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	µg/L	80	350	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane	µg/L	1,100	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	µg/L	NA	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichloromethane	µg/L	5.0	1,500	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Diethyl ether	µg/L	10	ID	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene	µg/L	74	18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/L	2,300	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Acetate	µg/L	NA	NA	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methylcyclohexane	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-29 5-15					MW-30 19-24					MW-31 17-22				
				4/26/2017	8/4/2017	11/14/2017	2/14/2018	5/14/2018	4/25/2017	7/27/2017	11/9/2017	2/13/2018	5/8/2018	4/21/2017	7/28/2017	11/10/2017	2/14/2018	5/8/2018
Methyl-tert-butylether	µg/L	40	7,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene (Monomer)	µg/L	100	80	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/L	790	270	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Xylenes	µg/L	280	41	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
trans-1,2-Dichloroethene	µg/L	100	1,500	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	2.0	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.68 J	0.84 J	< 1.0	< 1.0
Gases																		
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	< 0.50	NA	0.31 J	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	< 0.50	NA	< 1.0	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	65	NA	360	NA	NA	NA	NA	NA	NA	NA
Other																		
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	2.6	NA	2.5	NA	NA	NA	NA	NA	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	< 1.0	NA	< 0.10	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	52	NA	53	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	2.1	NA	2.4	NA	NA	NA	NA	NA	NA	NA
Metals																		
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	< 100	NA	**3,700**	NA	NA	NA	NA	NA	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	**630**	NA	**3,700**	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	**77**	NA	**150**	NA	NA	NA	NA	NA	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	**70**	NA	**150**	NA	NA	NA	NA	NA	NA	NA

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Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:				MW-32				MW-33				MW-34				
Screen Interval (ft. bgs):		Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	18-23				14-19				16.5-21.5				
Date:	Unit			7/28/2017	11/7/2017	2/12/2018	5/8/2018	7/28/2017	11/8/2017	2/14/2018	5/8/2018	4/24/2017	7/27/2017	11/9/2017	2/13/2018	5/8/2018
Semi-volatile Organic Compounds (SVOCs)																
1,4-Dioxane	µg/L	37	2,800	0.28 J	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	8.3	6.1	6.6	7.4	4.9
Volatile Organic Compounds (VOCs)																
1,1,1-Trichloroethane	µg/L	200	89	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/L	5.0	330	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/L	2,500	740	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/L	7.0	130	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trimethylbenzene	µg/L	130	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/L	70	99	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/L	63	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/L	0.05	5.7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/L	600	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/L	5.0	360	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/L	5.0	230	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/L	72	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/L	19	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/L	75	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
-2Butanone (MEK)	µg/L	38,000	2,200	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	µg/L	2,100	1,700	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	2.7 J	< 10	< 10	< 10	< 10
Benzene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/L	29	35	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide	µg/L	2,300	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon Tetrachloride	µg/L	5.0	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-11	µg/L	7,300	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-12	µg/L	4,800	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/L	100	25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorodibromomethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/L	1,700	1,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	µg/L	80	350	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane	µg/L	1,100	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	< 1.0	0.31 J	0.37 J	0.50 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.37 J	0.35 J	< 1.0	< 1.0
cis-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	µg/L	NA	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichloromethane	µg/L	5.0	1,500	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Diethyl ether	µg/L	10	ID	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene	µg/L	74	18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/L	2,300	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Acetate	µg/L	NA	NA	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methylcyclohexane	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-32 18-23				MW-33 14-19				MW-34 16.5-21.5				
				7/28/2017	11/7/2017	2/12/2018	5/8/2018	7/28/2017	11/8/2017	2/14/2018	5/8/2018	4/24/2017	7/27/2017	11/9/2017	2/13/2018	5/8/2018
Methyl-tert-butylether	µg/L	40	7,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene (Monomer)	µg/L	100	80	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/L	790	270	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Xylenes	µg/L	280	41	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
trans-1,2-Dichloroethene	µg/L	100	1,500	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	2.0	13	< 1.0	0.67 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.52 J	1.5	2.0	0.97 J	0.87 J
Gases																
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other																
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-35 19.5-24.5 7/27/2017	MW-35 19.5-24.5 11/7/2017	MW-35 19.5-24.5 2/14/2018	MW-35 19.5-24.5 5/9/2018	MW-36 20-25 7/28/2017	MW-36 20-25 11/10/2017	MW-36 20-25 2/15/2018	MW-36 20-25 5/14/2018	MW-37 18-23 8/1/2017	MW-37 18-23 11/10/2017	MW-37 18-23 2/12/2018	MW-37 18-23 5/10/2018
Semi-volatile Organic Compounds (SVOCs)															
1,4-Dioxane	µg/L	37	2,800	4.9	4.6	4.3	4.7	< 2.0	< 2.0	< 2.0	< 2.0	0.37 J	< 2.0	< 2.0	< 2.0
Volatile Organic Compounds (VOCs)															
1,1,1-Trichloroethane	µg/L	200	89	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/L	5.0	330	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/L	2,500	740	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/L	7.0	130	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trimethylbenzene	µg/L	130	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/L	70	99	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/L	63	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/L	0.05	5.7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/L	600	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/L	5.0	360	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/L	5.0	230	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/L	72	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/L	19	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/L	75	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
-2Butanone (MEK)	µg/L	38,000	2,200	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	µg/L	2,100	1,700	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/L	29	35	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide	µg/L	2,300	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon Tetrachloride	µg/L	5.0	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-11	µg/L	7,300	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-12	µg/L	4,800	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/L	100	25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorodibromomethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/L	1,700	1,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	µg/L	80	350	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane	µg/L	1,100	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	µg/L	NA	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichloromethane	µg/L	5.0	1,500	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Diethyl ether	µg/L	10	ID	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene	µg/L	74	18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/L	2,300	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Acetate	µg/L	NA	NA	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methylcyclohexane	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-35 19.5-24.5				MW-36 20-25				MW-37 18-23			
				7/27/2017	11/7/2017	2/14/2018	5/9/2018	7/28/2017	11/10/2017	2/15/2018	5/14/2018	8/1/2017	11/10/2017	2/12/2018	5/10/2018
Methyl-tert-butylether	µg/L	40	7,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene (Monomer)	µg/L	100	80	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/L	790	270	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Xylenes	µg/L	280	41	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
trans-1,2-Dichloroethene	µg/L	100	1,500	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	2.0	13	**3.5**	**2.4**	**4.5**	**7.2**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Gases															
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other															
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals															
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-38 15-20 4/26/2017	MW-38 15-20 7/28/2017	MW-38 15-20 11/8/2017	MW-38 15-20 2/15/2018	MW-38 15-20 5/8/2018	MW-39 20-25 4/26/2017	MW-39 20-25 7/28/2017	MW-39 20-25 11/7/2017	MW-39 20-25 2/15/2018	MW-39 20-25 5/8/2018	MW-40 20-25 7/28/2017	MW-40 20-25 11/15/2017	MW-40 20-25 5/8/2018
Semi-volatile Organic Compounds (SVOCs)																
1,4-Dioxane	µg/L	37	2,800	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Volatile Organic Compounds (VOCs)																
1,1,1-Trichloroethane	µg/L	200	89	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/L	5.0	330	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/L	2,500	740	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/L	7.0	130	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trimethylbenzene	µg/L	130	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/L	70	99	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/L	63	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/L	0.05	5.7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/L	600	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/L	5.0	360	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/L	5.0	230	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/L	72	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/L	19	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/L	75	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
-2Butanone (MEK)	µg/L	38,000	2,200	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	µg/L	2,100	1,700	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/L	29	35	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide	µg/L	2,300	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon Tetrachloride	µg/L	5.0	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-11	µg/L	7,300	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-12	µg/L	4,800	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/L	100	25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorodibromomethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/L	1,700	1,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	µg/L	80	350	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane	µg/L	1,100	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	2.7	3.2	2.3 J
cis-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	µg/L	NA	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichloromethane	µg/L	5.0	1,500	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Diethyl ether	µg/L	10	ID	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene	µg/L	74	18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/L	2,300	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Acetate	µg/L	NA	NA	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methylcyclohexane	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:		Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-38					MW-39					MW-40		
Screen Interval (ft. bgs):				15-20					20-25					20-25		
Date:	Unit			4/26/2017	7/28/2017	11/8/2017	2/15/2018	5/8/2018	4/26/2017	7/28/2017	11/7/2017	2/15/2018	5/8/2018	7/28/2017	11/15/2017	5/8/2018
Methyl-tert-butylether	µg/L	40	7,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene (Monomer)	µg/L	100	80	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/L	790	270	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Xylenes	µg/L	280	41	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
trans-1,2-Dichloroethene	µg/L	100	1,500	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.41 J	0.48 J	0.34 J
trans-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	2.0	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.77 J	1.8	1.3 J
Gases																
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other																
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-41 16-21 4/24/2017	MW-41 16-21 7/27/2017	MW-41 16-21 11/9/2017	MW-41 16-21 2/13/2018	MW-41 16-21 5/8/2018	MW-42 16-21 4/24/2017	MW-42 16-21 7/27/2017	MW-42 16-21 11/9/2017	MW-42 16-21 2/13/2018	MW-42 16-21 5/9/2018	MW-43 17-22 4/27/2017	MW-43 17-22 7/27/2017	MW-43 17-22 11/9/2017	MW-43 17-22 2/13/2018	MW-43 17-22 5/9/2018
Semi-volatile Organic Compounds (SVOCs)																		
1,4-Dioxane	µg/L	37	2,800	1.9 J	1.4 J	2.2	0.77 J	0.75 J	1.3 J	1.8 J	2.4	1.8 J	2.2	3.6	3.5	3.5	2.2	2.8
Volatile Organic Compounds (VOCs)																		
1,1,1-Trichloroethane	µg/L	200	89	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/L	5.0	330	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/L	2,500	740	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/L	7.0	130	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trimethylbenzene	µg/L	130	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/L	70	99	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/L	63	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/L	0.05	5.7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/L	600	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/L	5.0	360	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/L	5.0	230	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/L	72	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/L	19	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/L	75	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
-2Butanone (MEK)	µg/L	38,000	2,200	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	µg/L	2,100	1,700	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Benzene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/L	29	35	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide	µg/L	2,300	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon Tetrachloride	µg/L	5.0	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-11	µg/L	7,300	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-12	µg/L	4,800	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/L	100	25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorodibromomethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/L	1,700	1,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	µg/L	80	350	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane	µg/L	1,100	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	1.9	1.8	2.3	2.1	2.6	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	µg/L	NA	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichloromethane	µg/L	5.0	1,500	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Diethyl ether	µg/L	10	ID	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene	µg/L	74	18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/L	2,300	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Acetate	µg/L	NA	NA	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methylcyclohexane	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-41 16-21 4/24/2017	MW-41 16-21 7/27/2017	MW-41 16-21 11/9/2017	MW-41 16-21 2/13/2018	MW-41 16-21 5/8/2018	MW-42 16-21 4/24/2017	MW-42 16-21 7/27/2017	MW-42 16-21 11/9/2017	MW-42 16-21 2/13/2018	MW-42 16-21 5/9/2018	MW-43 17-22 4/27/2017	MW-43 17-22 7/27/2017	MW-43 17-22 11/9/2017	MW-43 17-22 2/13/2018	MW-43 17-22 5/9/2018
Methyl-tert-butylether	µg/L	40	7,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene (Monomer)	µg/L	100	80	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/L	790	270	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Xylenes	µg/L	280	41	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
trans-1,2-Dichloroethene	µg/L	100	1,500	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	2.0	13	**3.2**	1.9	**2.4**	**2.1**	**5.3**	0.81 J	0.99 J	1.0	0.81 J	0.99 J	**8.4**	**3.0**	**2.2**	**8.0**	**6.4 J**
Gases																		
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.48 J	NA	0.74 J	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.50	NA	0.27 J	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	190	NA	210	NA	NA
Other																		
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4	NA	4.3	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.50	NA	< 0.20	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	220	NA	**260**	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4	NA	4.3	NA	NA
Metals																		
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,700**	NA	**2,800**	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2,500**	NA	**3,900**	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**210**	NA	**190**	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**210**	NA	**200**	NA	NA

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-44 16-21					MW-45 15-20					MW-46 16-21				
				4/25/2017	8/2/2017	11/7/2017	2/6/2018	5/14/2018	4/24/2017	8/1/2017	11/13/2017	2/12/2018	5/8/2018	4/24/2017	7/31/2017	11/13/2017	2/12/2018	5/14/2018
Semi-volatile Organic Compounds (SVOCs)																		
1,4-Dioxane	µg/L	37	2,800	12	7.1	12	9.0	11	4.1	2.5	< 2.0	< 2.0	0.40 J	21	0.83 J	3.7	11	13
Volatile Organic Compounds (VOCs)																		
1,1,1-Trichloroethane	µg/L	200	89	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
1,1,2-Trichloroethane	µg/L	5.0	330	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
1,1-Dichloroethane	µg/L	2,500	740	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	1.9 J	2.8	3.6	2.4	1.0 J
1,1-Dichloroethene	µg/L	7.0	130	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	0.78 J	0.90 J	0.46 J	< 1.7
1,2,3-Trimethylbenzene	µg/L	130	ID	< 31	< 50	< 100	< 33	< 67	< 2,500	< 2,500	< 330	< 500	< 330	< 25	< 5.0	< 13	< 5.0	< 8.4
1,2,4-Trichlorobenzene	µg/L	70	99	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
1,2,4-Trimethylbenzene	µg/L	63	17	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
1,2-Dibromoethane	µg/L	0.05	5.7	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
1,2-Dichlorobenzene	µg/L	600	13	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
1,2-Dichloroethane	µg/L	5.0	360	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	0.55 J	< 1.7
1,2-Dichloropropane	µg/L	5.0	230	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
1,3,5-Trimethylbenzene	µg/L	72	45	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
1,3-Dichlorobenzene	µg/L	19	28	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
1,4-Dichlorobenzene	µg/L	75	17	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
-2Butanone (MEK)	µg/L	38,000	2,200	< 63	< 100	< 200	< 67	< 130	< 5,000	< 5,000	< 670	< 1,000	< 670	< 50	< 10	< 25	< 10	< 17
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 63	< 100	< 200	< 67	< 130	< 5,000	< 5,000	< 670	< 1,000	< 670	< 50	< 10	< 25	< 10	< 17
Acetone	µg/L	2,100	1,700	< 63	< 100	< 200	< 67	< 130	< 5,000	< 5,000	< 670	< 1,000	< 670	< 50	< 10	< 25	< 10	< 17
Benzene	µg/L	5.0	200	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
Bromodichloromethane	µg/L	80	ID	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
Bromoform	µg/L	80	ID	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
Bromomethane	µg/L	29	35	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
Carbon Disulfide	µg/L	2,300	ID	< 31	< 50	< 100	< 33	< 67	< 2,500	< 2,500	< 330	< 500	< 330	< 25	< 5.0	< 13	< 5.0	< 8.4
Carbon Tetrachloride	µg/L	5.0	45	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
CFC-11	µg/L	7,300	ID	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
CFC-12	µg/L	4,800	ID	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
Chlorobenzene	µg/L	100	25	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
Chlorodibromomethane	µg/L	80	ID	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
Chloroethane	µg/L	1,700	1,100	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
Chloroform	µg/L	80	350	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
Chloromethane	µg/L	1,100	ID	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
cis-1,2-Dichloroethene	µg/L	70	620	< 6.3	< 10	< 20	< 6.7	< 13	**10,000**	**8,100**	**2,100**	**1,800**	**1,200**	21	15	22	14	6.0
cis-1,3-Dichloropropene	µg/L	NA	NA	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
Cyclohexane	µg/L	NA	ID	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
Dichloromethane	µg/L	5.0	1,500	**8.3 J**	< 50	**18 J**	4.1 J	**9.7 J**	**330 J**	< 2,500	< 330	< 500	< 330	4.1 J	< 5.0	< 13	< 5.0	< 8.4
Diethyl ether	µg/L	10	ID	< 13	< 20	< 40	< 13	< 27	< 1,000	< 1,000	< 130	< 200	< 130	< 10	< 2.0	< 5.0	< 2.0	< 3.3
Ethylbenzene	µg/L	74	18	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
Isopropylbenzene	µg/L	2,300	28	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
Methyl Acetate	µg/L	NA	NA	< 63	< 100	< 200	< 67	< 130	< 5,000	< 5,000	< 670	< 1,000	< 670	< 50	< 10	< 25	< 10	< 17
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 63	< 100	< 200	< 67	< 130	< 5,000	< 5,000	< 670	< 1,000	< 670	< 50	< 10	< 25	< 10	< 17
Methylcyclohexane	µg/L	NA	NA	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:		Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-44					MW-45					MW-46				
Screen Interval (ft. bgs):				16-21					15-20					16-21				
Date:	Unit			4/25/2017	8/2/2017	11/7/2017	2/6/2018	5/14/2018	4/24/2017	8/1/2017	11/13/2017	2/12/2018	5/8/2018	4/24/2017	7/31/2017	11/13/2017	2/12/2018	5/14/2018
Methyl-tert-butylether	µg/L	40	7,100	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
Styrene (Monomer)	µg/L	100	80	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	7.9	< 1.0	< 2.5	< 1.0	< 1.7
Tetrachloroethene	µg/L	5.0	60	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
Toluene	µg/L	790	270	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
Total Xylenes	µg/L	280	41	< 13	< 20	< 40	< 13	< 27	< 1,000	< 1,000	< 130	< 200	< 130	< 10	< 2.0	< 5.0	< 2.0	< 3.3
trans-1,2-Dichloroethene	µg/L	100	1,500	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	1.6 J	2.6	2.7	1.7	0.86 J
trans-1,3-Dichloropropene	µg/L	NA	NA	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
Trichloroethene	µg/L	5.0	200	< 6.3	< 10	< 20	< 6.7	< 13	< 500	< 500	< 67	< 100	< 67	< 5.0	< 1.0	< 2.5	< 1.0	< 1.7
Vinyl chloride	µg/L	2.0	13	**230**	**380**	**520**	**210**	**270**	**7,600**	**5,400**	**1,500**	**1,200**	**1,400**	**150**	**13**	**57**	**38**	**30**
Gases																		
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other																		
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																		
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:				MW-47				MW-48					MW-49			
Screen Interval (ft. bgs):				16-21				17-22					12.5-17.5			
Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	4/24/2017	7/31/2017	11/10/2017	5/10/2018	4/21/2017	8/1/2017	11/14/2017	2/12/2018	5/15/2018	4/21/2017	7/28/2017	2/13/2018	5/11/2018
Semi-volatile Organic Compounds (SVOCs)																
1,4-Dioxane	µg/L	37	2,800	0.72 J	0.62 J	0.52 J	< 2.0	< 2.0	9.5	2.1	7.7	12	12	9.4	7.0	5.5
Volatile Organic Compounds (VOCs)																
1,1,1-Trichloroethane	µg/L	200	89	< 5.0	2.2 J	< 10	1.9 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
1,1,2-Trichloroethane	µg/L	5.0	330	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
1,1-Dichloroethane	µg/L	2,500	740	3.7 J	3.5 J	4.6 J	2.9 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
1,1-Dichloroethene	µg/L	7.0	130	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
1,2,3-Trimethylbenzene	µg/L	130	ID	< 25	< 20	< 50	< 25 J	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10,000	< 5,000	< 8,300	< 8,300
1,2,4-Trichlorobenzene	µg/L	70	99	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
1,2,4-Trimethylbenzene	µg/L	63	17	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
1,2-Dibromoethane	µg/L	0.05	5.7	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
1,2-Dichlorobenzene	µg/L	600	13	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
1,2-Dichloroethane	µg/L	5.0	360	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
1,2-Dichloropropane	µg/L	5.0	230	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
1,3,5-Trimethylbenzene	µg/L	72	45	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
1,3-Dichlorobenzene	µg/L	19	28	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
1,4-Dichlorobenzene	µg/L	75	17	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
-2Butanone (MEK)	µg/L	38,000	2,200	< 50	< 40	< 100	< 50 J	< 10	< 10	< 10	< 10	< 10	< 20,000	< 10,000	< 17,000	< 17,000
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 50	< 40	< 100	< 50 J	< 10	< 10	< 10	< 10	< 10	< 20,000	< 10,000	< 17,000	< 17,000
Acetone	µg/L	2,100	1,700	< 50	< 40	< 100	< 50 J	< 10	< 10	5.1 J	< 10	3.8 J	< 20,000	< 10,000	< 17,000	**3,900 J**
Benzene	µg/L	5.0	200	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
Bromodichloromethane	µg/L	80	ID	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
Bromoform	µg/L	80	ID	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
Bromomethane	µg/L	29	35	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
Carbon Disulfide	µg/L	2,300	ID	< 25	< 20	< 50	< 25 J	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10,000	< 5,000	< 8,300	< 8,300
Carbon Tetrachloride	µg/L	5.0	45	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
CFC-11	µg/L	7,300	ID	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
CFC-12	µg/L	4,800	ID	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
Chlorobenzene	µg/L	100	25	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
Chlorodibromomethane	µg/L	80	ID	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
Chloroethane	µg/L	1,700	1,100	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
Chloroform	µg/L	80	350	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
Chloromethane	µg/L	1,100	ID	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
cis-1,2-Dichloroethene	µg/L	70	620	69	69	**79**	49 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**43,000**	**29,000**	**20,000**	**17,000**
cis-1,3-Dichloropropene	µg/L	NA	NA	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
Cyclohexane	µg/L	NA	ID	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
Dichloromethane	µg/L	5.0	1,500	3.4 J	< 20	< 50	< 25 J	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**1,100 J**	< 5,000	< 8,300	**940 J**
Diethyl ether	µg/L	10	ID	< 10	< 8.0	< 20	< 10 J	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 4,000	< 2,000	< 3,300	< 3,300
Ethylbenzene	µg/L	74	18	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
Isopropylbenzene	µg/L	2,300	28	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
Methyl Acetate	µg/L	NA	NA	< 50	< 40	< 100	< 50 J	< 10	< 10	< 10	< 10	< 10	< 20,000	< 10,000	< 17,000	< 17,000
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 50	< 40	< 100	< 50 J	< 10	< 10	< 10	< 10	< 10	< 20,000	< 10,000	< 17,000	< 17,000
Methylcyclohexane	µg/L	NA	NA	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:				MW-47				MW-48					MW-49			
Screen Interval (ft. bgs):				16-21				17-22					12.5-17.5			
Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	4/24/2017	7/31/2017	11/10/2017	5/10/2018	4/21/2017	8/1/2017	11/14/2017	2/12/2018	5/15/2018	4/21/2017	7/28/2017	2/13/2018	5/11/2018
Methyl-tert-butylether	µg/L	40	7,100	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 J	< 2,000	< 1,000	< 1,700	< 1,700
Styrene (Monomer)	µg/L	100	80	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
Tetrachloroethene	µg/L	5.0	60	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
Toluene	µg/L	790	270	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
Total Xylenes	µg/L	280	41	< 10	< 8.0	< 20	< 10 J	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 4,000	< 2,000	< 3,300	< 3,300
trans-1,2-Dichloroethene	µg/L	100	1,500	7.1	8.6	9.3 J	6.5 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
trans-1,3-Dichloropropene	µg/L	NA	NA	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
Trichloroethene	µg/L	5.0	200	< 5.0	< 4.0	< 10	< 5.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2,000	< 1,000	< 1,700	< 1,700
Vinyl chloride	µg/L	2.0	13	**120**	**110**	**220**	**88 J**	0.85 J	**11**	**5.2**	**3.8**	**7.4**	**10,000**	**9,800**	**8,400**	**8,100**
Gases																
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other																
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-50 16-21					MW-51 15-20					MW-52 15-20			
				4/21/2017	7/31/2017	11/13/2017	2/12/2018	5/9/2018	4/25/2017	8/3/2017	11/9/2017	2/8/2018	5/14/2018	7/27/2017	11/10/2017	2/13/2018	5/9/2018
Semi-volatile Organic Compounds (SVOCs)																	
1,4-Dioxane	µg/L	37	2,800	1.5 J	2.2	0.68 J	0.78 J	2.8	0.75 J	1.2 J	1.1 J	1.1 J	0.49 J	1.3 J	0.68 J	1.2 J	0.30 J
Volatile Organic Compounds (VOCs)																	
1,1,1-Trichloroethane	µg/L	200	89	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/L	5.0	330	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/L	2,500	740	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	0.41 J	0.72 J	0.70 J	0.84 J	0.45 J	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/L	7.0	130	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trimethylbenzene	µg/L	130	ID	< 25	< 20	< 25	< 25	< 25	< 5.0	< 5.0	< 5.0	< 5.0	NA*	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/L	70	99	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/L	63	17	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/L	0.05	5.7	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/L	600	13	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/L	5.0	360	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/L	5.0	230	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/L	72	45	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/L	19	28	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/L	75	17	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
-2Butanone (MEK)	µg/L	38,000	2,200	< 50	< 40	< 50	< 50	< 50	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 50	< 40	< 50	< 50	< 50	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	µg/L	2,100	1,700	< 50	< 40	< 50	< 50	< 50	< 10	< 10	< 10	< 10	3.9 J	2.2 J	< 10	< 10	2.7 J
Benzene	µg/L	5.0	200	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/L	80	ID	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	µg/L	80	ID	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/L	29	35	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide	µg/L	2,300	ID	< 25	< 20	< 25	< 25	< 25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon Tetrachloride	µg/L	5.0	45	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-11	µg/L	7,300	ID	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-12	µg/L	4,800	ID	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/L	100	25	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorodibromomethane	µg/L	80	ID	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/L	1,700	1,100	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	µg/L	80	350	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane	µg/L	1,100	ID	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	13	15	23	22	12	< 1.0	< 1.0	< 1.0	0.31 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	µg/L	NA	NA	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	µg/L	NA	ID	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichloromethane	µg/L	5.0	1,500	< 25	< 20	< 25	3.5 J	< 25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Diethyl ether	µg/L	10	ID	< 10	< 8.0	< 10	< 10	< 10	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene	µg/L	74	18	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/L	2,300	28	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Acetate	µg/L	NA	NA	< 50	< 40	< 50	< 50	< 50	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 50	< 40	< 50	< 50	< 50	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methylcyclohexane	µg/L	NA	NA	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:		Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-50					MW-51					MW-52			
Screen Interval (ft. bgs):				16-21					15-20					15-20			
Date:	Unit			4/21/2017	7/31/2017	11/13/2017	2/12/2018	5/9/2018	4/25/2017	8/3/2017	11/9/2017	2/8/2018	5/14/2018	7/27/2017	11/10/2017	2/13/2018	5/9/2018
Methyl-tert-butylether	µg/L	40	7,100	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene (Monomer)	µg/L	100	80	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/L	790	270	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Xylenes	µg/L	280	41	< 10	< 8.0	< 10	< 10	< 10	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
trans-1,2-Dichloroethene	µg/L	100	1,500	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	µg/L	NA	NA	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	5.0	200	< 5.0	< 4.0	< 5.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	2.0	13	**48**	**140**	**150**	**76**	**150**	0.57 J	0.97 J	0.47 J	< 1.0	0.70 J	**7.0**	**9.1**	**4.0**	**4.3**
Gases																	
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other																	
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																	
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-53 16-21					MW-54 16-21				MW-55 15-20			
				4/24/2017	7/27/2017	11/8/2017	2/7/2018	5/9/2018	7/27/2017	11/8/2017	2/7/2018	5/9/2018	7/27/2017	11/8/2017	2/7/2018	5/10/2018
Semi-volatile Organic Compounds (SVOCs)																
1,4-Dioxane	µg/L	37	2,800	1.1 J	2.0	0.61 J	1.1 J	1.4 J	1.5 J	2.0	2.7	1.7 J	1.2 J	1.4 J	0.96 J	1.2 J
Volatile Organic Compounds (VOCs)																
1,1,1-Trichloroethane	µg/L	200	89	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/L	5.0	330	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/L	2,500	740	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/L	7.0	130	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trimethylbenzene	µg/L	130	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/L	70	99	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/L	63	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/L	0.05	5.7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/L	600	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/L	5.0	360	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/L	5.0	230	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/L	72	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/L	19	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/L	75	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
-2Butanone (MEK)	µg/L	38,000	2,200	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	µg/L	2,100	1,700	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	2.7 J
Benzene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/L	29	35	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide	µg/L	2,300	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon Tetrachloride	µg/L	5.0	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-11	µg/L	7,300	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-12	µg/L	4,800	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/L	100	25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorodibromomethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/L	1,700	1,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	µg/L	80	350	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane	µg/L	1,100	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	µg/L	NA	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichloromethane	µg/L	5.0	1,500	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Diethyl ether	µg/L	10	ID	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene	µg/L	74	18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/L	2,300	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Acetate	µg/L	NA	NA	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methylcyclohexane	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-53 16-21					MW-54 16-21				MW-55 15-20			
				4/24/2017	7/27/2017	11/8/2017	2/7/2018	5/9/2018	7/27/2017	11/8/2017	2/7/2018	5/9/2018	7/27/2017	11/8/2017	2/7/2018	5/10/2018
Methyl-tert-butylether	µg/L	40	7,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene (Monomer)	µg/L	100	80	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/L	790	270	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Xylenes	µg/L	280	41	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
trans-1,2-Dichloroethene	µg/L	100	1,500	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	2.0	13	< 1.0	0.63 J	< 1.0	< 1.0	< 1.0	0.88 J	1.5	1.2	0.98 J	0.84 J	0.65 J	< 1.0	0.48 J
Gases																
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other																
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-56 16-21					MW-57 17-22				MW-58 15-20			
				4/24/2017	7/28/2017	11/8/2017	2/14/2018	5/9/2018	7/27/2017	11/7/2017	2/9/2018	5/9/2018	7/28/2017	11/8/2017	2/7/2018	5/14/2018
Semi-volatile Organic Compounds (SVOCs)																
1,4-Dioxane	µg/L	37	2,800	3.8	2.7	2.2	1.6 J	2.7	4.6	4.9	4.9	3.9	10	8.0	9.6	3.6
Volatile Organic Compounds (VOCs)																
1,1,1-Trichloroethane	µg/L	200	89	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/L	5.0	330	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/L	2,500	740	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/L	7.0	130	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trimethylbenzene	µg/L	130	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA*
1,2,4-Trichlorobenzene	µg/L	70	99	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/L	63	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/L	0.05	5.7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/L	600	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/L	5.0	360	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/L	5.0	230	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/L	72	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/L	19	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/L	75	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
-2Butanone (MEK)	µg/L	38,000	2,200	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	µg/L	2,100	1,700	< 10	< 10	< 10	< 10	< 10	1.8 J	< 10	< 10	< 10	< 10	< 10	< 10	4.4 J
Benzene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/L	29	35	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide	µg/L	2,300	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon Tetrachloride	µg/L	5.0	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-11	µg/L	7,300	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-12	µg/L	4,800	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/L	100	25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorodibromomethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/L	1,700	1,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	µg/L	80	350	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane	µg/L	1,100	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	µg/L	NA	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichloromethane	µg/L	5.0	1,500	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Diethyl ether	µg/L	10	ID	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene	µg/L	74	18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/L	2,300	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Acetate	µg/L	NA	NA	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methylcyclohexane	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-56 16-21					MW-57 17-22				MW-58 15-20			
				4/24/2017	7/28/2017	11/8/2017	2/14/2018	5/9/2018	7/27/2017	11/7/2017	2/9/2018	5/9/2018	7/28/2017	11/8/2017	2/7/2018	5/14/2018
Methyl-tert-butylether	µg/L	40	7,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene (Monomer)	µg/L	100	80	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/L	790	270	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Xylenes	µg/L	280	41	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
trans-1,2-Dichloroethene	µg/L	100	1,500	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	2.0	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.59 J	0.56 J	< 1.0	< 1.0	< 1.0	< 1.0
Gases																
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other																
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:		Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-62					MW-63					
Screen Interval (ft. bgs):				16.3-21.3					7-12					
Date:	Unit			4/21/2017	7/31/2017	11/13/2017	2/6/2018	5/9/2018	4/21/2017	5/25/2017	7/31/2017	11/13/2017	2/7/2018	5/9/2018
Semi-volatile Organic Compounds (SVOCs)														
1,4-Dioxane	µg/L	37	2,800	2.8	3.7	3.7	2.1	1.5 J	19	NA	0.36 J	< 2.0	< 2.0	< 2.0
Volatile Organic Compounds (VOCs)														
1,1,1-Trichloroethane	µg/L	200	89	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/L	5.0	330	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
1,1-Dichloroethane	µg/L	2,500	740	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
1,1-Dichloroethene	µg/L	7.0	130	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
1,2,3-Trimethylbenzene	µg/L	130	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5,000	< 5,000	< 500	< 50	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/L	70	99	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/L	63	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
1,2-Dibromoethane	µg/L	0.05	5.7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/L	600	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
1,2-Dichloroethane	µg/L	5.0	360	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
1,2-Dichloropropane	µg/L	5.0	230	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/L	72	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/L	19	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/L	75	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
-2Butanone (MEK)	µg/L	38,000	2,200	< 10	< 10	< 10	< 10	< 10	< 10,000	< 10,000	< 1,000	< 100	< 10	< 10
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 10	< 10	< 10	< 10	< 10	< 10,000	< 10,000	< 1,000	< 100	< 10	< 10
Acetone	µg/L	2,100	1,700	< 10	< 10	< 10	< 10	< 10	< 10,000	< 10,000	< 1,000	< 100	< 10	< 10
Benzene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
Bromodichloromethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
Bromoform	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
Bromomethane	µg/L	29	35	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
Carbon Disulfide	µg/L	2,300	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5,000	< 5,000	< 500	< 50	< 5.0	< 5.0
Carbon Tetrachloride	µg/L	5.0	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
CFC-11	µg/L	7,300	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
CFC-12	µg/L	4,800	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
Chlorobenzene	µg/L	100	25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
Chlorodibromomethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
Chloroethane	µg/L	1,700	1,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
Chloroform	µg/L	80	350	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
Chloromethane	µg/L	1,100	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	1.6	< 1.0	0.30 J	0.30 J	0.83 J	< 1,000	< 1,000	< 100	< 10	1.7	2.5
cis-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
Cyclohexane	µg/L	NA	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
Dichloromethane	µg/L	5.0	1,500	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5,000	< 5,000	< 500	< 50	< 5.0	< 5.0
Diethyl ether	µg/L	10	ID	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2,000	< 2,000	< 200	< 20	< 2.0	< 2.0
Ethylbenzene	µg/L	74	18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	5.6 J	< 1.0	< 1.0
Isopropylbenzene	µg/L	2,300	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
Methyl Acetate	µg/L	NA	NA	< 10	< 10	< 10	< 10	< 10	< 10,000	< 10,000	< 1,000	< 100	< 10	< 10
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 10	< 10	< 10	< 10	< 10	< 10,000	< 10,000	< 1,000	< 100	< 10	< 10
Methylcyclohexane	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0

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Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-62 16.3-21.3					MW-63 7-12					
				4/21/2017	7/31/2017	11/13/2017	2/6/2018	5/9/2018	4/21/2017	5/25/2017	7/31/2017	11/13/2017	2/7/2018	5/9/2018
Methyl-tert-butylether	µg/L	40	7,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
Styrene (Monomer)	µg/L	100	80	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**13,000**	**13,000**	**3,900**	**320**	0.23 J	< 1.0
Tetrachloroethene	µg/L	5.0	60	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
Toluene	µg/L	790	270	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
Total Xylenes	µg/L	280	41	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2,000	< 2,000	< 200	< 20	< 2.0	< 2.0
trans-1,2-Dichloroethene	µg/L	100	1,500	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
trans-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
Trichloroethene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
Vinyl chloride	µg/L	2.0	13	1.3	< 1.0	1.0	1.3	1.2	< 1,000	< 1,000	< 100	< 10	< 1.0	< 1.0
Gases														
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other														
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals														
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-64 15-20					MW-65 16-21					MW-66 15-20				
				4/24/2017	7/27/2017	11/7/2017	2/9/2018	5/10/2018	4/25/2017	8/2/2017	11/8/2017	2/6/2018	5/10/2018	4/25/2017	8/2/2017	11/13/2017	2/12/2018	5/10/2018
Semi-volatile Organic Compounds (SVOCs)																		
1,4-Dioxane	µg/L	37	2,800	< 2.0	0.32 J	< 2.0	< 2.0	< 2.0	3.8	3.1	3.8	3.4	2.1	0.76 J	0.99 J	0.49 J	1.3 J	< 2.0
Volatile Organic Compounds (VOCs)																		
1,1,1-Trichloroethane	µg/L	200	89	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/L	5.0	330	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/L	2,500	740	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/L	7.0	130	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trimethylbenzene	µg/L	130	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 20	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/L	70	99	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/L	63	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/L	0.05	5.7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/L	600	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/L	5.0	360	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/L	5.0	230	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/L	72	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/L	19	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/L	75	17	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
-2Butanone (MEK)	µg/L	38,000	2,200	< 10	< 10	< 10	< 10	< 10	< 20	< 40	< 20	< 20	< 20	< 10	< 10	< 10	< 10	< 10
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 10	< 10	< 10	< 10	< 10	< 20	< 40	< 20	< 20	< 20	< 10	< 10	< 10	< 10	< 10
Acetone	µg/L	2,100	1,700	< 10	< 10	< 10	< 10	< 10	< 20	< 40	< 20	< 20	< 20	< 10	< 10	< 10	< 10	< 10
Benzene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/L	29	35	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide	µg/L	2,300	ID	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 20	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon Tetrachloride	µg/L	5.0	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-11	µg/L	7,300	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-12	µg/L	4,800	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/L	100	25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorodibromomethane	µg/L	80	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/L	1,700	1,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	µg/L	80	350	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane	µg/L	1,100	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	< 1.0	0.37 J	0.31 J	0.30 J	< 1.0	3.3	4.1	3.9	4.1	6.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	µg/L	NA	ID	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichloromethane	µg/L	5.0	1,500	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 20	< 10	1.5 J	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Diethyl ether	µg/L	10	ID	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 4.0	< 8.0	< 4.0	< 4.0	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene	µg/L	74	18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/L	2,300	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Acetate	µg/L	NA	NA	< 10	< 10	< 10	< 10	< 10	< 20	< 40	< 20	< 20	< 20	< 10	< 10	< 10	< 10	< 10
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 10	< 10	< 10	< 10	< 10	< 20	< 40	< 20	< 20	< 20	< 10	< 10	< 10	< 10	< 10
Methylcyclohexane	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:				MW-64					MW-65					MW-66				
Screen Interval (ft. bgs):				15-20					16-21					15-20				
Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	4/24/2017	7/27/2017	11/7/2017	2/9/2018	5/10/2018	4/25/2017	8/2/2017	11/8/2017	2/6/2018	5/10/2018	4/25/2017	8/2/2017	11/13/2017	2/12/2018	5/10/2018
Methyl-tert-butylether	µg/L	40	7,100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene (Monomer)	µg/L	100	80	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/L	790	270	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Xylenes	µg/L	280	41	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 4.0	< 8.0	< 4.0	< 4.0	< 4.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
trans-1,2-Dichloroethene	µg/L	100	1,500	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	µg/L	NA	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	5.0	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 4.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	2.0	13	**2.4**	**4.8**	**7.0**	**6.7**	1.3	**61**	**49**	**48**	**36**	**41**	**5.6**	**5.4**	**3.0**	**2.7**	**2.4**
Gases																		
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other																		
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																		
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-67 9-14					MW-68 15-20					MW-69 15-20			
				4/21/2017	7/31/2017	11/14/2017	2/12/2018	5/14/2018	4/24/2017	8/1/2017	11/10/2017	2/12/2018	5/15/2018	4/25/2017	11/10/2017	2/14/2018	5/10/2018
Semi-volatile Organic Compounds (SVOCs)																	
1,4-Dioxane	µg/L	37	2,800	1.8 J	0.33 J	< 2.0	< 2.0	< 2.0	0.40 J	0.69 J	0.73 J	0.54 J	< 2.0	12	35	23	7.3
Volatile Organic Compounds (VOCs)																	
1,1,1-Trichloroethane	µg/L	200	89	2.3 J	2.0 J	2.1 J	< 3.3	0.94 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/L	5.0	330	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/L	2,500	740	< 10	1.0 J	< 5.0	< 3.3	0.25 J	1.6	1.7	3.7	2.0	1.4	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/L	7.0	130	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	0.39 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trimethylbenzene	µg/L	130	ID	< 50	< 20	< 25	< 17	NA*	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/L	70	99	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/L	63	17	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/L	0.05	5.7	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/L	600	13	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/L	5.0	360	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/L	5.0	230	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/L	72	45	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/L	19	28	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/L	75	17	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
-2Butanone (MEK)	µg/L	38,000	2,200	< 100	< 40	< 50	< 33	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 100	< 40	< 50	< 33	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	µg/L	2,100	1,700	< 100	< 40	< 50	< 33	3.5 J	< 10	< 10	< 10	< 10	< 10	4.4 J	< 10	< 10	< 10
Benzene	µg/L	5.0	200	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/L	80	ID	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	µg/L	80	ID	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/L	29	35	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide	µg/L	2,300	ID	< 50	< 20	< 25	< 17	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon Tetrachloride	µg/L	5.0	45	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-11	µg/L	7,300	ID	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
CFC-12	µg/L	4,800	ID	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/L	100	25	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorodibromomethane	µg/L	80	ID	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/L	1,700	1,100	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	µg/L	80	350	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane	µg/L	1,100	ID	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	47	36	15	9.6	5.7	20	18	13	13	10	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	µg/L	NA	NA	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	µg/L	NA	ID	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichloromethane	µg/L	5.0	1,500	< 50	< 20	< 25	1.8 J	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Diethyl ether	µg/L	10	ID	< 20	< 8.0	< 10	< 6.7	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene	µg/L	74	18	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/L	2,300	28	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Acetate	µg/L	NA	NA	< 100	< 40	< 50	< 33	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 100	< 40	< 50	< 33	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Methylcyclohexane	µg/L	NA	NA	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-67 9-14					MW-68 15-20					MW-69 15-20			
				4/21/2017	7/31/2017	11/14/2017	2/12/2018	5/14/2018	4/24/2017	8/1/2017	11/10/2017	2/12/2018	5/15/2018	4/25/2017	11/10/2017	2/14/2018	5/10/2018
Methyl-tert-butylether	µg/L	40	7,100	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 J	< 1.0	< 1.0	< 1.0	< 1.0
Styrene (Monomer)	µg/L	100	80	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/L	790	270	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Xylenes	µg/L	280	41	< 20	< 8.0	< 10	< 6.7	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
trans-1,2-Dichloroethene	µg/L	100	1,500	< 10	2.4 J	1.7 J	1.1 J	0.75 J	1.9	1.9	1.5	1.8	1.4	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	µg/L	NA	NA	< 10	< 4.0	< 5.0	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	5.0	200	**94**	**91**	**110**	**83**	**57**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	2.0	13	**14**	< 4.0	< 5.0	< 3.3	1.3	**12**	**2.1**	**18**	**2.5**	**2.1**	**2.8**	< 1.0	< 1.0	**3.3**
Gases																	
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other																	
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																	
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-70 15-20 4/24/2017	MW-70 15-20 8/1/2017	MW-70 15-20 11/13/2017	MW-70 15-20 2/12/2018	MW-70 15-20 5/14/2018	MW-71 15-20 4/24/2017	MW-71 15-20 8/1/2017	MW-71 15-20 11/13/2017	MW-71 15-20 2/12/2018	MW-71 15-20 5/8/2018	PW-16-01 9.7-19.7 8/2/2017	PW-16-01 9.7-19.7 11/7/2017	PW-16-01 9.7-19.7 2/7/2018	PW-16-01 9.7-19.7 5/15/2018
Semi-volatile Organic Compounds (SVOCs)																	
1,4-Dioxane	µg/L	37	2,800	0.76 J	0.68 J	1.1 J	0.91 J	3.0	4.3	1.4 J	0.72 J	0.57 J	0.38 J	< 2.0	14	0.76 J	< 2.0
Volatile Organic Compounds (VOCs)																	
1,1,1-Trichloroethane	µg/L	200	89	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
1,1,2-Trichloroethane	µg/L	5.0	330	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
1,1-Dichloroethane	µg/L	2,500	740	2.4 J	3.3 J	3.4 J	< 13	2.2 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
1,1-Dichloroethene	µg/L	7.0	130	< 6.7	< 10	< 10	< 13	2.1 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
1,2,3-Trimethylbenzene	µg/L	130	ID	< 33	< 50	< 50	< 67	NA*	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1,000	< 71	< 71
1,2,4-Trichlorobenzene	µg/L	70	99	< 6.7	< 10	< 10	< 13	2.5 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
1,2,4-Trimethylbenzene	µg/L	63	17	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
1,2-Dibromoethane	µg/L	0.05	5.7	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
1,2-Dichlorobenzene	µg/L	600	13	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
1,2-Dichloroethane	µg/L	5.0	360	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
1,2-Dichloropropane	µg/L	5.0	230	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
1,3,5-Trimethylbenzene	µg/L	72	45	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
1,3-Dichlorobenzene	µg/L	19	28	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
1,4-Dichlorobenzene	µg/L	75	17	< 6.7	< 10	< 10	< 13	0.79 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
-2Butanone (MEK)	µg/L	38,000	2,200	< 67	< 100	< 100	< 130	< 33	< 10	< 10	< 10	< 10	< 10	< 10	< 2,000	< 140	< 140
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 67	< 100	< 100	< 130	< 33	< 10	< 10	< 10	< 10	< 10	< 10	< 2,000	< 140	< 140
Acetone	µg/L	2,100	1,700	< 67	< 100	< 100	< 130	15 J	< 10	< 10	< 10	< 10	< 10	< 10	< 2,000	< 140	32 J
Benzene	µg/L	5.0	200	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
Bromodichloromethane	µg/L	80	ID	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
Bromoform	µg/L	80	ID	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
Bromomethane	µg/L	29	35	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
Carbon Disulfide	µg/L	2,300	ID	< 33	< 50	< 50	< 67	< 17	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1,000	< 71	< 71
Carbon Tetrachloride	µg/L	5.0	45	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
CFC-11	µg/L	7,300	ID	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
CFC-12	µg/L	4,800	ID	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
Chlorobenzene	µg/L	100	25	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
Chlorodibromomethane	µg/L	80	ID	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
Chloroethane	µg/L	1,700	1,100	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.55 J	< 200	< 14	< 14
Chloroform	µg/L	80	350	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
Chloromethane	µg/L	1,100	ID	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
cis-1,2-Dichloroethene	µg/L	70	620	**190**	**200**	**200**	**230**	**260**	< 1.0	< 1.0	0.39 J	0.37 J	0.40 J	2.2	**550**	**82**	7.1 J
cis-1,3-Dichloropropene	µg/L	NA	NA	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
Cyclohexane	µg/L	NA	ID	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
Dichloromethane	µg/L	5.0	1,500	**8.9 J**	< 50	< 50	< 67	< 17	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 1,000	**11 J**	**8.6 J**
Diethyl ether	µg/L	10	ID	< 13	< 20	< 20	< 27	< 6.7	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 400	< 29	< 29
Ethylbenzene	µg/L	74	18	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
Isopropylbenzene	µg/L	2,300	28	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
Methyl Acetate	µg/L	NA	NA	< 67	< 100	< 100	< 130	< 33	< 10	< 10	< 10	< 10	< 10	< 10	< 2,000	< 140	< 140
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 67	< 100	< 100	< 130	< 33	< 10	< 10	< 10	< 10	< 10	< 10	< 2,000	< 140	< 140
Methylcyclohexane	µg/L	NA	NA	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14

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Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-70 15-20					MW-71 15-20					PW-16-01 9.7-19.7			
				4/24/2017	8/1/2017	11/13/2017	2/12/2018	5/14/2018	4/24/2017	8/1/2017	11/13/2017	2/12/2018	5/8/2018	8/2/2017	11/7/2017	2/7/2018	5/15/2018
Methyl-tert-butylether	µg/L	40	7,100	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14 J
Styrene (Monomer)	µg/L	100	80	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.35 J	< 200	< 14	< 14
Tetrachloroethene	µg/L	5.0	60	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
Toluene	µg/L	790	270	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
Total Xylenes	µg/L	280	41	< 13	< 20	< 20	< 27	< 6.7	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 400	< 29	< 29
trans-1,2-Dichloroethene	µg/L	100	1,500	3.8 J	4.2 J	5.1 J	4.4 J	3.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	5.4 J	< 14
trans-1,3-Dichloropropene	µg/L	NA	NA	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
Trichloroethene	µg/L	5.0	200	< 6.7	< 10	< 10	< 13	< 3.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 200	< 14	< 14
Vinyl chloride	µg/L	2.0	13	**120**	**100**	**140**	**160**	**210**	< 1.0	0.68 J	0.83 J	0.59 J	0.59 J	**24**	**5,300**	**160**	**37 J**
Gases																	
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other																	
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																	
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:				PW-16-02				TW-16-01				TW-16-02				
Screen Interval (ft. bgs):				6-21				12-17				12-17				
Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	8/3/2017	11/8/2017	2/14/2018	5/11/2018	8/2/2017	11/7/2017	2/7/2018	5/15/2018	4/25/2017	8/2/2017	11/7/2017	2/14/2018	5/11/2018
Semi-volatile Organic Compounds (SVOCs)																
1,4-Dioxane	µg/L	37	2,800	0.51 J	< 2.0	< 2.0	< 2.0	0.32 J	< 2.0	< 2.0	< 2.0	7.2	3.9	5.8	3.9	5.0
Volatile Organic Compounds (VOCs)																
1,1,1-Trichloroethane	µg/L	200	89	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
1,1,2-Trichloroethane	µg/L	5.0	330	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
1,1-Dichloroethane	µg/L	2,500	740	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
1,1-Dichloroethene	µg/L	7.0	130	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
1,2,3-Trimethylbenzene	µg/L	130	ID	< 25	< 5.0	< 5.0	< 5.0	< 50	< 63	< 170	< 170	< 3,100	< 2,500	< 2,000	< 5,000	< 2,500
1,2,4-Trichlorobenzene	µg/L	70	99	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
1,2,4-Trimethylbenzene	µg/L	63	17	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
1,2-Dibromoethane	µg/L	0.05	5.7	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
1,2-Dichlorobenzene	µg/L	600	13	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
1,2-Dichloroethane	µg/L	5.0	360	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
1,2-Dichloropropane	µg/L	5.0	230	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
1,3,5-Trimethylbenzene	µg/L	72	45	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
1,3-Dichlorobenzene	µg/L	19	28	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
1,4-Dichlorobenzene	µg/L	75	17	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
-2Butanone (MEK)	µg/L	38,000	2,200	< 50	< 10	< 10	< 10	< 100	< 130	< 330	< 330	< 6,300	< 5,000	< 4,000	< 10,000	< 5,000
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 50	< 10	< 10	< 10	< 100	< 130	< 330	< 330	< 6,300	< 5,000	< 4,000	< 10,000	< 5,000
Acetone	µg/L	2,100	1,700	< 50	< 10	< 10	< 10	< 100	< 130	< 330	68 J	< 6,300	< 5,000	< 4,000	< 10,000	< 5,000
Benzene	µg/L	5.0	200	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
Bromodichloromethane	µg/L	80	ID	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
Bromoform	µg/L	80	ID	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
Bromomethane	µg/L	29	35	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
Carbon Disulfide	µg/L	2,300	ID	< 25	< 5.0	< 5.0	< 5.0	< 50	< 63	< 170	< 170	< 3,100	< 2,500	< 2,000	< 5,000	< 2,500
Carbon Tetrachloride	µg/L	5.0	45	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
CFC-11	µg/L	7,300	ID	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
CFC-12	µg/L	4,800	ID	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
Chlorobenzene	µg/L	100	25	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
Chlorodibromomethane	µg/L	80	ID	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
Chloroethane	µg/L	1,700	1,100	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
Chloroform	µg/L	80	350	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
Chloromethane	µg/L	1,100	ID	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
cis-1,2-Dichloroethene	µg/L	70	620	63	2.3	12	< 1.0	17	32	34	68	**5,200**	**3,100**	**6,000**	**3,500**	**4,400**
cis-1,3-Dichloropropene	µg/L	NA	NA	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
Cyclohexane	µg/L	NA	ID	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
Dichloromethane	µg/L	5.0	1,500	< 25	< 5.0	< 5.0	< 5.0	< 50	**10 J**	**23 J**	**20 J**	**1,200 J**	< 2,500	< 2,000	< 5,000	< 2,500
Diethyl ether	µg/L	10	ID	< 10	< 2.0	< 2.0	< 2.0	< 20	< 25	< 67	< 67	< 1,300	< 1,000	< 800	< 2,000	< 1,000
Ethylbenzene	µg/L	74	18	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
Isopropylbenzene	µg/L	2,300	28	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
Methyl Acetate	µg/L	NA	NA	< 50	< 10	< 10	< 10	< 100	< 130	< 330	< 330	< 6,300	< 5,000	< 4,000	< 10,000	< 5,000
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 50	< 10	< 10	< 10	< 100	< 130	< 330	< 330	< 6,300	< 5,000	< 4,000	< 10,000	< 5,000
Methylcyclohexane	µg/L	NA	NA	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500

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Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	PW-16-02 6-21				TW-16-01 12-17				TW-16-02 12-17				
				8/3/2017	11/8/2017	2/14/2018	5/11/2018	8/2/2017	11/7/2017	2/7/2018	5/15/2018	4/25/2017	8/2/2017	11/7/2017	2/14/2018	5/11/2018
Methyl-tert-butylether	µg/L	40	7,100	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33 J	< 630	< 500	< 400	< 1,000	< 500
Styrene (Monomer)	µg/L	100	80	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
Tetrachloroethene	µg/L	5.0	60	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
Toluene	µg/L	790	270	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
Total Xylenes	µg/L	280	41	< 10	< 2.0	< 2.0	< 2.0	< 20	< 25	< 67	< 67	< 1,300	< 1,000	< 800	< 2,000	< 1,000
trans-1,2-Dichloroethene	µg/L	100	1,500	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	11 J	< 630	< 500	< 400	< 1,000	< 500
trans-1,3-Dichloropropene	µg/L	NA	NA	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
Trichloroethene	µg/L	5.0	200	< 5.0	< 1.0	< 1.0	< 1.0	< 10	< 13	< 33	< 33	< 630	< 500	< 400	< 1,000	< 500
Vinyl chloride	µg/L	2.0	13	**160**	2.0	**18**	< 1.0	**210**	**320**	**380**	**720**	**15,000**	**12,000**	**13,000**	**9,100**	**8,500**
Gases																
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other																
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals																
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	TW-16-03 9-19 8/3/2017	TW-16-03 9-19 11/8/2017	TW-16-03 9-19 2/14/2018	TW-16-03 9-19 5/11/2018	TW-16-04 9-19 4/25/2017	TW-16-04 9-19 8/3/2017	TW-16-04 9-19 11/8/2017	TW-16-04 9-19 2/14/2018	TW-16-04 9-19 5/11/2018
Semi-volatile Organic Compounds (SVOCs)												
1,4-Dioxane	µg/L	37	2,800	0.54 J	< 2.0	< 2.0	< 2.0	1.7 J	0.81 J	0.89 J	< 2.0	< 2.0
Volatile Organic Compounds (VOCs)												
1,1,1-Trichloroethane	µg/L	200	89	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
1,1,2,2-Tetrachloroethane	µg/L	35	78	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
1,1,2-trichloro-1,2,2-trifluoroethane	µg/L	170,000	32	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
1,1,2-Trichloroethane	µg/L	5.0	330	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
1,1-Dichloroethane	µg/L	2,500	740	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
1,1-Dichloroethene	µg/L	7.0	130	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
1,2,3-Trimethylbenzene	µg/L	130	ID	< 20	< 17	< 50	< 13	< 20	< 20	< 33	< 33	< 13
1,2,4-Trichlorobenzene	µg/L	70	99	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
1,2,4-Trimethylbenzene	µg/L	63	17	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
1,2-Dibromo-3-chloropropane	µg/L	0.2	ID	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
1,2-Dibromoethane	µg/L	0.05	5.7	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
1,2-Dichlorobenzene	µg/L	600	13	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
1,2-Dichloroethane	µg/L	5.0	360	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
1,2-Dichloropropane	µg/L	5.0	230	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
1,3,5-Trimethylbenzene	µg/L	72	45	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
1,3-Dichlorobenzene	µg/L	19	28	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
1,4-Dichlorobenzene	µg/L	75	17	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
-2Butanone (MEK)	µg/L	38,000	2,200	< 40	< 33	< 100	< 25	< 40	< 40	< 67	< 67	< 25
-4Methyl-2-Pentanone	µg/L	5,200	ID	< 40	< 33	< 100	< 25	< 40	< 40	< 67	< 67	< 25
Acetone	µg/L	2,100	1,700	< 40	< 33	< 100	< 25	< 40	< 40	< 67	< 67	< 25
Benzene	µg/L	5.0	200	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
Bromodichloromethane	µg/L	80	ID	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
Bromoform	µg/L	80	ID	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
Bromomethane	µg/L	29	35	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
Carbon Disulfide	µg/L	2,300	ID	< 20	< 17	< 50	< 13	< 20	< 20	< 33	< 33	< 13
Carbon Tetrachloride	µg/L	5.0	45	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
CFC-11	µg/L	7,300	ID	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
CFC-12	µg/L	4,800	ID	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
Chlorobenzene	µg/L	100	25	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
Chlorodibromomethane	µg/L	80	ID	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
Chloroethane	µg/L	1,700	1,100	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
Chloroform	µg/L	80	350	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
Chloromethane	µg/L	1,100	ID	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
cis-1,2-Dichloroethene	µg/L	70	620	37	36	40	39	20	18	23	25	20
cis-1,3-Dichloropropene	µg/L	NA	NA	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
Cyclohexane	µg/L	NA	ID	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
Dichloromethane	µg/L	5.0	1,500	< 20	< 17	< 50	< 13	4.4 J	< 20	< 33	< 33	< 13
Diethyl ether	µg/L	10	ID	< 8.0	< 6.7	< 20	< 5.0	< 8.0	< 8.0	< 13	< 13	< 5.0
Ethylbenzene	µg/L	74	18	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
Isopropylbenzene	µg/L	2,300	28	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
Methyl Acetate	µg/L	NA	NA	< 40	< 33	< 100	< 25	< 40	< 40	< 67	< 67	< 25
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	94	ID	< 40	< 33	< 100	< 25	< 40	< 40	< 67	< 67	< 25
Methylcyclohexane	µg/L	NA	NA	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Non-residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	TW-16-03 9-19				TW-16-04 9-19				
				8/3/2017	11/8/2017	2/14/2018	5/11/2018	4/25/2017	8/3/2017	11/8/2017	2/14/2018	5/11/2018
Methyl-tert-butylether	µg/L	40	7,100	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
Styrene (Monomer)	µg/L	100	80	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
Tetrachloroethene	µg/L	5.0	60	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
Toluene	µg/L	790	270	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
Total Xylenes	µg/L	280	41	< 8.0	< 6.7	< 20	< 5.0	< 8.0	< 8.0	< 13	< 13	< 5.0
trans-1,2-Dichloroethene	µg/L	100	1,500	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
trans-1,3-Dichloropropene	µg/L	NA	NA	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
Trichloroethene	µg/L	5.0	200	< 4.0	< 3.3	< 10	< 2.5	< 4.0	< 4.0	< 6.7	< 6.7	< 2.5
Vinyl chloride	µg/L	2.0	13	**100**	**77**	**95**	**78**	**150**	**120**	**100**	**77**	**65**
Gases												
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other												
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals												
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 2
On-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Notes:
Results are compared to the Michigan Department of Environmental Quality Part 201 Generic Cleanup Criteria, December 31, 2013.
< denotes not detected above reporting limit.

Bold	Result denotes exceedance of Non-Residential Drinking Water Criteria.
Shaded	Result denotes exceedance of Groundwater Surface Water Interface Criteria.

Abbreviations:

ft. bgs	Feet below ground surface
ID	Insufficient data to develop criterion
J	Estimated result
NA	Not Analyzed/Not Available
NA*	Result not reported due to laboratory instrument calibration.
NS	No Standard
mg/L	Milligrams per liter
µg/L	Micrograms per liter

This document is a DRAFT document that has not received approval from the Michigan Department of Environmental Quality (MDEQ). This document was prepared pursuant to a court Consent Decree. The opinions, findings, and conclusions expressed are those of the authors and not those of the MDEQ.

Table 3
Off-Site Groundwater Elevations
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

ARCADIS Design & Consultancy for natural and built assets

Well ID	TOC Elevation (ft. amsl)	Screen Interval (ft. bgs)	Gauging Date	Depth to LNAPL (ft. btoc)	Depth to Water (ft. btoc)	Total Depth (ft.)	LNAPL Thickness (ft.)	Corrected Groundwater Elevation (ft. amsl)
MW-72	668.81	15-20	05/22/17	NP	6.98	19.31	NM	661.83
			07/24/17	NP	8.60	19.60	NM	660.21
			11/06/17	NP	9.20	19.54	NM	659.61
			02/05/18	NP	8.58	19.86	NM	660.23
			05/07/18	NP	6.83	19.63	NM	661.98
MW-73S	666.89	7-12	05/22/17	NP	4.72	11.31	NM	662.17
			07/24/17	NP	6.38	11.48	NM	660.51
			11/06/17	NP	6.94	11.42	NM	659.95
			02/05/18	NP	6.30	11.62	NM	660.59
			05/07/18	NP	4.77	11.55	NM	662.12
MW-73D	667.08	13.5-18.5	05/22/17	NP	4.98	17.21	NM	662.10
			07/24/17	NP	6.64	17.47	NM	660.44
			11/06/17	NP	7.22	17.38	NM	659.86
			02/05/18	NP	6.54	17.52	NM	660.54
			05/07/18	NP	5.02	17.36	NM	662.06
MW-74	668.02	14-19	05/22/17	NP	5.94	18.52	NM	662.08
			07/24/17	NP	7.47	18.81	NM	660.55
			11/06/17	NP	8.12	18.76	NM	659.90
			02/05/18	NP	7.49	18.85	NM	660.53
			05/07/18	NP	5.95	18.77	NM	662.07
MW-75S	666.86	5-10	05/22/17	NP	5.16	9.23	NM	661.70
			07/24/17	NP	6.15	9.48	NM	660.71
			11/06/17	NP	6.83	9.43	NM	660.03
			02/05/18	NP	6.56	9.82	NM	660.30
			05/07/18	NP	5.08	9.67	NM	661.78
MW-75D	666.89	12-17	05/22/17	NP	5.20	16.59	NM	661.69
			07/24/17	NP	6.19	16.78	NM	660.70
			11/06/17	NP	6.81	17.80	NM	660.08
			02/05/18	NP	6.59	16.83	NM	660.30
			05/07/18	NP	5.04	16.77	NM	661.85
MW-76	670.10	15-20	05/22/17	NP	9.43	19.44	NM	660.67
			07/24/17	NP	10.05	19.73	NM	660.05
			11/06/17	NP	10.73	19.66	NM	659.37
			02/05/18	NP	10.89	19.71	NM	659.21
			05/07/18	NP	9.34	19.64	NM	660.76
MW-77	660.56	9-14	05/22/17	NP	4.59	13.45	NM	655.97
			07/24/17	NP	5.90	13.75	NM	654.66
			11/06/17	NP	6.30	13.67	NM	654.26
			02/05/18	NP	5.43	13.75	NM	655.13
			05/07/18	NP	4.28	13.70	NM	656.28
MW-78	657.23	7-12	05/22/17	NP	1.78	11.47	NM	655.45
			07/24/17	NP	3.55	11.79	NM	653.68
			11/06/17	NP	3.50	11.72	NM	653.73
			02/05/18	NP	3.09	11.80	NM	654.14
			05/07/18	NP	1.54	11.75	NM	655.69

See Notes on Last Page.

Table 3
Off-Site Groundwater Elevations
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

ARCADIS Design & Consultancy for natural and built assets

Well ID	TOC Elevation (ft. amsl)	Screen Interval (ft. bgs)	Gauging Date	Depth to LNAPL (ft. btoc)	Depth to Water (ft. btoc)	Total Depth (ft.)	LNAPL Thickness (ft.)	Corrected Groundwater Elevation (ft. amsl)
MW-79S	663.10	5-10	05/22/17	NP	4.15	9.49	NM	658.95
			07/24/17	NP	6.37	9.76	NM	656.73
			11/06/17	NP	6.56	9.71	NM	656.54
			02/05/18	NP	5.46	9.78	NM	657.64
			05/07/18	NP	3.49	9.73	NM	659.61
MW-79D	663.35	10-15	05/22/17	NP	4.20	14.38	NM	659.15
			07/24/17	NP	6.45	14.66	NM	656.90
			11/06/17	NP	6.62	14.60	NM	656.73
			02/05/18	NP	5.51	14.69	NM	657.84
			05/07/18	NP	3.55	14.62	NM	659.80
MW-80S	656.08	7-12	05/22/17	NP	2.41	11.29	NM	653.67
			07/24/17	NP	4.19	11.50	NM	651.89
			11/06/17	NP	3.41	11.53	NM	652.67
			02/05/18	NP	2.86	11.81	NM	653.22
			05/07/18	NP	1.23	11.56	NM	654.85
MW-81	657.32	8-13	05/22/17	NP	6.05	12.40	NM	651.27
			07/24/17	NP	7.24	12.70	NM	650.08
			11/06/17	NP	8.27	12.63	NM	649.05
			02/05/18	NP	7.29	12.71	NM	650.03
			05/07/18	NP	5.98	12.66	NM	651.34
MW-82S	658.63	9-14	05/22/17	NP	6.93	13.12	NM	651.70
			07/24/17	NP	8.24	11.50	NM	650.39
			11/06/17	NP	9.08	13.34	NM	649.55
			02/05/18	NP	8.32	13.44	NM	650.31
			05/07/18	NP	7.10	13.36	NM	651.53
MW-82D	658.45	18-23	05/22/17	NP	7.34	22.45	NM	651.11
			07/24/17	NP	8.50	22.80	NM	649.95
			11/06/17	NP	9.41	22.72	NM	649.04
			02/05/18	NP	8.65	22.81	NM	649.80
			05/07/18	NP	7.33	22.74	NM	651.12
MW-83	660.09	8-13	05/22/17	NP	6.46	12.11	NM	653.63
			07/24/17	NP	7.61	12.44	NM	652.48
			11/06/17	NP	8.08	12.46	NM	652.01
			02/05/18	NP	7.53	12.48	NM	652.56
			05/07/18	NP	6.28	12.43	NM	653.81
MW-84	662.50	8-13	05/22/17	NP	3.26	12.28	NM	659.24
			07/24/17	NP	5.19	12.59	NM	657.31
			11/06/17	NP	5.54	12.52	NM	656.96
			02/05/18	NP	4.60	12.60	NM	657.90
			05/07/18	NP	2.90	12.55	NM	659.60
MW-85	658.85	8-13	05/22/17	NP	4.71	12.43	NM	654.14
			07/24/17	NP	6.12	12.75	NM	652.73
			11/06/17	NP	6.34	12.70	NM	652.51
			02/05/18	NP	5.53	12.76	NM	653.32
			05/07/18	NP	4.16	12.69	NM	654.69

See Notes on Last Page.

Table 3
Off-Site Groundwater Elevations
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Well ID	TOC Elevation (ft. amsl)	Screen Interval (ft. bgs)	Gauging Date	Depth to LNAPL (ft. btoc)	Depth to Water (ft. btoc)	Total Depth (ft.)	LNAPL Thickness (ft.)	Corrected Groundwater Elevation (ft. amsl)
MW-86	666.11	12-17	05/22/17	NP	6.25	16.35	NM	659.86
			07/24/17	NP	8.07	16.66	NM	658.04
			11/06/17	NP	8.70	16.58	NM	657.41
			02/05/18	NP	7.87	16.72	NM	658.24
			05/07/18	NP	6.03	16.60	NM	660.08
MW-87	668.89	14-19	05/22/17	NP	9.41	18.55	NM	659.48
			07/24/17	NP	10.65	18.85	NM	658.24
			11/06/17	NP	11.42	18.79	NM	657.47
			02/05/18	NP	11.06	18.86	NM	657.83
			05/07/18	NP	9.39	18.80	NM	659.50

Notes:
Water level measurements collected from top of well casing.
MW-81 and MW-83 were re-surveyed on November 20, 2017 by Geodetic Designs Inc.

Abbreviations:

ft.	Feet
ft. amsl	Feet above mean sea level
ft. bgs	Feet below ground surface
ft. btoc	Feet below top of casing
LNAPL	Light non-aqueous phase liquid
NM	Not measured
NP	No product detected
TOC	Top of casing

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Table 4
Off-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-72 15-20					MW-73D 13.5-18.5				
				5/22/2017	7/26/2017	11/7/2017	2/6/2018	5/9/2018	5/22/2017	7/26/2017	11/7/2017	2/6/2018	5/9/2018
Semi-volatile Organic Compounds (SVOCs)													
1,4-Dioxane	µg/L	7.2*	2,800	1.1 J	0.53 J	0.97 J	0.78 J	0.32 J	3.2	3.1	2.8	1.5 J	3.0
Volatile Organic Compounds (VOCs)													
1,1-Dichloroethene	µg/L	7.0	130	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	0.45 J	0.50 J	0.43 J	0.35 J
Tetrachloroethene	µg/L	5.0	60	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	µg/L	100	1,500	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	1.0**	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	1.0**	13	**3.9**	**2.9**	**1.6**	**1.3**	**1.5 J**	**1.1**	0.85 J	**1.3**	0.79 J	0.80 J
Metals													
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Total	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Total	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anions													
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon (TOC)													
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gases													
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 4
Off-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:		Residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-73S					MW-74				
Screen Interval (ft. bgs):				7-12					14-19				
Date:	Unit			5/22/2017	7/26/2017	11/7/2017	2/6/2018	5/9/2018	5/23/2017	7/26/2017	11/7/2017	2/6/2018	5/9/2018
Semi-volatile Organic Compounds (SVOCs)													
1,4-Dioxane	µg/L	7.2*	2,800	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	1.5 J	1.3 J	0.66 J	0.34 J
Volatile Organic Compounds (VOCs)													
1,1-Dichloroethene	µg/L	7.0	130	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	NA	1.9	1.8	1.3	1.3	NA	< 1.0	< 1.0	0.42 J	0.96 J
Tetrachloroethene	µg/L	5.0	60	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	µg/L	100	1,500	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	1.0**	200	0.40 J	0.48 J	0.48 J	0.33 J	0.38 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	1.0**	13	**1.6**	**1.3**	**1.9**	**1.1**	**1.2**	< 1.0	**2.7**	**2.4**	**2.0**	0.70 J
Metals													
Iron, Dissolved	µg/L	300	NS	**3,900**	NA	**1,200**	NA	NA	NA	NA	NA	NA	NA
Iron, Total	µg/L	300	NS	**3,900**	NA	**1,200**	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	**1,200**	NA	**940**	NA	NA	NA	NA	NA	NA	NA
Manganese, Total	µg/L	50	NS	**1,200**	NA	**890**	NA	NA	NA	NA	NA	NA	NA
Anions													
Nitrate-N	mg/L	10	NS	< 1.0	NA	< 0.10 J	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	80	NA	89	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon (TOC)													
Carbon, Dissolved	mg/L	NS	NS	6.1	NA	4.8	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	5.2	NA	4.6	NA	NA	NA	NA	NA	NA	NA
Gases													
Ethane	µg/L	NS	NS	NA	NA	< 1.0	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	< 1.0	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	24	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 4
Off-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-75D 12-17					MW-75S 5-10				
				5/23/2017	7/26/2017	11/8/2017	2/6/2018	5/9/2018	5/23/2017	7/26/2017	11/8/2017	2/6/2018	5/9/2018
Semi-volatile Organic Compounds (SVOCs)													
1,4-Dioxane	µg/L	7.2*	2,800	1.9 J	1.8 J	1.8 J	0.91 J	0.65 J	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Volatile Organic Compounds (VOCs)													
1,1-Dichloroethene	µg/L	7.0	130	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	µg/L	100	1,500	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	1.0**	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	1.0**	13	**6.4**	**3.7**	**4.9 J**	**1.9**	**2.4**	0.45 J	< 1.0	< 1.0	< 1.0	< 1.0
Metals													
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	< 100	NA	**330**	NA	NA
Iron, Total	µg/L	300	NS	NA	NA	NA	NA	NA	210	NA	**350**	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	**63**	NA	42	NA	NA
Manganese, Total	µg/L	50	NS	NA	NA	NA	NA	NA	**70**	NA	42	NA	NA
Anions													
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	**21**	NA	8.0 J	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	89	NA	110	NA	NA
Total Organic Carbon (TOC)													
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	4.6	NA	13	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	3.6	NA	13	NA	NA
Gases													
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	0.95 J	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	< 1.0	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	3,200	NA	NA

See Notes on Last Page.

Table 4
Off-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	Unit	Residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-76					MW-77				
Screen Interval (ft. bgs):				15-20					9-14				
Date:				5/23/2017	7/26/2017	11/8/2017	2/6/2018	5/10/2018	5/25/2017	7/26/2017	11/10/2017	2/8/2018	5/11/2018
Semi-volatile Organic Compounds (SVOCs)													
1,4-Dioxane	µg/L	7.2*	2,800	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	NA	0.32 J	< 2.0	< 2.0	0.27 J
Volatile Organic Compounds (VOCs)													
1,1-Dichloroethene	µg/L	7.0	130	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	NA	3.9	4.0	2.2	2.6	NA	0.67 J	0.73 J	0.66 J	0.54 J
Tetrachloroethene	µg/L	5.0	60	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	µg/L	100	1,500	NA	0.54 J	0.49 J	< 1.0	0.35 J	NA	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	1.0**	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.87 J	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	1.0**	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.51 J	0.45 J	< 1.0	< 1.0	< 1.0
Metals													
Iron, Dissolved	µg/L	300	NS	**340**	NA	270	NA	NA	NA	NA	NA	NA	NA
Iron, Total	µg/L	300	NS	**480**	NA	280	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	**760**	NA	**760**	NA	NA	NA	NA	NA	NA	NA
Manganese, Total	µg/L	50	NS	**800**	NA	**770**	NA	NA	NA	NA	NA	NA	NA
Anions													
Nitrate-N	mg/L	10	NS	1.2 J	NA	3.3 J	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	120	NA	160	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon (TOC)													
Carbon, Dissolved	mg/L	NS	NS	1.1	NA	4.1	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	0.90 J	NA	1.3	NA	NA	NA	NA	NA	NA	NA
Gases													
Ethane	µg/L	NS	NS	NA	NA	< 1.0	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	< 1.0	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	1.5	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 4
Off-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	Unit	Residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-78					MW-79D				
Screen Interval (ft. bgs):				7-12					10-15				
Date:				5/25/2017	7/25/2017	11/9/2017	2/8/2018	5/8/2018	5/24/2017	7/25/2017	11/9/2017	2/8/2018	5/8/2018
Semi-volatile Organic Compounds (SVOCs)													
1,4-Dioxane	µg/L	7.2*	2,800	NA	< 2.0	< 2.0	< 2.0	< 2.0	NA	< 2.0	< 2.0	< 2.0	0.49 J
Volatile Organic Compounds (VOCs)													
1,1-Dichloroethene	µg/L	7.0	130	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	µg/L	100	1,500	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	1.0**	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	1.0**	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**3.2**	**4.1**	**3.6**	**1.9**	**3.5**
Metals													
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Total	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Total	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anions													
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon (TOC)													
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gases													
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 4
Off-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	Unit	Residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-79S					MW-80S				
Screen Interval (ft. bgs):				5-10					7-12				
Date:				5/24/2017	7/25/2017	11/9/2017	2/8/2018	5/8/2018	5/24/2017	7/25/2017	11/8/2017	2/8/2018	5/8/2018
Semi-volatile Organic Compounds (SVOCs)													
1,4-Dioxane	µg/L	7.2*	2,800	NA	< 2.0	< 2.0	< 2.0	< 2.0	NA	0.52 J	0.55 J	0.33 J	0.46 J
Volatile Organic Compounds (VOCs)													
1,1-Dichloroethene	µg/L	7.0	130	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	µg/L	100	1,500	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	1.0**	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	1.0**	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**4.6**	**7.1**	**7.6**	**2.9**	**6.3**
Metals													
Iron, Dissolved	µg/L	300	NS	**990**	NA	**2,500**	NA	NA	**600**	NA	**3,600**	NA	NA
Iron, Total	µg/L	300	NS	**1,100**	NA	**2,900**	NA	NA	**530**	NA	**3,600**	NA	NA
Manganese, Dissolved	µg/L	50	NS	**110**	NA	**200**	NA	NA	**200**	NA	**230**	NA	NA
Manganese, Total	µg/L	50	NS	**120**	NA	**200**	NA	NA	**190**	NA	**230**	NA	NA
Anions													
Nitrate-N	mg/L	10	NS	0.063 J	NA	< 0.10	NA	NA	< 0.10	NA	< 0.10	NA	NA
Sulfate	mg/L	250	NS	41	NA	69	NA	NA	97	NA	110	NA	NA
Total Organic Carbon (TOC)													
Carbon, Dissolved	mg/L	NS	NS	4.1	NA	4.9	NA	NA	5.6	NA	5.7	NA	NA
Total Organic Carbon	mg/L	NS	NS	3.1	NA	4.4	NA	NA	4.5	NA	5.2	NA	NA
Gases													
Ethane	µg/L	NS	NS	NA	NA	< 1.0	NA	NA	NA	NA	< 1.0	NA	NA
Ethene	µg/L	NS	NS	NA	NA	< 1.0	NA	NA	NA	NA	< 1.0	NA	NA
Methane	µg/L	NS	NS	NA	NA	6.6	NA	NA	NA	NA	55	NA	NA

See Notes on Last Page.

Table 4
Off-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	Unit	Residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-81					MW-82D				
Screen Interval (ft. bgs):				8-13					18-23				
Date:				5/26/2017	7/25/2017	11/9/2017	2/6/2018	5/10/2018	5/24/2017	7/25/2017	11/8/2017	2/6/2018	5/10/2018
Semi-volatile Organic Compounds (SVOCs)													
1,4-Dioxane	µg/L	7.2*	2,800	NA	< 2.0	< 2.0	< 2.0	< 2.0	NA	< 2.0	< 2.0	< 2.0	< 2.0
Volatile Organic Compounds (VOCs)													
1,1-Dichloroethene	µg/L	7.0	130	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	µg/L	100	1,500	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	1.0**	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	1.0**	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Metals													
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Total	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Total	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anions													
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon (TOC)													
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gases													
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 4
Off-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-82S 9-14					MW-83 8-13				
				5/24/2017	7/25/2017	11/8/2017	2/6/2018	5/10/2018	5/26/2017	7/25/2017	11/9/2017	2/8/2018	5/11/2018
Semi-volatile Organic Compounds (SVOCs)													
1,4-Dioxane	µg/L	7.2*	2,800	NA	< 2.0	< 2.0	< 2.0	< 2.0	NA	< 2.0	< 2.0	< 2.0	< 2.0
Volatile Organic Compounds (VOCs)													
1,1-Dichloroethene	µg/L	7.0	130	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	µg/L	100	1,500	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	1.0**	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	1.0**	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Metals													
Iron, Dissolved	µg/L	300	NS	180	NA	**710**	NA	NA	NA	NA	NA	NA	NA
Iron, Total	µg/L	300	NS	**380**	NA	**720**	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	**510**	NA	**390**	NA	NA	NA	NA	NA	NA	NA
Manganese, Total	µg/L	50	NS	**550**	NA	**380**	NA	NA	NA	NA	NA	NA	NA
Anions													
Nitrate-N	mg/L	10	NS	< 0.10	NA	< 0.10 J	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	**470**	NA	**270**	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon (TOC)													
Carbon, Dissolved	mg/L	NS	NS	2.7	NA	4.8	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	2.1	NA	2.2	NA	NA	NA	NA	NA	NA	NA
Gases													
Ethane	µg/L	NS	NS	NA	NA	< 1.0	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	< 1.0	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	10	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 4
Off-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	Unit	Residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-84					MW-85				
Screen Interval (ft. bgs):				8-13					8-13				
Date:				5/25/2017	7/25/2017	11/9/2017	2/8/2018	5/8/2018	5/25/2017	7/25/2017	11/7/2017	2/8/2018	5/8/2018
Semi-volatile Organic Compounds (SVOCs)													
1,4-Dioxane	µg/L	7.2*	2,800	NA	< 2.0	< 2.0	< 2.0	< 2.0	NA	0.29 J	< 2.0	0.41 J	0.45 J
Volatile Organic Compounds (VOCs)													
1,1-Dichloroethene	µg/L	7.0	130	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	µg/L	100	1,500	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	1.0**	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	1.0**	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**8.6**	**7.3**	**7.3**	**5.5**	**7.5**
Metals													
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Total	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Total	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anions													
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon (TOC)													
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gases													
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 4
Off-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Screen Interval (ft. bgs): / Date:	Unit	Residential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	MW-86 12-17					MW-87 14-19				
				5/25/2017	7/26/2017	11/10/2017	2/8/2018	5/10/2018	5/23/2017	7/26/2017	11/10/2017	2/8/2018	5/10/2018
Semi-volatile Organic Compounds (SVOCs)													
1,4-Dioxane	µg/L	7.2*	2,800	NA	0.99 J	0.87 J	< 2.0	1.2 J	NA	< 2.0	< 2.0	< 2.0	< 2.0
Volatile Organic Compounds (VOCs)													
1,1-Dichloroethene	µg/L	7.0	130	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	µg/L	70	620	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/L	5.0	60	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	µg/L	100	1,500	NA	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/L	1.0**	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	µg/L	1.0**	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Metals													
Iron, Dissolved	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Total	µg/L	300	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Total	µg/L	50	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anions													
Nitrate-N	mg/L	10	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	250	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon (TOC)													
Carbon, Dissolved	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	mg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gases													
Ethane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	µg/L	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Last Page.

Table 4
Off-Site Groundwater Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Notes:
All results are compared to the Michigan Department of Environmental Quality (MDEQ) Proposed Part 201 Generic Cleanup Criteria (September 2016).
Bolded Result exceeds Residential Drinking Water Criteria
< Result not detected above reporting limit.

Footnote:

* Residential Drinking Water Criteria for 1,4-dioxane is derived from the MDEQ Proposed Rule Changes (September 2016) and Emergency Rules (October 27, 2016).

** Groundwater results for trichloroethene and vinyl chloride are compared to the published MDEQ Remediation and Redevelopment Division (RRD) Target Detection Limit (TDL) of 1.0 µg/L.

Abbreviations:

ft. bgs	feet below ground surface
J	Estimated Result
mg/L	milligrams per liter
NA	Not Analyzed
NS	No Standard
µg/L	micrograms per liter

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Table 5
Soil Vapor Monitoring Point Helium Tracer Test Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location ID	June 2017		September 2017		November 2017		February 2018		May 2018	
	Helium Pre Sample (ppm)	Helium Post Sample (ppm)	Helium Pre Sample (ppm)	Helium Post Sample (ppm)	Helium Pre Sample (ppm)	Helium Post Sample (ppm)	Helium Pre Sample (ppm)	Helium Post Sample (ppm)	Helium Pre Sample (ppm)	Helium Post Sample (ppm)
SVMP-1-3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SVMP-1-7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SVMP-2-4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SVMP-2-8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SVMP-3-3.5	50	75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SVMP-3-7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SVMP-4-3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SVMP-5-4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SVMP-6-4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SVMP-7-3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SVMP-8-3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SVMP-9-4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SVMP-10-3	0.0	1,475	0.0	0.0	0.0	0.0	0.0	0.0	NS	NS
SVMP-11-3.5	0.0	0.0	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-12-3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SVMP-13-2	250	4,750	0.0	0.0	0.0	0.0	NS	NS	NS	NS
SVMP-14-2	225	0.0	0.0	0.0	0.0	0.0	NS	NS	NS	NS
SVMP-15-2	2,450	3,800	0.0	0.0	0.0	0.0	NS	NS	NS	NS
SVMP-16-2	450	1,725	0.0	0.0	0.0	0.0	NS	NS	NS	NS
SVMP-17-2	4,675	2,925	0.0	0.0	0.0	NA	NS	NS	0.0	0.0
SVMP-18-3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SVMP-19-3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	NS	NS
SVMP-20-3	0.0	850	0.0	0.0	NS	NS	NS	NS	NS	NS
SVMP-21-2	0.0	0.0	0.0	0.0	0.0	0.0	NS	NS	0.0	0.0
SVMP-22-3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NS	NS
SVMP-23-3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NS	NS
SVMP-24-4	0.0	0.0	0.0	0.0	800	0.0	0.0	0.0	0.0	0.0
SVMP-25-3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SVMP-25-6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SVMP-26-4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SVMP-27-4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SVMP-28-3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SVMP-29-3.5	0.0	0.0	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-29-7.5	0.0	0.0	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-30-4	0.0	0.0	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-31-5.5	0.0	0.0	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-32-3	0.0	0.0	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-32-6	0.0	0.0	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-33-4	0.0	0.0	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-34-4	0.0	0.0	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-35-4	0.0	0.0	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-36-4	0.0	0.0	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-37-2.5	0.0	0.0	NS	NS	NS	NS	NS	NS	NS	NS

See Notes on Last Page.

Table 5
Soil Vapor Monitoring Point Helium Tracer Test Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Notes:

Helium tracer test readings collected using a Helium Leak Detector MGD-2002.

Shroud concentrations ranged from 30-40% helium during all sampling events.

As discussed in the MDEQ VI Guidance, a tracer gas can be used to verify that soil gas samples are from the installed point and not from leaks in the sampling train.

No unacceptable helium leak test results were noted during the June 2017, September 2017, November 2017, February 2018, or May 2018 sampling events.

Samples were deemed acceptable, as all exhibited concentrations of helium in purged soil gas less than 10% of the initial shroud concentration of helium, as presented in the MDEQ VI guidance.

SVMP-11 abandoned after the initial sampling event per the adjacent property owners request.

SVMP-29 through SVMP-37 are located on residential properties and were therefore only sampled during the initial sampling event.

SVMP-17 and SVMP-20 were not sampled during the November 2017 sampling event due to saturated screens.

SVMP-13 through SVMP-17, SVMP-20, and SVMP-21 were not sampled during the February 2018 sampling event due to saturated screens.

SVMP-10, SVMP-13 through SVMP-16, SVMP-19, SVMP-22, and SVMP-23 were not sampled during the May 2018 sampling event due to saturated screens.

SVMP-20 not sampled during the May 2018 sampling event due to a blockage in the tubing.

Abbreviations:

MDEQ	Michigan Department of Environmental Quality
NA	Not analyzed
NS	Not sampled
ppm	parts per million
SVMP	Soil Vapor Monitoring Point
VI	Vapor intrusion

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Table 6
Soil Vapor Monitoring Point Purged Air Parameter Readings
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location ID	June 2017			September 2017			November 2017			February 2018			May 2018		
	CO_2 (%)	O_2 (%)	CH_4 (%)	CO_2 (%)	O_2 (%)	CH_4 (%)	CO_2 (%)	O_2 (%)	CH_4 (%)	CO_2 (%)	O_2 (%)	CH_4 (%)	CO_2 (%)	O_2 (%)	CH_4 (%)
SVMP-1-3.5	1.3	19.7	0.0	1.2	19.3	0.0	1.7	21.1	0.0	1.8	18.5	NA	1.7	17.9	NA
SVMP-1-7	0.9	19.4	0.0	1.7	19.2	0.0	2.4	20.0	0.0	1.9	18.9	NA	1.2	16.2	NA
SVMP-2-4.5	4.8	17.4	0.0	0.9	20.1	0.0	9.3	7.7	0.0	0.1	21.6	NA	6.7	16.1	NA
SVMP-2-8.5	6.7	16.3	0.0	1.7	19.3	0.0	10.5	5.4	0.0	0.0	21.6	NA	7.2	14.5	NA
SVMP-3-3.5	0.3	20.6	0.0	0.6	20.4	0.0	0.7	21.4	0.0	0.0	21.4	NA	0.9	17.2	NA
SVMP-3-7	0.4	21.2	0.0	0.8	19.9	0.0	0.9	21.1	0.0	0.0	21.2	NA	0.7	19.6	NA
SVMP-4-3.5	0.6	20.1	0.0	1.0	20.0	0.0	0.8	19.1	0.0	1.6	16.2	NA	0.8	18.4	NA
SVMP-5-4.5	0.2	22.0	0.0	0.2	20.7	0.0	0.5	26.9	0.0	1.2	19.6	NA	0.6	20.0	NA
SVMP-6-4.5	0.5	20.8	0.0	0.9	20.1	0.0	0.7	21.0	0.0	0.4	20.8	NA	1.0	19.8	NA
SVMP-7-3.5	1.2	20.5	0.0	0.0	20.8	0.0	1.3	19.7	0.0	1.0	20.4	NA	2.2	19.9	NA
SVMP-8-3.5	2.5	19.8	0.0	1.4	19.6	0.0	8.9	21.6	0.0	0.3	20.8	NA	1.7	17.8	NA
SVMP-9-4	0.3	21.2	0.0	0.0	20.8	0.0	0.7	21.6	0.0	0.0	21.0	NA	0.7	20.5	NA
SVMP-10-3	0.2	20.1	0.0	0.4	19.9	0.0	0.5	19.5	0.0	0.1	20.9	NA	NS	NS	NS
SVMP-11-3.5	0.3	21.1	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-12-3.5	0.2	21.2	0.0	1.2	19.9	0.0	1.0	19.9	0.0	0.0	20.9	NA	0.9	16.5	NA
SVMP-13-2	0.6	20.0	0.0	1.2	18.6	0.0	2.6	11.8	0.0	NS	NS	NS	NS	NS	NS
SVMP-14-2	0.9	18.5	0.0	1.5	19.5	0.0	1.4	19.1	0.0	NS	NS	NS	NS	NS	NS
SVMP-15-2	0.8	21.4	0.0	0.7	20.3	0.0	0.1	20.1	0.0	NS	NS	NS	NS	NS	NS
SVMP-16-2	0.9	20.8	0.0	1.2	19.8	0.0	0.3	20.5	0.0	NS	NS	NS	NS	NS	NS
SVMP-17-2	1.3	19.5	0.0	4.9	16.8	0.0	NS	NS	NS	NS	NS	NS	2.8	16.9	NA
SVMP-18-3	2.6	18.6	0.0	5.2	16.8	0.0	4.3	17.6	0.0	2.7	16.6	NA	5.5	15.6	NA
SVMP-19-3	6.4	14.8	0.0	6.4	16.3	0.0	7.0	15.0	0.0	NA	NA	NA	NS	NS	NS
SVMP-20-3	6.3	15.7	0.0	6.0	16.1	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-21-2	2.5	19.8	0.0	1.8	19.3	0.0	0.8	19.9	0.0	NS	NS	NS	8.8	14.0	NA
SVMP-22-3	0.9	20.3	0.0	1.8	19.8	0.0	1.3	20.2	0.0	0.0	21.0	NA	NS	NS	NS
SVMP-23-3	1.4	20.2	0.0	0.1	15.8	0.0	1.1	20.6	0.0	NA	NA	NA	NS	NS	NS
SVMP-24-4	2.8	19.4	0.0	2.5	18.9	0.0	2.6	19.5	0.0	2.0	19.2	NA	3.1	17.5	NA
SVMP-25-3	3.2	18.0	0.0	4.0	15.5	0.0	4.0	18.0	0.0	0.2	20.9	NA	2.9	17.4	NA
SVMP-25-6	2.4	18.4	0.0	5.4	14.0	0.0	4.6	17.4	0.0	0.0	21.0	NA	2.1	17.6	NA
SVMP-26-4	3.8	12.0	0.0	11.4	8.6	0.0	12.0	5.6	0.0	0.6	20.7	NA	6.1	10.2	NA
SVMP-27-4.5	3.8	20.3	0.0	1.1	19.2	0.0	1.5	20.4	0.0	0.1	21.3	NA	1.1	18.4	NA
SVMP-28-3	1.8	21.0	0.0	3.4	16.7	0.0	2.3	16.2	0.0	0.1	21.1	NA	2.4	16.6	NA
SVMP-29-3.5	0.6	20.5	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-29-7.5	0.9	20.8	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-30-4	0.4	20.9	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-31-5.5	1.2	19.7	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-32-3	1.6	19.5	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-32-6	1.3	19.7	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-33-4	5.7	16.9	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-34-4	0.9	20.3	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-35-4	1.1	21.4	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-36-4	1.4	19.5	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SVMP-37-2.5	7.2	15.8	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

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Table 6
Soil Vapor Monitoring Point Purged Air Parameter Readings
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Notes:

Air parameter readings collected directly after each round of sample collection using a GEM 2000.
SVMP-11 abandoned after the initial sampling event per the adjacent property owners request.
SVMP-29 through SVMP-37 are located on residential properties and therefore only sampled during the initial sampling event.
SVMP-17 and SVMP-20 were not sampled during the November 2017 sampling event due to saturated screens.
SVMP-13 through SVMP-17, SVMP-20, and SVMP-21 were not sampled during the February 2018 sampling event due to saturated screens.
SVMP-10, SVMP-13 through SVMP-16, SVMP-19, SVMP-22, and SVMP-23 were not sampled during the May 2018 sampling event due to saturated screens.
SVMP-20 not sampled during the May 2018 sampling event due to a blockage in the tubing.

Abbreviations:

%	Percent
CH_4	Methane
CO_2	Carbon dioxide
NA	Not analyzed
NS	Not sampled
O_2	Oxygen
SVMP	Soil Vapor Monitoring Point

This document is a DRAFT document that has not received approval from the Michigan Department of Environmental Quality (MDEQ). This document was prepared pursuant to a court Consent Decree. The opinions, findings, and conclusions expressed are those of the authors and not those of the MDEQ.

Table 7
Off-Site Soil Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	Residential RIASL	SVMP-01										SVMP-02				
Sample Depth (ft. bgs):		3.5					7					4.5				
Sample Date:		6/8/2017	9/20/2017	11/17/2017	2/19/2018	5/29/2018	6/8/2017	9/20/2017	11/17/2017	2/19/2018	5/29/2018	6/9/2017	9/20/2017	11/17/2017	2/19/2018	5/29/2018
VOCs (Method TO-15) µg/m^3																
1,1-Dichloroethene	7,000	NA	< 5.0	< 4.2	< 4.6	< 4.8	NA	< 4.8	< 4.8	< 4.5	< 5.1	NA	< 5.2	< 4.5	< 8.3	< 4.9
1,4-Dioxane	170	NA	< 18	< 15	< 16	< 18	NA	< 17	< 17	< 16	< 18	NA	< 19	< 16	< 30	< 18
cis-1,2-Dichloroethene	280	NA	< 5.0	< 4.2	< 4.6	< 4.8	NA	< 4.8	< 4.8	< 4.5	< 5.1	NA	< 5.2	< 4.5	< 8.3	< 4.9
Tetrachloroethene	1,400	NA	< 8.5	< 7.1	< 7.8	< 8.3	NA	< 8.2	< 8.2	< 7.6	< 8.7	NA	< 9.0	< 7.8	< 14	< 8.4
trans-1,2-Dichloroethene	9,000	NA	< 5.0	< 4.2	< 4.6	< 4.8	NA	< 4.8	< 4.8	< 4.5	< 5.1	NA	< 5.2	< 4.5	< 8.3	< 4.9
Trichloroethene	67	< 6.2	< 6.8	< 5.6	< 6.2	< 6.6	< 6.2	< 6.5	< 6.5	< 6.0	< 6.9	< 6.0	< 7.1	< 6.2	< 11	< 6.7
Vinyl chloride	54	< 3.0	< 3.2	< 2.7	< 2.9	< 3.1	< 3.0	< 3.1	< 3.1	< 2.9	< 3.3	< 2.8	< 3.4	< 2.9	< 5.3	< 3.2

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Table 7
Off-Site Soil Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	Residential RIASL	SVMP-02					SVMP-03									
Sample Depth (ft. bgs):		8.5					3.5					7				
Sample Date:		6/9/2017	9/20/2017	11/17/2017	2/19/2018	5/29/2018	6/12/2017	9/21/2017	11/17/2017	2/19/2018	5/29/2018	6/12/2017	9/21/2017	11/17/2017	2/19/2018	5/29/2018
VOCs (Method TO-15) µg/m^3																
1,1-Dichloroethene	7,000	NA	< 5.2	< 4.6	< 8.3	< 5.1	NA	< 4.9	< 4.0	< 4.3	< 5.5	NA	< 4.7	< 4.3	< 4.6	< 5.0
1,4-Dioxane	170	NA	< 19	< 17	< 30	< 18	NA	< 18	< 15	< 16	< 20	NA	< 17	< 16	< 17	< 18
cis-1,2-Dichloroethene	280	NA	< 5.2	< 4.6	< 8.3	< 5.1	NA	< 4.9	< 4.0	< 4.3	< 5.5	NA	< 4.7	< 4.3	< 4.6	< 5.0
Tetrachloroethene	1,400	NA	< 9.0	< 7.9	< 14	< 8.7	NA	< 8.3	< 6.9	< 7.3	< 9.4	NA	< 8.1	< 7.4	< 7.9	< 8.5
trans-1,2-Dichloroethene	9,000	NA	< 5.2	< 4.6	< 8.3	< 5.1	NA	< 4.9	< 4.0	< 4.3	< 5.5	NA	< 4.7	< 4.3	< 4.6	< 5.0
Trichloroethene	67	< 6.1	< 7.1	< 6.3	< 11	< 6.9	< 6.3	< 6.6	< 5.5	< 5.8	< 7.4	< 6.8	< 6.4	< 5.8	< 6.3	< 6.7
Vinyl chloride	54	< 2.9	< 3.4	< 3.0	< 5.3	< 3.3	< 3.0	< 3.1	< 2.6	< 2.8	< 3.5	< 3.2	< 3.0	< 2.8	< 3.0	< 3.2

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Table 7
Off-Site Soil Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	Residential RIASL	SVMP-04					SVMP-05					SVMP-06				
Sample Depth (ft. bgs):		3.5					4.5					4.5				
Sample Date:		6/12/2017	9/20/2017	11/20/2017	2/21/2018	5/30/2018	6/12/2017	9/20/2017	11/20/2017	2/21/2018	5/30/2018	6/13/2017	9/20/2017	11/20/2017	2/21/2018	5/30/2018
VOCs (Method TO-15) µg/m^3																
1,1-Dichloroethene	7,000	NA	< 4.9	< 4.9	< 4.7	< 4.8	NA	< 4.8	< 4.6	< 4.2	< 4.7	NA	< 4.6	< 4.5	< 4.6	< 4.7
1,4-Dioxane	170	NA	< 18	< 18	< 17	< 17	NA	< 17	< 16	< 15	< 17	NA	< 17	< 16	< 17	< 17
cis-1,2-Dichloroethene	280	NA	< 4.9	< 4.9	< 4.7	< 4.8	NA	< 4.8	< 4.6	< 4.2	< 4.7	NA	**8.0**	< 4.5	< 4.6	< 4.7
Tetrachloroethene	1,400	NA	**8.3 J**	< 8.4	< 8.1	< 8.2	NA	< 8.2	< 7.8	< 7.2	< 8.0	NA	**24**	< 7.7	< 7.8	< 8.1
trans-1,2-Dichloroethene	9,000	NA	< 4.9	< 4.9	< 4.7	< 4.8	NA	< 4.8	< 4.6	< 4.2	< 4.7	NA	< 4.6	< 4.5	< 4.6	< 4.7
Trichloroethene	67	< 6.0	< 6.6	< 6.7	< 6.4	< 6.5	< 6.7	< 6.5	< 6.2	< 5.7	< 6.3	< 6.0	< 6.3	< 6.1	< 6.2	< 6.4
Vinyl chloride	54	< 2.9	< 3.2	< 3.2	< 3.0	< 3.1	< 3.2	< 3.1	< 2.9	< 2.7	< 3.0	< 2.9	< 3.0	< 2.9	< 3.0	< 3.0

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Table 7
Off-Site Soil Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	Residential RIASL	SVMP-07					SVMP-08					SVMP-09				
Sample Depth (ft. bgs):		3.5					3.5					4				
Sample Date:		6/13/2017	9/20/2017	11/20/2017	2/19/2018	5/30/2018	6/15/2017	9/20/2017	11/20/2017	2/20/2018	5/29/2018	6/14/2017	9/20/2017	11/20/2017	2/20/2018	5/30/2018
VOCs (Method TO-15) µg/m^3																
1,1-Dichloroethene	7,000	NA	< 4.8	< 4.7	< 4.5	< 4.9	NA	< 4.7	< 4.6	< 4.6	< 5.0	NA	< 4.9	< 4.5	< 4.8	< 4.5
1,4-Dioxane	170	NA	< 17	< 17	< 16	< 18	NA	< 17	< 17	< 17	< 18	NA	< 18	< 16	< 17	< 16
cis-1,2-Dichloroethene	280	NA	< 4.8	< 4.7	< 4.5	< 4.9	NA	< 4.7	< 4.6	< 4.6	< 5.0	NA	< 4.9	< 4.5	< 4.8	< 4.5
Tetrachloroethene	1,400	NA	< 8.2	< 8.1	< 7.7	< 8.4	NA	< 8.1	< 7.9	< 7.9	< 8.6	NA	< 8.4	< 7.7	< 8.2	< 7.7
trans-1,2-Dichloroethene	9,000	NA	< 4.8	< 4.7	< 4.5	< 4.9	NA	< 4.7	< 4.6	< 4.6	< 5.0	NA	< 4.9	< 4.5	< 4.8	< 4.5
Trichloroethene	67	< 6.3	< 6.5	< 6.4	< 6.1	< 6.7	< 6.5	< 6.4	< 6.2	< 6.3	**11**	**6.9**	< 6.6	< 6.1	< 6.5	< 6.1
Vinyl chloride	54	< 3.0	< 3.1	< 3.0	< 2.9	< 3.2	< 3.1	< 3.0	< 3.0	< 3.0	< 3.2	< 3.0	< 3.2	< 2.9	< 3.1	< 2.9

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Table 7
Off-Site Soil Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	Residential RIASL	SVMP-10					SVMP-11	SVMP-12					SVMP-13				
Sample Depth (ft. bgs):		3					3.5	3.5					2				
Sample Date:		6/13/2017	9/20/2017	11/21/2017	2/20/2018	5/31/2018	6/13/2017	6/13/2017	9/19/2017	11/21/2017	2/20/2018	5/29/2018	6/16/2017	9/19/2017	11/21/2017	2/19/2018	5/31/2018
VOCs (Method TO-15) µg/m^3																	
1,1-Dichloroethene	7,000	NA	< 4.8	< 4.4	< 4.7	NA	NA	NA	< 4.8	< 4.7	< 4.7	< 4.8	NA	< 4.6	< 4.6	NA	NA
1,4-Dioxane	170	NA	< 17	< 16	< 17	NA	NA	NA	< 17	< 17	< 17	< 18	NA	< 17	< 16	NA	NA
cis-1,2-Dichloroethene	280	NA	< 4.8	< 4.4	< 4.7	NA	NA	NA	< 4.8	< 4.7	< 4.7	< 4.8	NA	< 4.6	< 4.6	NA	NA
Tetrachloroethene	1,400	NA	< 8.2	< 7.5	< 8.1	NA	NA	NA	< 8.2	< 8.0	< 8.1	< 8.2	NA	< 7.9	< 7.8	NA	NA
trans-1,2-Dichloroethene	9,000	NA	< 4.8	< 4.4	< 4.7	NA	NA	NA	< 4.8	< 4.7	< 4.7	< 4.8	NA	< 4.6	< 4.6	NA	NA
Trichloroethene	67	< 6.7	< 6.5	< 5.9	< 6.4	NA	< 6.3	< 6.4	< 6.5	< 6.3	< 6.4	< 6.5	< 6.6	< 6.3	< 6.2	NA	NA
Vinyl chloride	54	< 3.2	< 3.1	< 2.8	< 3.0	NA	< 3.0	< 3.0	< 3.1	< 3.0	< 3.0	< 3.1	< 3.2	< 3.0	< 2.9	NA	NA

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Off-Site Soil Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	Residential RIASL	SVMP-14					SVMP-15					SVMP-16				
Sample Depth (ft. bgs):		2					2					2				
Sample Date:		6/16/2017	9/19/2017	11/21/2017	2/19/2018	5/31/2018	6/16/2017	9/19/2017	11/20/2017	2/19/2018	5/31/2018	6/16/2017	9/19/2017	11/20/2017	2/19/2018	5/31/2018
VOCs (Method TO-15) µg/m^3																
1,1-Dichloroethene	7,000	NA	< 4.5	< 4.1	NA	NA	NA	< 4.7	< 4.4	NA	NA	NA	< 4.5	< 4.3	NA	NA
1,4-Dioxane	170	NA	< 16	< 15	NA	NA	NA	< 17	< 16	NA	NA	NA	< 16	< 16	NA	NA
cis-1,2-Dichloroethene	280	NA	< 4.5	< 4.1	NA	NA	NA	< 4.7	< 4.4	NA	NA	NA	< 4.5	< 4.3	NA	NA
Tetrachloroethene	1,400	NA	< 7.8	< 7.0	NA	NA	NA	< 8.1	< 7.6	NA	NA	NA	< 7.8	< 7.4	NA	NA
trans-1,2-Dichloroethene	9,000	NA	< 4.5	< 4.1	NA	NA	NA	< 4.7	< 4.4	NA	NA	NA	< 4.5	< 4.3	NA	NA
Trichloroethene	67	< 6.4	< 6.2	< 5.6	NA	NA	< 6.3	< 6.4	< 6.0	NA	NA	< 6.4	< 6.2	< 5.9	NA	NA
Vinyl chloride	54	< 3.0	< 2.9	< 2.6	NA	NA	< 3.0	< 3.0	< 2.9	NA	NA	< 3.0	< 2.9	< 2.8	NA	NA

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Ford Livonia Transmission Plant
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Location:	Residential RIASL	SVMP-17					SVMP-18					SVMP-19				
Sample Depth (ft. bgs):		2					3					3				
Sample Date:		6/16/2017	9/19/2017	11/20/2017	2/19/2018	5/30/2018	6/16/2017	9/18/2017	11/17/2017	2/20/2018	5/30/2018	6/16/2017	9/18/2017	11/17/2017	2/20/2018	5/31/2018
VOCs (Method TO-15) µg/m^3																
1,1-Dichloroethene	7,000	NA	< 4.8	NA	NA	< 4.8	NA	< 4.6	< 4.3	< 4.5	< 4.7	NA	< 5.1	< 4.3	< 4.1	NA
1,4-Dioxane	170	NA	< 17	NA	NA	< 17	NA	< 17	< 16	< 16	< 17	NA	< 18	< 16	< 15	NA
cis-1,2-Dichloroethene	280	NA	< 4.8	NA	NA	< 4.8	NA	< 4.6	< 4.3	< 4.5	< 4.7	NA	< 5.1	< 4.3	< 4.1	NA
Tetrachloroethene	1,400	NA	< 8.2	NA	NA	< 8.1	NA	< 7.9	< 7.3	< 7.8	< 8.1	NA	< 8.8	< 7.4	< 7.1	NA
trans-1,2-Dichloroethene	9,000	NA	< 4.8	NA	NA	< 4.8	NA	< 4.6	< 4.3	< 4.5	< 4.7	NA	< 5.1	< 4.3	< 4.1	NA
Trichloroethene	67	**18**	**22**	NA	NA	< 6.4	< 6.6	< 6.3	< 5.8	< 6.2	< 6.4	< 6.4	< 6.9	< 5.9	< 5.6	NA
Vinyl chloride	54	< 3.0	< 3.1	NA	NA	< 3.1	< 3.2	< 3.0	< 2.8	< 2.9	< 3.0	< 3.0	< 3.3	< 2.8	< 2.7	NA

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Location:	Residential RIASL	SVMP-20					SVMP-21					SVMP-22				
Sample Depth (ft. bgs):		3					2					3				
Sample Date:		6/19/2017	9/19/2017	11/20/2017	2/19/2018	5/31/2018	6/19/2017	9/19/2017	11/20/2017	2/19/2018	5/30/2018	6/19/2017	9/18/2017	11/17/2017	2/20/2018	5/31/2018
VOCs (Method TO-15) µg/m^3																
1,1-Dichloroethene	7,000	NA	< 4.8	NA	NA	NA	NA	< 4.6	< 4.6	NA	< 4.8	NA	< 4.8	< 4.9	< 4.7	NA
1,4-Dioxane	170	NA	< 17	NA	NA	NA	NA	< 17	< 17	NA	< 18	NA	< 17	< 18	< 17	NA
cis-1,2-Dichloroethene	280	NA	< 4.8	NA	NA	NA	NA	< 4.6	< 4.6	NA	< 4.8	NA	< 4.8	< 4.9	< 4.7	NA
Tetrachloroethene	1,400	NA	< 8.2	NA	NA	NA	NA	< 7.9	< 7.9	NA	< 8.3	NA	< 8.2	< 8.4	< 8.1	NA
trans-1,2-Dichloroethene	9,000	NA	< 4.8	NA	NA	NA	NA	< 4.6	< 4.6	NA	< 4.8	NA	< 4.8	< 4.9	< 4.7	NA
Trichloroethene	67	< 5.8	< 6.5	NA	NA	NA	< 6.2	< 6.3	< 6.2	NA	< 6.6	< 6.4	< 6.5	< 6.7	< 6.4	NA
Vinyl chloride	54	< 2.7	< 3.1	NA	NA	NA	< 3.0	< 3.0	< 3.0	NA	< 3.1	< 3.1	< 3.1	< 3.2	< 3.0	NA

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Off-Site Soil Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	Residential RIASL	SVMP-23					SVMP-24					SVMP-25				
Sample Depth (ft. bgs):		3					4					3				
Sample Date:		6/19/2017	9/18/2017	11/17/2017	2/20/2018	5/31/2018	6/19/2017	9/18/2017	11/17/2017	2/21/2018	5/30/2018	6/19/2017	9/21/2017	11/21/2017	2/21/2018	5/29/2018
VOCs (Method TO-15) µg/m^3																
1,1-Dichloroethene	7,000	NA	< 4.6	< 4.3	< 4.2	NA	NA	< 4.6	< 4.4	< 4.7	< 4.6	NA	< 4.7	< 4.5	< 4.4	< 5.0
1,4-Dioxane	170	NA	< 17	< 16	< 15	NA	NA	< 17	< 16	< 17	< 17	NA	< 17	< 16	< 16	< 18
cis-1,2-Dichloroethene	280	NA	< 4.6	< 4.3	< 4.2	NA	NA	< 4.6	< 4.4	< 4.7	< 4.6	NA	< 4.7	< 4.5	< 4.4	< 5.0
Tetrachloroethene	1,400	NA	< 7.9	< 7.4	< 7.2	NA	NA	< 7.9	< 7.5	< 8.1	< 7.9	NA	< 8.1	< 7.7	< 7.6	< 8.5
trans-1,2-Dichloroethene	9,000	NA	< 4.6	< 4.3	< 4.2	NA	NA	< 4.6	< 4.4	< 4.7	< 4.6	NA	< 4.7	< 4.5	< 4.4	< 5.0
Trichloroethene	67	< 6.4	< 6.3	< 5.8	< 5.7	NA	< 6.2	< 6.3	< 5.9	< 6.4	< 6.3	< 6.2	< 6.4	< 6.1	< 6.0	< 6.7
Vinyl chloride	54	< 3.1	< 3.0	< 2.8	< 2.7	NA	< 3.0	< 3.0	< 2.8	< 3.0	< 3.0	< 3.0	< 3.0	< 2.9	< 2.9	< 3.2

See Notes on Last Page.

Table 7
Off-Site Soil Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	Residential RIASL	SVMP-25					SVMP-26					SVMP-27				
Sample Depth (ft. bgs):		6					4					4.5				
Sample Date:		6/19/2017	9/21/2017	11/21/2017	2/21/2018	5/29/2018	6/19/2017	9/21/2017	11/21/2017	2/21/2018	5/29/2018	6/19/2017	9/21/2017	11/21/2017	2/21/2018	5/29/2018
VOCs (Method TO-15) µg/m^3																
1,1-Dichloroethene	7,000	NA	< 4.4	< 4.7	< 4.4	< 5.1	NA	< 4.9	< 4.4	< 4.4	< 4.9	NA	< 4.4	< 4.4	< 4.4	< 4.9
1,4-Dioxane	170	NA	< 16	< 17	< 16	< 19	NA	< 18	< 16	< 16	< 18	NA	< 16	< 16	< 16	< 18
cis-1,2-Dichloroethene	280	NA	< 4.4	< 4.7	< 4.4	< 5.1	NA	< 4.9	< 4.4	< 4.4	< 4.9	NA	**11**	< 4.4	< 4.4	< 4.9
Tetrachloroethene	1,400	NA	**12**	< 8.1	< 7.6	< 8.8	NA	< 8.4	< 7.6	< 7.5	< 8.4	NA	< 7.6	< 7.5	< 7.6	< 8.4
trans-1,2-Dichloroethene	9,000	NA	< 4.4	< 4.7	< 4.4	< 5.1	NA	< 4.9	< 4.4	< 4.4	< 4.9	NA	< 4.4	< 4.4	< 4.4	< 4.9
Trichloroethene	67	< 6.4	< 6.0	< 6.4	< 6.0	< 7.0	< 6.2	< 6.6	< 6.0	< 5.9	< 6.7	< 6.2	**7.2**	< 5.9	< 6.0	< 6.7
Vinyl chloride	54	< 3.0	< 2.9	< 3.0	< 2.9	< 3.3	< 3.0	< 3.2	< 2.9	< 2.8	< 3.2	< 3.0	< 2.9	< 2.8	< 2.9	< 3.2

See Notes on Last Page.

Table 7
Off-Site Soil Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	Residential RIASL	SVMP-28					SVMP-29		SVMP-30	SVMP-31	SVMP-32		SVMP-33	SVMP-34	SVMP-35	SVMP-36	SVMP-37
Sample Depth (ft. bgs):		3					3.5	7.5	4	5.5	3	6	4	4	4	4	2.5
Sample Date:		6/19/2017	9/21/2017	11/21/2017	2/21/2018	5/29/2018	6/14/2017	6/14/2017	6/14/2017	6/14/2017	6/15/2017	6/15/2017	6/15/2017	6/15/2017	6/15/2017	6/16/2017	6/16/2017
VOCs (Method TO-15) µg/m^3																	
1,1-Dichloroethene	7,000	NA	< 4.8	< 4.6	< 4.3	< 5.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dioxane	170	NA	< 17	< 17	< 16	< 19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	280	NA	< 4.8	< 4.6	< 4.3	< 5.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	1,400	NA	**25**	< 7.9	< 7.3	< 8.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,2-Dichloroethene	9,000	NA	< 4.8	< 4.6	< 4.3	< 5.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	67	< 6.1	< 6.5	< 6.3	< 5.8	< 7.1	< 6.3	< 6.0	**31**	< 6.1	< 6.4	< 6.5	< 6.5	< 6.3	< 6.9	< 6.2	< 6.2
Vinyl chloride	54	< 2.9	< 3.1	< 3.0	< 2.8	< 3.4	< 3.0	< 2.8	< 2.9	< 2.9	< 3.0	< 3.1	< 3.1	< 3.0	< 3.3	< 2.9	< 3.0

See Notes on Last Page.

Table 7
Off-Site Soil Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Notes:

The residential RIASLs apply to a residential structure with a basement.

SVMP-11 abandoned after the initial sampling event per the adjacent property owners request.

SVMP-29 through SVMP-37 are located on residential properties and therefore only sampled during the initial sampling event.

SVMP-17 and SVMP-20 were not sampled during the November 2017 sampling event due to saturated screens.

SVMP-13 through SVMP-17, SVMP-20, and SVMP-21 were not sampled during the February 2018 sampling event due to saturated screens.

SVMP-10, SVMP-13 through SVMP-16, SVMP-19, SVMP-22, and SVMP-23 were not sampled during the May 2018 sampling event due to saturated screens.

SVMP-20 was not sampled during the May 2018 sampling event due to a blockage in the tubing.

Bold Concentration was detected above reporting limit.

Abbreviations:

<	denotes not detected above reporting limit
µg/m^3	Micrograms per cubic meter
ft. bgs	Feet below ground surface
J	Reported value is estimated
NA	Not analyzed
RIASL	Recommended Interim Action Screening Levels
SVMP	Soil vapor monitoring point
VOC	Volatile organic compounds

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Table 8
Hydraulic Control System Monthly Discharge Volumes
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Date	Approximate Volume of Treated Water Discharged ¥ (Gallons)	Date	Approximate Volume of Treated Water Discharged ¥ (Gallons)	Date	Approximate Volume of Treated Water Discharged ¥ (Gallons)
4/1/2018	38,607	5/1/2018	45,265	6/1/2018[Ω]	44,769
4/2/2018[Ω]	38,646	5/2/2018[CΩ]	12,324	6/2/2018	45,734
4/3/2018[Ω]	39,336	5/3/2018[C]	3	6/3/2018	45,465
4/4/2018[*]	38,913	5/4/2018[C]	0	6/4/2018	45,179
4/5/2018	38,659	5/5/2018	45,082	6/5/2018[M]	33,057
4/6/2018[Ω]	38,835	5/6/2018	43,077	6/6/2018	45,912
4/7/2018	38,540	5/7/2018	37,348	6/7/2018[Ω]	44,881
4/8/2018[Ω]	17,505	5/8/2018	48,374	6/8/2018[Ω*]	44,444
4/9/2018[Ω]	30,685	5/9/2018[Ω]	55,340	6/9/2018	45,011
4/10/2018	32,300	5/10/2018[Ω]	51,490	6/10/2018[S]	33,850
4/11/2018	17,161	5/11/2018[*]	48,351	6/11/2018[Ω]	26,946
4/12/2018[Ω]	30,264	5/12/2018	41,628	6/12/2018	45,786
4/13/2018	36,730	5/13/2018	34,535	6/13/2018	44,608
4/14/2018[S]	30,898	5/14/2018	23,689	6/14/2018	43,642
4/15/2018[Ω]	16,415	5/15/2018	38,300	6/15/2018[ΩS]	33,687
4/16/2018[ΩM]	24,406	5/16/2018	54,871	6/16/2018[S]	24,164
4/17/2018	42,947	5/17/2018	51,370	6/17/2018	45,169
4/18/2018	45,572	5/18/2018[Ω]	51,157	6/18/2018	44,505
4/19/2018[Ω]	44,232	5/19/2018	52,620	6/19/2018	43,956
4/20/2018	34,542	5/20/2018	49,915	6/20/2018	43,509
4/21/2018	43,990	5/21/2018	48,020	6/21/2018	43,180
4/22/2018	42,476	5/22/2018[Ω]	48,095	6/22/2018[ΩA]	43,090
4/23/2018	43,478	5/23/2018	48,896	6/23/2018[A]	42,365
4/24/2018	44,327	5/24/2018	48,453	6/24/2018[A]	42,526
4/25/2018	43,374	5/25/2018[Ω]	48,121	6/25/2018	41,880
4/26/2018[Ω]	38,341	5/26/2018	47,893	6/26/2018	39,892
4/27/2018	50,173	5/27/2018	47,610	6/27/2018	38,185
4/28/2018	48,722	5/28/2018	47,358	6/28/2018	37,228
4/29/2018	45,213	5/29/2018	46,910	6/29/2018[Ω]	36,578
4/30/2018	42,279	5/30/2018	45,739	6/30/2018	36,633
--	--	5/31/2018	44,410	--	--
Total volume discharged during April 2018	**1,117,566**	**Total volume discharged during May 2018**	**1,306,244**	**Total volume discharged during June 2018**	**1,225,831**

Notes:
Treated groundwater discharge volume readings are recorded daily.

Footnotes:

* Monthly treated groundwater discharge compliance sample collected as required by the Wastewater Discharge Permit Addendum #1 (Permit No.: 006-27510-IU).

¥ Volume of treated groundwater discharged from the Groundwater Remediation System is based on a totalizer flow meter installed on the effluent discharge pipe inside the system building.

Ω Groundwater remediation treatment system inspection visit.

A Daily discharge amounts recorded from daily Master Trend file instead of Daily System Screenshot .

S System shut down (Less than 1 day).

C System deactivated to collect carbon sample from each carbon vessel (less than 1 day).

M System deactivated to perform maintenance of the air stripper (less than 1 day).

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Table 9
Hydraulic Control System Air Stripper Effluent Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Date:	Air Stripper Effluent 4/19/2018	Air Stripper Effluent 5/16/2018	Air Stripper Effluent 6/8/2018
Method TO-15 (Full Scan)			
1,1,1-Trichloroethane	< 5.4	< 24	< 5.7
1,1,2,2-Tetrachloroethane	< 6.8	< 31	< 7.2
1,1,2-Trichloroethane	< 5.4	< 24	< 5.7
1,1-Dichloroethane	< 4.0	21	< 4.2
1,1-Dichloroethene	< 3.9	< 18	< 4.1
1,2,4-Trichlorobenzene	< 29	< 130	< 31
1,2,4-Trimethylbenzene	< 4.8	< 22	< 5.1
1,2-Dibromoethane (EDB)	< 7.6	< 34	< 8.0
1,2-Dichlorobenzene	< 5.9	< 27	< 6.3
1,2-Dichloroethane	< 4.0	< 18	< 4.2
1,2-Dichloropropane	< 4.6	< 21	< 4.8
1,3,5-Trimethylbenzene	< 4.8	< 22	< 5.1
1,3-Butadiene	< 2.2	< 9.9	< 2.3
1,3-Dichlorobenzene	< 5.9	< 27	< 6.3
1,4-Dichlorobenzene	< 5.9	< 27	< 6.3
1,4-Dioxane	< 14	< 65	< 15
2,2,4-Trimethylpentane	< 4.6	< 21	< 4.9
2-Butanone (Methyl Ethyl Ketone)	< 12	< 53	< 12
2-Hexanone	< 16	< 74	< 17
2-Propanol	< 9.7	< 44	< 10
3-Chloropropene	< 12	< 56	< 13
4-Ethyltoluene	< 4.8	< 22	< 5.1
4-Methyl-2-pentanone	< 4.0	< 18	< 4.3
Acetone	< 23	< 110	< 25
alpha-Chlorotoluene	< 5.1	< 23	< 5.4
Benzene	< 3.1	< 14	< 3.3
Bromodichloromethane	< 6.6	< 30	< 7.0
Bromoform	< 10	< 46	< 11
Bromomethane	< 38	< 170	< 40
Carbon Disulfide	< 12	< 56	< 13
Carbon Tetrachloride	< 6.2	< 28	< 6.6
Chlorobenzene	< 4.5	< 21	< 4.8
Chloroethane	< 10	< 47	< 11
Chloroform	< 4.8	< 22	< 5.1
Chloromethane	< 20	< 93	< 22
cis-1,2-Dichloroethene	82	710	20
cis-1,3-Dichloropropene	< 4.5	< 20	< 4.7
Cumene	< 4.8	< 22	< 5.1
Cyclohexane	< 3.4	< 15	< 3.6
Dibromochloromethane	< 8.4	< 38	< 8.9
Ethanol	< 7.4	< 34	< 7.9
Ethyl Benzene	< 4.3	< 20	< 4.5
Freon 11	< 5.5	< 25	< 5.9
Freon 113	< 7.5	< 34	< 8.0
Freon 114	< 6.9	< 31	< 7.3
Freon 12	< 4.9	< 22	< 5.2
Heptane	< 4.0	< 18	< 4.3
Hexachlorobutadiene	< 42	< 190	< 44
Hexane	< 3.5	< 16	< 3.7
m,p-Xylene	< 4.3	< 20	< 4.5
Methyl tert-butyl ether	< 14	< 65	< 15
Methylene Chloride	< 34	< 160	< 36
o-Xylene	< 4.3	< 20	< 4.5
Propylbenzene	< 4.8	< 22	< 5.1
Styrene	< 4.2	< 19	< 4.4
Tetrachloroethene	< 6.7	< 30	< 7.1
Tetrahydrofuran	4.1	14	7.4
Toluene	< 3.7	< 17	< 3.9
trans-1,2-Dichloroethene	< 3.9	27	< 4.1
trans-1,3-Dichloropropene	< 4.5	< 20	< 4.7
Trichloroethene	13	170	< 5.6
Vinyl Chloride	460	2,100	150

Notes:
United States Environmental Protection Agency Method, Toxic Organics - 15 (TO-15)
Compounds exempt under Rule 290
All units are measured in micrograms per cubic meter ($\mu g/m^3$).
< denotes not detected above reporting limit.

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FIGURES

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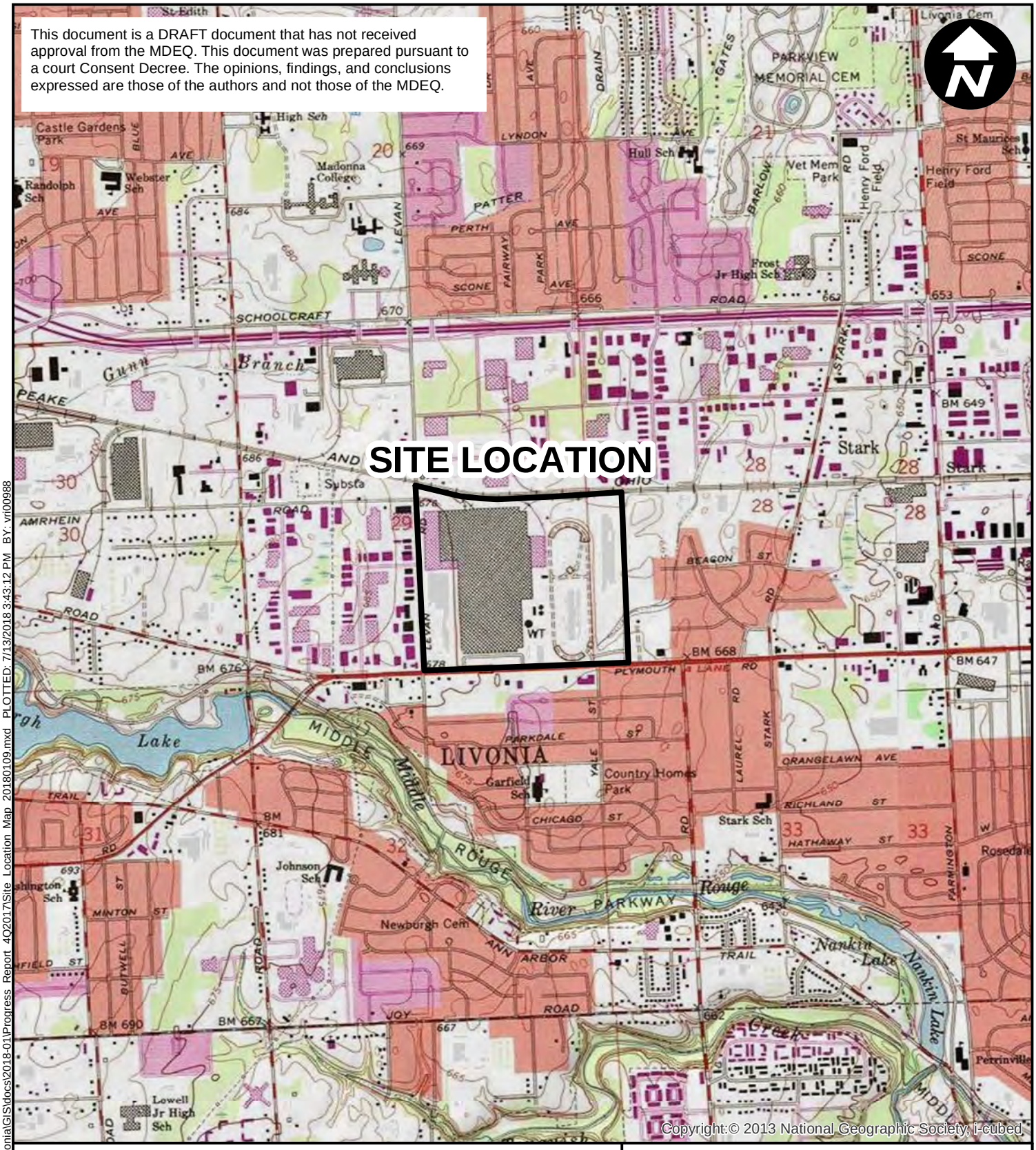

0 2,000 4,000

SCALE IN FEET

NOTES:

MDEQ = MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

SOURCE:

USGS 7.5 MINUTE TOPOGRAPHIC MAP
NORTHVILLE AND WAYNE QUADRANGLES

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

SITE LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE
1

CITY: Novi DIV: ENV DB: MG PROJECT NUMBER: MI001322.0001 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
Z:\GISProjects\ENV\NoviBrighton_MI\Ford\LivoniaGIS\docs\2018-01\Progress_Report_4Q2017\Site_Location_Map_20180109.mxd PLOTTED: 7/13/2018 3:43:12 PM BY: vri00988

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ON-SITE AREA

OFF-SITE AREA

LIVONIA TRANSMISSION PLANT

TEST TRACK

ATNPC BUILDING

ROSATI AVE

CONCORD ST

CAPITOL ST

BEACON ST

WADSWORTH ST

BOSTON POST ST

BREWSTER ST

STARK RD

BELDEN CT

PRISCILLA LN

STANDISH ST

LEVAN RD

PLYMOUTH RD

ELMIRA ST

WAYNE RD

LAUREL ST

MW-15-59D, MW-27, MW-56, MW-55, MW-54, MW-26, SVMP-15-01, MW-28, MW-53, MW-57, VAULT V-ESD-1, MW-58, SVMP-25, MW-72, MW-85, SVMP-22, SVMP-23, SVMP-24, SVMP-36, MW-83, TW-16-03, TW-16-04, PW-16-02, MW-52, SVMP-15-03, MW-62, MW-29, MW-50, MW-43, MW-73S, SVMP-26, SVMP-19, SVMP-18, SVMP-20, MW-80S, MW-82D, SVMP-11, SVMP-16-01, MW-79D, MW-79S, MW-82S, SVMP-12, SVMP-34, SVMP-21, VAULT V-ESD-2, MW-63, MW-73D, SVMP-15-04, MW-35, MW-65, MW-64, MW-74, SVMP-32, SVMP-33, MW-78, SVMP-16, SVMP-37, SVMP-17, MW-81, MW-51, SVMP-27, SVMP-08, MW-84, SVMP-10, SVMP-13, SVMP-14, SVMP-09, SVMP-15, MW-66, MW-48, MW-42, MW-15-61D, MW-67, VAULT V-ESD-3, MW-34, MW-44, SVMP-15-05, MW-68, MW-75D, MW-75S, MW-86, SVMP-05, SVMP-04, SVMP-07, SVMP-06, SVMP-35, SVMP-31, MW-3, MW-19, SVMP-15-02, MW-47, MW-41, SVMP-28, SVMP-30, MW-77, SVMP-16-02, SVMP-29, VAULT V-ESD-4, MW-22, MW-46, SVMP-16-09, SVMP-16-08, MW-69, MW-30, MW-70, SVMP-15-06, MW-87, SVMP-03, SVMP-01, SVMP-02, MW-5, MW-21, MW-49, SVMP-16-07, SVMP-16-03, SVMP-16-04, MW-31, MW-2, MW-4, MW-10, MW-25, SVMP-15-08, PW-16-01, TW-16-02, TW-16-01, MW-45, MW-71, SVMP-16-06, SVMP-16-05, MW-23, MW-40, SVMP-15-07, MW-76, VAULT V-ESD-5, MW-9, MW-15-60D, MW-1, MW-7, MW-14, MW-18, MW-20, MW-37, MW-38, MW-39, MW-32, MW-33, MW-36, MW-24

0 400 800

SCALE IN FEET

LEGEND

- ABANDONED SOIL VAPOR MONITORING POINT
- SOIL VAPOR MONITORING POINT
- MONITORING WELL
- VAULT (2 FT x 2 FT)
- VAULT (4 FT x 6 FT)
- WELL SCREEN (4-INCH SDR-11 HDPE, CUSTOM SLOTTED)
- WELL BLANK CASING (4-INCH SDR-11 HDPE)
- WELL BLANK CASING (6-INCH SDR-11 HDPE)
- FORD PROPERTY BOUNDARY
- COMMERCIAL/RESIDENTIAL PROPERTY BOUNDARY
- AREA OF CONCERN

NOTES:

ATNPC - AUTOMATIC TRANSMISSION NEW PRODUCT CENTER

MDEQ = MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

HDPE = HIGH-DENSITY POLYETHYLENE

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

SITE LAYOUT

ARCADIS Design & Consultancy for natural and built assets

FIGURE
2

CITY: Novi DIV: ENV DB: MG PIC: R. ELLIS PM: K. HINSKEY PROJECT NUMBER: MI001322.0001 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
Z:\GISProjects_ENV\NoviBrighton_MIFord\Livonia\GIS\docs\2018-01\Progress_Report_4Q2017\Site Layout On-site and Off-site_20180109.mxd PLOTTED: 7/13/2018 3:44:17 PM BY: vri00988

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CITY: NOVI DIV: ENV DB: MG PIC: R. ELLIS PM: K. HINSKEY TM: A. DEGRANDIS TR: P. CURRY PROJECT NUMBER: MI001454.0004.00001 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
Z:\GISProjects_ENV\NoviBrighton_MI\FordLivonia\GIS\Docs\GEC2018-06\Progress Report_Quarter 2\Figure 3_Site Wide GWE Contour.mxd PLOTTED: 7/13/2018 3:46:28 PM BY: vri00988

LEGEND

- MONITORING WELL
- LNAPL MONITORING WELL
- VAULT (2 FT x 2 FT)
- VAULT (4 FT x 6 FT)
- WELL SCREEN (4-INCH SDR-11 HDPE, CUSTOM SLOTTED)
- WELL BLANK CASING (4-INCH SDR-11 HDPE)
- WELL BLANK CASING (6-INCH SDR-11 HDPE)
- (661.98) GROUNDWATER ELEVATION
- 652 GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED; CONTOUR INTERVAL = 1.0 FT)
- APPARENT GROUNDWATER FLOW DIRECTION
- PROPERTY BOUNDARIES
- FORD PROPERTY BOUNDARY

NOTES:
1. ALL ELEVATIONS COLLECTED ON MAY 7, 2018 AND MEASURED FROM TOP OF WELL CASING.

2. ALL ELEVATIONS ARE REFERENCED TO A MEAN SEA LEVEL DATUM AND ARE IN UNITS OF FEET ABOVE SEA LEVEL.

3. WHERE NESTED WELLS ARE PRESENT, THE DEEP WELL IS USED FOR CONTOURING PURPOSES.

4. *WELL NOT USED TO CREATE CONTOURS. DEPTH TO WATER MEASUREMENTS FOR MW-18, MW-20, AND MW-68 WERE NOT COLLECTED ON MAY 7, 2018 AND WERE THEREFORE NOT USED TO CREATE CONTOURS.

5. LNAPL = LIGHT NON-AQUEOUS PHASE LIQUID

6. NM = NOT MEASURED, CNL = COULD NOT LOCATE

7. GROUNDWATER ELEVATION AT HYDRAULIC CONTROL SYSTEM HORIZONTAL WELLS ARE DETERMINED BY ESTIMATING AN APPARENT AMBIENT GROUNDWATER ELEVATION AND SUBTRACTING THE PUMPING WATER LEVEL.

8. HYDRAULIC CONTROL SYSTEM PERFORMANCE MONITORING WELLS RE-SURVEYED IN OCTOBER 2017. MONITORING WELLS RE-SURVEYED IN NOVEMBER 2017. MW-5 AND MW-21 WERE UNABLE TO BE RE-SURVEYED DURING THE NOVEMBER 2017 EVENT DUE TO ACCESS.

9. MONITORING WELLS WITH LNAPL PRESENT IN THEM HAVE HAD THEIR GROUNDWATER ELEVATIONS CORRECTED TO ACCOUNT FOR THE LNAPL.

10. MDEQ = MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

11. HDPE = HIGH-DENSITY POLYETHYLENE

0 400 800
SCALE IN FEET

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

SITE-WIDE GROUNDWATER ELEVATION CONTOUR MAP UNDER PUMPING CONDITIONS MAY 2018

ARCADIS Design & Consultancy for natural and built assets

FIGURE 3

This document is a DRAFT document that has not received approval from the MDEQ. This document was prepared pursuant to a court Consent Decree. The opinions, findings, and conclusions expressed are those of the authors and not those of the MDEQ.

MW-15-59D (94-99 FT)
8/1/2017: ND (< 1.0 µg/L)
11/15/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/15/2018: ND (< 1.0 µg/L)

MW-26 (4.5-14.5 FT)
8/4/2017: ND (< 1.0 µg/L)
11/14/2017: ND (< 1.0 µg/L)
5/15/2018: ND (< 1.0 µg/L)

MW-27

MW-28 (2-12 FT)
8/3/2017: 1.1 µg/L
11/8/2017: 0.91 J µg/L
2/7/2018: 0.50 J µg/L
5/15/2018: 0.43 J µg/L

MW-56 (16-21 FT)
7/28/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-55 (15-20 FT)
7/27/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/7/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-54 (16-21 FT)
7/27/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/7/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-53 (16-21 FT)
7/27/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/7/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

LMW-15-07

TW-16-03 (9-19 FT)
8/3/2017: 37 µg/L
11/8/2017: 36 µg/L
2/14/2018: 40 µg/L
5/11/2018: 39 µg/L

MW-58 (15-20 FT)
7/28/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/7/2018: ND (< 1.0 µg/L)
5/14/2018: ND (< 1.0 µg/L)

VAULT V-ESD-1

MW-57 (17-22 FT)
7/27/2017: ND (< 1.0 µg/L)
11/7/2017: ND (< 1.0 µg/L)
2/9/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-52 (15-20 FT)
7/27/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

LMW-15-06

LMW-15-08

LMW-15-10

TW-16-04 (9-19 FT)
8/3/2017: 18 µg/L
11/8/2017: 23 µg/L
2/14/2018: 25 µg/L
5/11/2018: 20 µg/L

MW-50 (16-21 FT)
7/31/2017: 15 µg/L
11/13/2017: 23 µg/L
2/12/2018: 22 µg/L
5/9/2018: 12 µg/L

ESD-1

MW-62 (16.3-21.3 FT)
7/31/2017: ND (< 1.0 µg/L)
11/13/2017: 0.30 J µg/L
2/6/2018: 0.30 J µg/L
5/9/2018: 0.83 J µg/L

MW-43 (17-22 FT)
7/27/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-29 (5-15 FT)
8/4/2017: ND (< 1.0 µg/L)
11/14/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/14/2018: ND (< 1.0 µg/L)

PW-16-02 (6-21 FT)
8/3/2017: 63 µg/L
11/8/2017: 2.3 µg/L
2/14/2018: 12 µg/L
5/11/2018: ND (< 1.0 µg/L)

MW-63 (7-12 FT)
7/31/2017: ND (< 100 µg/L)
11/13/2017: ND (< 10 µg/L)
2/7/2018: 1.7 µg/L
5/9/2018: 2.5 µg/L

VAULT V-ESD-2

MW-35 (19.5-24.5 FT)
7/27/2017: ND (< 1.0 µg/L)
11/7/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

LMW-15-09

MW-65 (16-21 FT)
8/2/2017: 4.1 µg/L
11/8/2017: 3.9 µg/L
2/6/2018: 4.1 µg/L
5/10/2018: 6.0 µg/L

MW-64 (15-20 FT)
7/27/2017: 0.37 J µg/L
11/7/2017: 0.31 J µg/L
2/9/2018: 0.30 J µg/L
5/10/2018: ND (< 1.0 µg/L)

MW-51 (15-20 FT)
8/3/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/8/2018: 0.31 J µg/L
5/14/2018: ND (< 1.0 µg/L)

MW-42 (16-21 FT)
7/27/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-48 (17-22 FT)
8/1/2017: ND (< 1.0 µg/L)
11/14/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/15/2018: ND (< 1.0 µg/L)

MW-44 (16-21 FT)
8/2/2017: ND (< 10 µg/L)
11/7/2017: ND (< 20 µg/L)
2/6/2018: ND (< 6.7 µg/L)
5/14/2018: ND (< 13 µg/L)

MW-66 (15-20 FT)
8/2/2017: ND (< 1.0 µg/L)
11/13/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

ESD-2

MW-15-61D (88-93 FT)
8/1/2017: ND (< 1.0 µg/L)
11/15/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/15/2018: ND (< 1.0 µg/L)

LMW-15-02

VAULT V-ESD-3

MW-67 (9-14 FT)
7/31/2017: 36 µg/L
11/14/2017: 15 µg/L
2/12/2018: 9.6 µg/L
5/14/2018: 5.7 µg/L

MW-3 (14-19 FT)
8/3/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-19 (15-20 FT)
11/14/2017: 1.1 µg/L
2/14/2018: 0.94 J µg/L
5/14/2018: 0.71 J µg/L

MW-22 (16.5-21.5 FT)
8/2/2017: 210 µg/L
11/7/2017: 25 J µg/L
2/6/2018: 200 µg/L
5/10/2018: 180 µg/L

MW-47 (16-21 FT)
7/31/2017: 69 µg/L
11/10/2017: 79 µg/L
5/10/2018: 49 J µg/L

MW-34 (16.5-21.5 FT)
7/27/2017: 0.37 J µg/L
11/9/2017: 0.35 J µg/L
2/13/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

LMW-15-05

LMW-15-03

MW-46 (16-21 FT)
7/31/2017: 15 µg/L
11/13/2017: 22 µg/L
2/12/2018: 14 µg/L
5/14/2018: 6.0 µg/L

MW-68 (15-20 FT)
8/1/2017: 18 µg/L
11/10/2017: 13 µg/L
2/12/2018: 13 µg/L
5/15/2018: 10 µg/L

MW-41 (16-21 FT)
7/27/2017: 1.8 µg/L
11/9/2017: 2.3 µg/L
2/13/2018: 2.1 µg/L
5/8/2018: 2.6 µg/L

ESD-3

MW-21 (13.5-18.5 FT)
2/13/2018: 20,000 µg/L
5/15/2018: 18,000 µg/L

VAULT V-ESD-4

MW-30 (19-24 FT)
7/27/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-5 (15.5-20.5 FT)
8/3/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/10/2018: 0.58 J µg/L

MW-49 (12.5-17.5 FT)
7/28/2017: 29,000 J µg/L
2/13/2018: 20,000 µg/L
5/11/2018: 17,000 µg/L

PW-16-01 (9.7-19.7 FT)
8/2/2017: 2.2 µg/L
11/7/2017: 550 µg/L
2/7/2018: 82 µg/L
5/15/2018: 7.1 J µg/L

MW-45 (15-20 FT)
8/1/2017: 8,100 µg/L
11/13/2017: 2,100 µg/L
2/12/2018: 1,800 µg/L
5/8/2018: 1,200 µg/L

MW-69 (15-20 FT)
11/10/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

LEVAN RD

LMW-15-04

MW-2 (15.5-20.5 FT)
8/3/2017: 1,200 µg/L
11/9/2017: 1,000 µg/L
2/13/2018: 1,400 µg/L
5/10/2018: 1,700 J µg/L

MW-4 (15.5-20.5 FT)
8/3/2017: 27,000 µg/L
11/9/2017: 21,000 µg/L
2/13/2018: 26,000 µg/L
5/10/2018: 21,000 J µg/L

MW-10 (16.5-21.5 FT)
8/4/2017: ND (< 67 µg/L)
11/9/2017: ND (< 100 µg/L)
2/13/2018: ND (< 200 µg/L)
5/10/2018: ND (< 100 µg/L)

MW-18 (13-18 FT)
7/28/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-23 (15-20 FT)
8/3/2017: 21,000 µg/L
11/7/2017: 78,000 µg/L
2/6/2018: 33,000 µg/L
5/7/2018: 2,400 µg/L

MW-70 (15-20 FT)
8/1/2017: 200 µg/L
11/13/2017: 200 µg/L
2/12/2018: 230 µg/L
5/14/2018: 260 µg/L

ESD-4

MW-31 (17-22 FT)
7/28/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-25 (16-21 FT)
8/2/2017: ND (< 1.0 µg/L)
11/14/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-7 (18-23 FT)
7/31/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-9 (19.5-24.5 FT)
7/28/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

LMW-15-01

MW-14 (15-20 FT)
7/28/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-20 (13.5-18.5 FT)
7/31/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

TW-16-02 (12-17 FT)
8/2/2017: 3,100 µg/L
11/7/2017: 6,000 µg/L
2/14/2018: 3,500 µg/L
5/11/2018: 4,400 µg/L

TW-16-01 (12-17 FT)
8/2/2017: 17 µg/L
11/7/2017: 32 µg/L
2/7/2018: 34 µg/L
5/15/2018: 68 µg/L

MW-71 (15-20 FT)
8/1/2017: ND (< 1.0 µg/L)
11/13/2017: 0.39 J µg/L
2/12/2018: 0.37 J µg/L
5/8/2018: 0.40 J µg/L

MW-40 (20-25 FT)
7/28/2017: 2.7 µg/L
11/15/2017: 3.2 µg/L
5/8/2018: 2.3 J µg/L

MW-1 (14-19 FT)
7/28/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-15-60D (93-98 FT)
8/1/2017: ND (< 1.0 µg/L)
11/15/2017: ND (< 1.0 J µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

VAULT V-ESD-5

MW-32 (18-23 FT)
7/28/2017: ND (< 1.0 µg/L)
11/7/2017: 0.31 J µg/L
2/12/2018: 0.37 J µg/L
5/8/2018: 0.50 J µg/L

MW-36 (20-25 FT)
7/28/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/15/2018: ND (< 1.0 µg/L)
5/14/2018: ND (< 1.0 µg/L)

MW-24 (19-24 FT)
8/2/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/14/2018: ND (< 1.0 µg/L)

MW-37 (18-23 FT)
8/1/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-38 (15-20 FT)
7/28/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/15/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-33 (14-19 FT)
7/28/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-39 (20-25 FT)
7/28/2017: ND (< 1.0 µg/L)
11/7/2017: ND (< 1.0 µg/L)
2/15/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

WESTERN DIVERSION CHAMBER

PLYMOUTH RD

EASTERN DIVERSION CHAMBER

LEGEND

- ON-SITE MONITORING WELL CIS-1,2-DICHLOROETHENE ≤ 70 µg/L
- ON-SITE MONITORING WELL CIS-1,2-DICHLOROETHENE > 70 µg/L
- BLUE/BOLD TEXT: EXCEEDANCE OF NONRESIDENTIAL DRINKING WATER CRITERIA FROM PAST AND PRESENT SAMPLING EVENTS
- WELL NOT SAMPLED
- VAULT (2 FT x 2 FT)
- VAULT (4 FT x 6 FT)
- WELL SCREEN (4-INCH SDR-11 HDPE, CUSTOM SLOTTED)
- WELL BLANK CASING (4-INCH SDR-11 HDPE)
- WELL BLANK CASING (6-INCH SDR-11 HDPE)
- FORD PROPERTY BOUNDARY

NOTES:
FIGURE ONLY SHOWS THE FOUR MOST RECENT QUARTERS OF DATA (JULY 2017, NOVEMBER 2017, FEBRUARY 2018, AND MAY 2018). FULL SET OF DATA CAN BE FOUND IN THE CORRESPONDING TABLES.

µg/L - MICROGRAMS PER LITER (PARTS PER BILLION)

≤ - LESS THAN OR EQUAL TO

> - GREATER THAN

THE NONRESIDENTIAL DRINKING WATER CRITERIA FOR CIS-1,2-DICHLOROETHENE IS 70 µg/L.

THE GROUNDWATER-SURFACE WATER INTERFACE CRITERIA FOR CIS-1,2-DICHLOROETHENE IS 620 µg/L.

FT = FEET BELOW GROUND SURFACE

"ND", "<" INDICATES VALUE IS BELOW THE LABORATORY REPORTING LIMIT OF 1.0 µg/L FOR CIS-1,2-DICHLOROETHENE

J = ESTIMATED RESULT

MW = MONITORING WELL

LMW = LIGHT NON-AQUEOUS PHASE LIQUID MONITORING WELL

MDEQ = MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

HDPE = HIGH-DENSITY POLYETHYLENE

BLUE BOX INDICATES EXCEEDANCE OF NONRESIDENTIAL DRINKING WATER CRITERIA ASSOCIATED WITH THE MOST RECENT SAMPLING EVENT POSSIBLE

0 300 600
SCALE IN FEET

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

ON-SITE MONITORING WELLS CIS-1,2-DICHLOROETHENE IN GROUNDWATER

ARCADIS Design & Consultancy for natural and built assets

FIGURE 4

CITY: Novi DIV: ENV DB: MG PROJECT NUMBER: MI001454.0004.00001 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
Z:\GIS\Projects_ENV\Novi\Brighton_MI\Ford\Livonia\GIS\docs\GEC\2018-06\Progress Report_Quarter 2\Figure 4_On-Site GWA cis.mxd PLOTTED: 7/13/2018 3:48:03 PM BY: vri00988

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MW-15-59D (94-99 FT)
8/1/2017: ND (< 1.0 µg/L)
11/15/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/15/2018: ND (< 1.0 µg/L)

MW-26 (4.5-14.5 FT)
8/4/2017: ND (< 1.0 µg/L)
11/14/2017: ND (< 1.0 µg/L)
5/15/2018: ND (< 1.0 µg/L)

MW-27

MW-28 (2-12 FT)
8/3/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/7/2018: ND (< 1.0 µg/L)
5/15/2018: ND (< 1.0 µg/L)

MW-56 (16-21 FT)
7/28/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-55 (15-20 FT)
7/27/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/7/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-54 (16-21 FT)
7/27/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/7/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-57 (17-22 FT)
7/27/2017: ND (< 1.0 µg/L)
11/7/2017: ND (< 1.0 µg/L)
2/9/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-53 (16-21 FT)
7/27/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/7/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

LMW-15-07

MW-58 (15-20 FT)
7/28/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/7/2018: ND (< 1.0 µg/L)
5/14/2018: ND (< 1.0 µg/L)

VAULT V-ESD-1

TW-16-04 (9-19 FT)
8/3/2017: ND (< 4.0 µg/L)
11/8/2017: ND (< 6.7 µg/L)
2/14/2018: ND (< 6.7 µg/L)
5/11/2018: ND (< 2.5 µg/L)

TW-16-03 (9-19 FT)
8/3/2017: ND (< 4.0 µg/L)
11/8/2017: ND (< 3.3 µg/L)
2/14/2018: ND (< 10 µg/L)
5/11/2018: ND (< 2.5 µg/L)

MW-52 (15-20 FT)
7/27/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-43 (17-22 FT)
7/27/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

LMW-15-06

LMW-15-08

LMW-15-10

MW-62 (16.3-21.3 FT)
7/31/2017: ND (< 1.0 µg/L)
11/13/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

ESD-1

PW-16-02 (6-21 FT)
8/3/2017: ND (< 5.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-50 (16-21 FT)
7/31/2017: ND (< 4.0 µg/L)
11/13/2017: ND (< 5.0 µg/L)
2/12/2018: ND (< 5.0 µg/L)
5/9/2018: ND (< 5.0 µg/L)

MW-35 (19.5-24.5 FT)
7/27/2017: ND (< 1.0 µg/L)
11/7/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-29 (5-15 FT)
8/4/2017: ND (< 1.0 µg/L)
11/14/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/14/2018: ND (< 1.0 µg/L)

MW-63 (7-12 FT)
7/31/2017: ND (< 100 µg/L)
11/13/2017: ND (< 10 µg/L)
2/7/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

VAULT V-ESD-2

LMW-15-09

MW-64 (15-20 FT)
7/27/2017: ND (< 1.0 µg/L)
11/7/2017: ND (< 1.0 µg/L)
2/9/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-51 (15-20 FT)
8/3/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/8/2018: ND (< 1.0 µg/L)
5/14/2018: ND (< 1.0 µg/L)

MW-65 (16-21 FT)
8/2/2017: ND (< 4.0 µg/L)
11/8/2017: ND (< 2.0 µg/L)
2/6/2018: ND (< 2.0 µg/L)
5/10/2018: ND (< 2.0 µg/L)

MW-42 (16-21 FT)
7/27/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

ESD-2

MW-66 (15-20 FT)
8/2/2017: ND (< 1.0 µg/L)
11/13/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-48 (17-22 FT)
8/1/2017: ND (< 1.0 µg/L)
11/14/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/15/2018: ND (< 1.0 µg/L)

MW-15-61D (88-93 FT)
8/1/2017: ND (< 1.0 µg/L)
11/15/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/15/2018: ND (< 1.0 µg/L)

LMW-15-02

VAULT V-ESD-3

MW-68 (15-20 FT)
8/1/2017: 1.9 µg/L
11/10/2017: 1.5 µg/L
2/12/2018: 1.8 µg/L
5/15/2018: 1.4 µg/L

MW-19 (15-20 FT)
11/14/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/14/2018: ND (< 1.0 µg/L)

MW-44 (16-21 FT)
8/2/2017: ND (< 10 µg/L)
11/7/2017: ND (< 20 µg/L)
2/6/2018: ND (< 6.7 µg/L)
5/14/2018: ND (< 13 µg/L)

MW-67 (9-14 FT)
7/31/2017: 2.4 J µg/L
11/14/2017: 1.7 J µg/L
2/12/2018: 1.1 J µg/L
5/14/2018: 0.75 J µg/L

ESD-3

MW-34 (16.5-21.5 FT)
7/27/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-3 (14-19 FT)
8/3/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

LMW-15-05

LMW-15-03

MW-47 (16-21 FT)
7/31/2017: 8.6 µg/L
11/10/2017: 9.3 J µg/L
5/10/2018: 6.5 J µg/L

MW-22 (16.5-21.5 FT)
8/2/2017: ND (< 100 µg/L)
11/7/2017: ND (< 50 µg/L)
2/6/2018: ND (< 140 µg/L)
5/10/2018: ND (< 67 µg/L)

MW-46 (16-21 FT)
7/31/2017: 2.6 µg/L
11/13/2017: 2.7 µg/L
2/12/2018: 1.7 µg/L
5/14/2018: 0.86 J µg/L

MW-41 (16-21 FT)
7/27/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-5 (15.5-20.5 FT)
8/3/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

LEVAN RD

MW-21 (13.5-18.5 FT)
2/13/2018: ND (< 1,000 µg/L)
5/15/2018: ND (< 1,000 µg/L)

VAULT V-ESD-4

PW-16-01 (9.7-19.7 FT)
8/2/2017: ND (< 1.0 µg/L)
11/7/2017: ND (< 200 µg/L)
2/7/2018: 5.4 J µg/L
5/15/2018: ND (< 14 µg/L)

MW-30 (19-24 FT)
7/27/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-4 (15.5-20.5 FT)
8/3/2017: 1,100 µg/L
11/9/2017: 850 J µg/L
2/13/2018: 1,100 J µg/L
5/10/2018: 860 J µg/L

LMW-15-04

MW-10 (16.5-21.5 FT)
8/4/2017: ND (< 67 µg/L)
11/9/2017: ND (< 100 µg/L)
2/13/2018: ND (< 200 µg/L)
5/10/2018: ND (< 100 µg/L)

TW-16-02 (12-17 FT)
8/2/2017: ND (< 500 µg/L)
11/7/2017: ND (< 400 µg/L)
2/14/2018: ND (< 1,000 µg/L)
5/11/2018: ND (< 500 µg/L)

MW-70 (15-20 FT)
8/1/2017: 4.2 J µg/L
11/13/2017: 5.1 J µg/L
2/12/2018: 4.4 J µg/L
5/14/2018: 3.0 J µg/L

MW-31 (17-22 FT)
7/28/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-2 (15.5-20.5 FT)
8/3/2017: 270 µg/L
11/9/2017: 260 µg/L
2/13/2018: 390 µg/L
5/10/2018: 510 µg/L

MW-49 (12.5-17.5 FT)
7/28/2017: ND (< 1,000 µg/L)
2/13/2018: ND (< 1,700 µg/L)
5/11/2018: ND (< 1,700 µg/L)

TW-16-01 (12-17 FT)
8/2/2017: ND (< 10 µg/L)
11/7/2017: ND (< 13 µg/L)
2/7/2018: ND (< 33 µg/L)
5/15/2018: 11 J µg/L

MW-69 (15-20 FT)
11/10/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

ESD-4

MW-25 (16-21 FT)
8/2/2017: ND (< 1.0 µg/L)
11/14/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-1 (14-19 FT)
7/28/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-7 (18-23 FT)
7/31/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-9 (19.5-24.5 FT)
7/28/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

LMW-15-01

MW-20 (13.5-18.5 FT)
7/31/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-23 (15-20 FT)
8/3/2017: 1,200 µg/L
11/7/2017: 4,100 µg/L
2/6/2018: 1,800 µg/L
5/7/2018: 180 µg/L

MW-71 (15-20 FT)
8/1/2017: ND (< 1.0 µg/L)
11/13/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-40 (20-25 FT)
7/28/2017: 0.41 J µg/L
11/15/2017: 0.48 J µg/L
5/8/2018: 0.34 J µg/L

MW-15-60D (93-98 FT)
8/1/2017: ND (< 1.0 µg/L)
11/15/2017: ND (< 1.0 J µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-45 (15-20 FT)
8/1/2017: ND (< 500 µg/L)
11/13/2017: ND (< 67 µg/L)
2/12/2018: ND (< 100 µg/L)
5/8/2018: ND (< 67 µg/L)

EASTERN DIVERSION CHAMBER

VAULT V-ESD-5

MW-32 (18-23 FT)
7/28/2017: ND (< 1.0 µg/L)
11/7/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-36 (20-25 FT)
7/28/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/15/2018: ND (< 1.0 µg/L)
5/14/2018: ND (< 1.0 µg/L)

MW-24 (19-24 FT)
8/2/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/14/2018: ND (< 1.0 µg/L)

MW-14 (15-20 FT)
7/28/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-18 (13-18 FT)
7/28/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-37 (18-23 FT)
8/1/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-38 (15-20 FT)
7/28/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/15/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-33 (14-19 FT)
7/28/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-39 (20-25 FT)
7/28/2017: ND (< 1.0 µg/L)
11/7/2017: ND (< 1.0 µg/L)
2/15/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

WESTERN DIVERSION CHAMBER

LEGEND

- ON-SITE MONITORING WELL TRANS-1,2-DICHLOROETHENE ≤ 100 µg/L
- ON-SITE MONITORING WELL TRANS-1,2-DICHLOROETHENE > 100 µg/L
- BLUE/BOLD TEXT: EXCEEDANCE OF NONRESIDENTIAL DRINKING WATER CRITERIA FROM PAST AND PRESENT SAMPLING EVENTS
- WELL NOT SAMPLED
- VAULT (2 FT x 2 FT)
- VAULT (4 FT x 6 FT)
- WELL SCREEN (4-INCH SDR-11 HDPE, CUSTOM SLOTTED)
- WELL BLANK CASING (4-INCH SDR-11 HDPE)
- WELL BLANK CASING (6-INCH SDR-11 HDPE)
- FORD PROPERTY BOUNDARY

NOTES:
FIGURE ONLY SHOWS THE FOUR MOST RECENT QUARTERS OF DATA (JULY 2017, NOVEMBER 2017, FEBRUARY 2018, AND MAY 2018). FULL SET OF DATA CAN BE FOUND IN THE CORRESPONDING TABLES.

µg/L - MICROGRAMS PER LITER (PARTS PER BILLION)

≤ - LESS THAN OR EQUAL TO

> - GREATER THAN

THE NONRESIDENTIAL DRINKING WATER CRITERIA FOR TRANS-1,2-DICHLOROETHENE IS 100 µg/L.

THE GROUNDWATER-SURFACE WATER INTERFACE CRITERIA FOR TRANS-1,2-DICHLOROETHENE IS 1,500 µg/L.

FT = FEET BELOW GROUND SURFACE

"ND", "<" INDICATES VALUE IS BELOW THE LABORATORY REPORTING LIMIT OF 1.0 µg/L FOR TRANS-1,2-DICHLOROETHENE

J = ESTIMATED RESULT

MW = MONITORING WELL

LMW = LIGHT NON-AQUEOUS PHASE LIQUID MONITORING WELL

MDEQ = MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

HDPE = HIGH-DENSITY POLYETHYLENE

BLUE BOX INDICATES EXCEEDANCE OF NONRESIDENTIAL DRINKING WATER CRITERIA ASSOCIATED WITH THE MOST RECENT SAMPLING EVENT POSSIBLE

0 300 600
SCALE IN FEET

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

ON-SITE MONITORING WELLS TRANS-1,2-DICHLOROETHENE IN GROUNDWATER

ARCADIS Design & Consultancy for natural and built assets

FIGURE 5

CITY: Novi DIV: ENV DB: MG PROJECT NUMBER: MI001454.0004.00001 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
Z:\GISProjects_ENV\NoviBrighton_MI\FordLivonia\GIS\docs\GEC\2018-06\Progress Report_Quarter 2\Figure 5_On-Site GWA trans.mxd PLOTTED: 7/13/2018 4:12:19 PM BY: vri00988

This document is a DRAFT document that has not received approval from the MDEQ. This document was prepared pursuant to a court Consent Decree. The opinions, findings, and conclusions expressed are those of the authors and not those of the MDEQ.

MW-15-59D (94-99 FT)
8/1/2017: ND (< 1.0 µg/L)
11/15/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/15/2018: ND (< 1.0 µg/L)

MW-26 (4.5-14.5 FT)
8/4/2017: ND (< 1.0 µg/L)
11/14/2017: ND (< 1.0 µg/L)
5/15/2018: ND (< 1.0 µg/L)

MW-27

MW-28 (2-12 FT)
8/3/2017: 0.68 J µg/L
11/8/2017: 0.59 J µg/L
2/7/2018: 0.45 J µg/L
5/15/2018: 0.51 J µg/L

MW-56 (16-21 FT)
7/28/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-55 (15-20 FT)
7/27/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/7/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-54 (16-21 FT)
7/27/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/7/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-53 (16-21 FT)
7/27/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/7/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-58 (15-20 FT)
7/28/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/7/2018: ND (< 1.0 µg/L)
5/14/2018: ND (< 1.0 µg/L)

VAULT V-ESD-1

MW-57 (17-22 FT)
7/27/2017: ND (< 1.0 µg/L)
11/7/2017: ND (< 1.0 µg/L)
2/9/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

TW-16-04 (9-19 FT)
8/3/2017: ND (< 4.0 µg/L)
11/8/2017: ND (< 6.7 µg/L)
2/14/2018: ND (< 6.7 µg/L)
5/11/2018: ND (< 2.5 µg/L)

TW-16-03 (9-19 FT)
8/3/2017: ND (< 4.0 µg/L)
11/8/2017: ND (< 3.3 µg/L)
2/14/2018: ND (< 10 µg/L)
5/11/2018: ND (< 2.5 µg/L)

MW-62 (16.3-21.3 FT)
7/31/2017: ND (< 1.0 µg/L)
11/13/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-52 (15-20 FT)
7/27/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-50 (16-21 FT)
7/31/2017: ND (< 4.0 µg/L)
11/13/2017: ND (< 5.0 µg/L)
2/12/2018: ND (< 5.0 µg/L)
5/9/2018: ND (< 5.0 µg/L)

ESD-1

MW-43 (17-22 FT)
7/27/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-29 (5-15 FT)
8/4/2017: ND (< 1.0 µg/L)
11/14/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/14/2018: ND (< 1.0 µg/L)

PW-16-02 (6-21 FT)
8/3/2017: ND (< 5.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-63 (7-12 FT)
7/31/2017: ND (< 100 µg/L)
11/13/2017: ND (< 10 µg/L)
2/7/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

VAULT V-ESD-2

MW-35 (19.5-24.5 FT)
7/27/2017: ND (< 1.0 µg/L)
11/7/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-51 (15-20 FT)
8/3/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/8/2018: ND (< 1.0 µg/L)
5/14/2018: ND (< 1.0 µg/L)

MW-65 (16-21 FT)
8/2/2017: ND (< 4.0 µg/L)
11/8/2017: ND (< 2.0 µg/L)
2/6/2018: ND (< 2.0 µg/L)
5/10/2018: ND (< 2.0 µg/L)

MW-64 (15-20 FT)
7/27/2017: ND (< 1.0 µg/L)
11/7/2017: ND (< 1.0 µg/L)
2/9/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-42 (16-21 FT)
7/27/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-66 (15-20 FT)
8/2/2017: ND (< 1.0 µg/L)
11/13/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-48 (17-22 FT)
8/1/2017: ND (< 1.0 µg/L)
11/14/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/15/2018: ND (< 1.0 µg/L)

MW-44 (16-21 FT)
8/2/2017: ND (< 10 µg/L)
11/7/2017: ND (< 20 µg/L)
2/6/2018: ND (< 6.7 µg/L)
5/14/2018: ND (< 13 µg/L)

ESD-2

MW-67 (9-14 FT)
7/31/2017: 91 µg/L
11/14/2017: 110 µg/L
2/12/2018: 83 µg/L
5/14/2018: 57 µg/L

VAULT V-ESD-3

MW-34 (16.5-21.5 FT)
7/27/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-19 (15-20 FT)
11/14/2017: 1.1 µg/L
2/14/2018: 1.0 µg/L
5/14/2018: 0.91 J µg/L

MW-22 (16.5-21.5 FT)
8/2/2017: ND (< 100 µg/L)
11/7/2017: ND (< 50 µg/L)
2/6/2018: ND (< 140 µg/L)
5/10/2018: ND (< 67 µg/L)

MW-15-61D (88-93 FT)
8/1/2017: ND (< 1.0 µg/L)
11/15/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/15/2018: ND (< 1.0 µg/L)

MW-41 (16-21 FT)
7/27/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-47 (16-21 FT)
7/31/2017: ND (< 4.0 µg/L)
11/10/2017: ND (< 10 µg/L)
5/10/2018: ND (< 5.0 J µg/L)

MW-68 (15-20 FT)
8/1/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/15/2018: ND (< 1.0 µg/L)

MW-3 (14-19 FT)
8/3/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

LMW-15-05

LMW-15-03

ESD-3

MW-46 (16-21 FT)
7/31/2017: ND (< 1.0 µg/L)
11/13/2017: ND (< 2.5 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/14/2018: ND (< 1.7 µg/L)

VAULT V-ESD-4

MW-69 (15-20 FT)
11/10/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-5 (15.5-20.5 FT)
8/3/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-21 (13.5-18.5 FT)
2/13/2018: 460 J µg/L
5/15/2018: ND (< 1,000 µg/L)

TW-16-02 (12-17 FT)
8/2/2017: ND (< 500 µg/L)
11/7/2017: ND (< 400 µg/L)
2/14/2018: ND (< 1,000 µg/L)
5/11/2018: ND (< 500 µg/L)

MW-70 (15-20 FT)
8/1/2017: ND (< 10 µg/L)
11/13/2017: ND (< 10 µg/L)
2/12/2018: ND (< 13 µg/L)
5/14/2018: ND (< 3.3 µg/L)

PW-16-01 (9.7-19.7 FT)
8/2/2017: ND (< 1.0 µg/L)
11/7/2017: ND (< 200 µg/L)
2/7/2018: ND (< 14 µg/L)
5/15/2018: ND (< 14 µg/L)

MW-30 (19-24 FT)
7/27/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-4 (15.5-20.5 FT)
8/3/2017: 18,000 µg/L
11/9/2017: 19,000 µg/L
2/13/2018: 23,000 µg/L
5/10/2018: 23,000 J µg/L

MW-10 (16.5-21.5 FT)
8/4/2017: ND (< 67 µg/L)
11/9/2017: ND (< 100 µg/L)
2/13/2018: ND (< 200 µg/L)
5/10/2018: ND (< 100 µg/L)

MW-49 (12.5-17.5 FT)
7/28/2017: ND (< 1,000 µg/L)
2/13/2018: ND (< 1,700 µg/L)
5/11/2018: ND (< 1,700 µg/L)

TW-16-01 (12-17 FT)
8/2/2017: ND (< 10 µg/L)
11/7/2017: ND (< 13 µg/L)
2/7/2018: ND (< 33 µg/L)
5/15/2018: ND (< 33 µg/L)

MW-71 (15-20 FT)
8/1/2017: ND (< 1.0 µg/L)
11/13/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-31 (17-22 FT)
7/28/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-25 (16-21 FT)
8/2/2017: ND (< 1.0 µg/L)
11/14/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-2 (15.5-20.5 FT)
8/3/2017: ND (< 50 µg/L)
11/9/2017: ND (< 67 µg/L)
2/13/2018: ND (< 67 µg/L)
5/10/2018: ND (< 25 µg/L)

MW-9 (19.5-24.5 FT)
7/28/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-18 (13-18 FT)
7/28/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-20 (13.5-18.5 FT)
7/31/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-23 (15-20 FT)
8/3/2017: 5,300 µg/L
11/7/2017: 25,000 µg/L
2/6/2018: 11,000 µg/L
5/7/2018: 1,000 µg/L

MW-45 (15-20 FT)
8/1/2017: ND (< 500 µg/L)
11/13/2017: ND (< 67 µg/L)
2/12/2018: ND (< 100 µg/L)
5/8/2018: ND (< 67 µg/L)

MW-32 (18-23 FT)
7/28/2017: ND (< 1.0 µg/L)
11/7/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-1 (14-19 FT)
7/28/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-7 (18-23 FT)
7/31/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-15-60D (93-98 FT)
8/1/2017: ND (< 1.0 µg/L)
11/15/2017: ND (< 1.0 J µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-36 (20-25 FT)
7/28/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/15/2018: ND (< 1.0 µg/L)
5/14/2018: ND (< 1.0 µg/L)

MW-24 (19-24 FT)
8/2/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/14/2018: ND (< 1.0 µg/L)

MW-14 (15-20 FT)
7/28/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-37 (18-23 FT)
8/1/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-38 (15-20 FT)
7/28/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/15/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-33 (14-19 FT)
7/28/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-39 (20-25 FT)
7/28/2017: ND (< 1.0 µg/L)
11/7/2017: ND (< 1.0 µg/L)
2/15/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

LMW-15-07
LMW-15-06
LMW-15-08
LMW-15-10
LMW-15-09
LMW-15-02
LMW-15-04
LMW-15-01

VAULT V-ESD-5

EASTERN DIVERSION CHAMBER

WESTERN DIVERSION CHAMBER

LEVAN RD

PLYMOUTH RD

LEGEND

- ON-SITE MONITORING WELL TRICHLOROETHENE ≤ 5 µg/L
- ON-SITE MONITORING WELL TRICHLOROETHENE > 5 µg/L
- BLUE/BOLD TEXT — EXCEEDANCE OF NONRESIDENTIAL DRINKING WATER CRITERIA FROM PAST AND PRESENT SAMPLING EVENTS
- WELL NOT SAMPLED
- VAULT (2 FT x 2 FT)
- VAULT (4 FT x 6 FT)
- WELL SCREEN (4-INCH SDR-11 HDPE, CUSTOM SLOTTED)
- WELL BLANK CASING (4-INCH SDR-11 HDPE)
- WELL BLANK CASING (6-INCH SDR-11 HDPE)
- FORD PROPERTY BOUNDARY

NOTES:
FIGURE ONLY SHOWS THE FOUR MOST RECENT QUARTERS OF DATA (JULY 2017, NOVEMBER 2017, FEBRUARY 2018, AND MAY 2018). FULL SET OF DATA CAN BE FOUND IN THE CORRESPONDING TABLES.

µg/L - MICROGRAMS PER LITER (PARTS PER BILLION)

≤ - LESS THAN OR EQUAL TO

> - GREATER THAN

THE NONRESIDENTIAL DRINKING WATER CRITERIA FOR TRICHLOROETHENE IS 5.0 µg/L.

THE GROUNDWATER-SURFACE WATER INTERFACE CRITERIA FOR TRICHLOROETHENE IS 200 µg/L.

FT = FEET BELOW GROUND SURFACE

"ND", "<" INDICATES VALUE IS BELOW THE LABORATORY REPORTING LIMIT OF 1.0 µg/L FOR TRICHLOROETHENE

J = ESTIMATED RESULT

MW = MONITORING WELL

LMW = LIGHT NON-AQUEOUS PHASE LIQUID MONITORING WELL

MDEQ = MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

HDPE = HIGH-DENSITY POLYETHYLENE

BLUE BOX INDICATES EXCEEDANCE OF NONRESIDENTIAL DRINKING WATER CRITERIA ASSOCIATED WITH THE MOST RECENT SAMPLING EVENT POSSIBLE

0 300 600
SCALE IN FEET

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

ON-SITE MONITORING WELLS TRICHLOROETHENE IN GROUNDWATER

ARCADIS Design & Consultancy for natural and built assets

FIGURE 6

CITY: Novi DIV: ENV DB: MG PROJECT NUMBER: MI001454.0004.00001 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
Z:\GISProjects_ENV\NoviBrighton_MI\Ford\Livonia\GIS\docs\GEC\2018-06\Progress Report_Quarter 2\Figure 6_On-Site GWA TCE.mxd PLOTTED: 7/13/2018 3:51:17 PM BY: vri00988

This document is a DRAFT document that has not received approval from the MDEQ. This document was prepared pursuant to a court Consent Decree. The opinions, findings, and conclusions expressed are those of the authors and not those of the MDEQ.

MW-15-59D (94-99 FT)
8/1/2017: ND (< 1.0 µg/L)
11/15/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/15/2018: ND (< 1.0 µg/L)

MW-26 (4.5-14.5 FT)
8/4/2017: ND (< 1.0 µg/L)
11/14/2017: ND (< 1.0 µg/L)
5/15/2018: ND (< 1.0 µg/L)

MW-27

MW-28 (2-12 FT)
8/3/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/7/2018: ND (< 1.0 µg/L)
5/15/2018: ND (< 1.0 µg/L)

MW-56 (16-21 FT)
7/28/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-55 (15-20 FT)
7/27/2017: 0.84 J µg/L
11/8/2017: 0.65 J µg/L
2/7/2018: ND (< 1.0 µg/L)
5/10/2018: 0.48 J µg/L

MW-54 (16-21 FT)
7/27/2017: 0.88 J µg/L
11/8/2017: 1.5 µg/L
2/7/2018: 1.2 µg/L
5/9/2018: 0.98 J µg/L

MW-53 (16-21 FT)
7/27/2017: 0.63 J µg/L
11/8/2017: ND (< 1.0 µg/L)
2/7/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-58 (15-20 FT)
7/28/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/7/2018: ND (< 1.0 µg/L)
5/14/2018: ND (< 1.0 µg/L)

VAULT V-ESD-1

MW-57 (17-22 FT)
7/27/2017: ND (< 1.0 µg/L)
11/7/2017: ND (< 1.0 µg/L)
2/9/2018: 0.59 J µg/L
5/9/2018: 0.56 J µg/L

MW-52 (15-20 FT)
7/27/2017: 7.0 µg/L
11/10/2017: 9.1 µg/L
2/13/2018: 4.0 µg/L
5/9/2018: 4.3 µg/L

TW-16-03 (9-19 FT)
8/3/2017: 100 µg/L
11/8/2017: 77 µg/L
2/14/2018: 95 µg/L
5/11/2018: 78 µg/L

TW-16-04 (9-19 FT)
8/3/2017: 120 µg/L
11/8/2017: 100 µg/L
2/14/2018: 77 µg/L
5/11/2018: 65 µg/L

MW-50 (16-21 FT)
7/31/2017: 140 µg/L
11/13/2017: 150 µg/L
2/12/2018: 76 µg/L
5/9/2018: 150 µg/L

MW-62 (16.3-21.3 FT)
7/31/2017: ND (< 1.0 µg/L)
11/13/2017: 1.0 µg/L
2/6/2018: 1.3 µg/L
5/9/2018: 1.2 µg/L

MW-43 (17-22 FT)
7/27/2017: 3.0 µg/L
11/9/2017: 2.2 µg/L
2/13/2018: 8.0 µg/L
5/9/2018: 6.4 J µg/L

MW-29 (5-15 FT)
8/4/2017: ND (< 1.0 µg/L)
11/14/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/14/2018: ND (< 1.0 µg/L)

PW-16-02 (6-21 FT)
8/3/2017: 160 µg/L
11/8/2017: 2.0 µg/L
2/14/2018: 18 µg/L
5/11/2018: ND (< 1.0 µg/L)

MW-65 (16-21 FT)
8/2/2017: 49 µg/L
11/8/2017: 48 µg/L
2/6/2018: 36 µg/L
5/10/2018: 41 µg/L

VAULT V-ESD-2

MW-63 (7-12 FT)
7/31/2017: ND (< 100 µg/L)
11/13/2017: ND (< 10 µg/L)
2/7/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-35 (19.5-24.5 FT)
7/27/2017: 3.5 µg/L
11/7/2017: 2.4 µg/L
2/14/2018: 4.5 µg/L
5/9/2018: 7.2 µg/L

MW-66 (15-20 FT)
8/2/2017: 5.4 µg/L
11/13/2017: 3.0 µg/L
2/12/2018: 2.7 µg/L
5/10/2018: 2.4 µg/L

MW-64 (15-20 FT)
7/27/2017: 4.8 µg/L
11/7/2017: 7.0 µg/L
2/9/2018: 6.7 µg/L
5/10/2018: 1.3 µg/L

MW-42 (16-21 FT)
7/27/2017: 0.99 J µg/L
11/9/2017: 1.0 µg/L
2/13/2018: 0.81 J µg/L
5/9/2018: 0.99 J µg/L

MW-51 (15-20 FT)
8/3/2017: 0.97 J µg/L
11/9/2017: 0.47 J µg/L
2/8/2018: ND (< 1.0 µg/L)
5/14/2018: 0.70 J µg/L

MW-67 (9-14 FT)
7/31/2017: ND (< 4.0 µg/L)
11/14/2017: ND (< 5.0 µg/L)
2/12/2018: ND (< 3.3 µg/L)
5/14/2018: 1.3 µg/L

MW-48 (17-22 FT)
8/1/2017: 11 µg/L
11/14/2017: 5.2 µg/L
2/12/2018: 3.8 µg/L
5/15/2018: 7.4 µg/L

MW-15-61D (88-93 FT)
8/1/2017: ND (< 1.0 µg/L)
11/15/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/15/2018: ND (< 1.0 µg/L)

MW-44 (16-21 FT)
8/2/2017: 380 µg/L
11/7/2017: 520 µg/L
2/6/2018: 210 µg/L
5/14/2018: 270 µg/L

VAULT V-ESD-3

MW-68 (15-20 FT)
8/1/2017: 2.1 µg/L
11/10/2017: 18 µg/L
2/12/2018: 2.5 µg/L
5/15/2018: 2.1 µg/L

MW-34 (16.5-21.5 FT)
7/27/2017: 1.5 µg/L
11/9/2017: 2.0 µg/L
2/13/2018: 0.97 J µg/L
5/8/2018: 0.87 J µg/L

MW-3 (14-19 FT)
8/3/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-19 (15-20 FT)
11/14/2017: 1.8 µg/L
2/14/2018: 1.5 µg/L
5/14/2018: 1.3 µg/L

MW-47 (16-21 FT)
7/31/2017: 110 µg/L
11/10/2017: 220 µg/L
5/10/2018: 88 J µg/L

MW-22 (16.5-21.5 FT)
8/2/2017: 2,100 µg/L
11/7/2017: 1,600 µg/L
2/6/2018: 1,500 µg/L
5/10/2018: 2,400 µg/L

MW-46 (16-21 FT)
7/31/2017: 13 µg/L
11/13/2017: 57 µg/L
2/12/2018: 38 µg/L
5/14/2018: 30 µg/L

MW-69 (15-20 FT)
11/10/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/10/2018: 3.3 µg/L

MW-41 (16-21 FT)
7/27/2017: 1.9 µg/L
11/9/2017: 2.4 µg/L
2/13/2018: 2.1 µg/L
5/8/2018: 5.3 µg/L

VAULT V-ESD-4

MW-5 (15.5-20.5 FT)
8/3/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-21 (13.5-18.5 FT)
2/13/2018: 5,400 µg/L
5/15/2018: 3,700 µg/L

PW-16-01 (9.7-19.7 FT)
8/2/2017: 24 µg/L
11/7/2017: 5,300 µg/L
2/7/2018: 160 µg/L
5/15/2018: 37 J µg/L

MW-70 (15-20 FT)
8/1/2017: 100 µg/L
11/13/2017: 140 µg/L
2/12/2018: 160 µg/L
5/14/2018: 210 µg/L

MW-45 (15-20 FT)
8/1/2017: 5,400 µg/L
11/13/2017: 1,500 µg/L
2/12/2018: 1,200 µg/L
5/8/2018: 1,400 µg/L

MW-30 (19-24 FT)
7/27/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-25 (16-21 FT)
8/2/2017: ND (< 1.0 µg/L)
11/14/2017: ND (< 1.0 µg/L)
2/13/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-2 (15.5-20.5 FT)
8/3/2017: 160 µg/L
11/9/2017: 140 µg/L
2/13/2018: 210 µg/L
5/10/2018: 190 µg/L

MW-4 (15.5-20.5 FT)
8/3/2017: 640 J µg/L
11/9/2017: 470 J µg/L
2/13/2018: ND (< 1,700 µg/L)
5/10/2018: 610 J µg/L

MW-10 (16.5-21.5 FT)
8/4/2017: 2,100 µg/L
11/9/2017: 2,000 µg/L
2/13/2018: 1,900 µg/L
5/10/2018: 3,100 µg/L

MW-49 (12.5-17.5 FT)
7/28/2017: 9,800 µg/L
2/13/2018: 8,400 µg/L
5/11/2018: 8,100 µg/L

TW-16-02 (12-17 FT)
8/2/2017: 12,000 µg/L
11/7/2017: 13,000 µg/L
2/14/2018: 9,100 µg/L
5/11/2018: 8,500 µg/L

MW-71 (15-20 FT)
8/1/2017: 0.68 J µg/L
11/13/2017: 0.83 J µg/L
2/12/2018: 0.59 J µg/L
5/8/2018: 0.59 J µg/L

MW-31 (17-22 FT)
7/28/2017: 0.68 J µg/L
11/10/2017: 0.84 J µg/L
2/14/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-15-60D (93-98 FT)
8/1/2017: ND (< 1.0 µg/L)
11/15/2017: ND (< 1.0 J µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-1 (14-19 FT)
7/28/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-7 (18-23 FT)
7/31/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-14 (15-20 FT)
7/28/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-18 (13-18 FT)
7/28/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-23 (15-20 FT)
8/3/2017: 1,100 µg/L
11/7/2017: 2,400 µg/L
2/6/2018: 820 J µg/L
5/7/2018: 77 J µg/L

TW-16-01 (12-17 FT)
8/2/2017: 210 µg/L
11/7/2017: 320 µg/L
2/7/2018: 380 µg/L
5/15/2018: 720 µg/L

MW-39 (20-25 FT)
7/28/2017: ND (< 1.0 µg/L)
11/7/2017: ND (< 1.0 µg/L)
2/15/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-40 (20-25 FT)
7/28/2017: 0.77 J µg/L
11/15/2017: 1.8 µg/L
5/8/2018: 1.3 J µg/L

MW-32 (18-23 FT)
7/28/2017: ND (< 1.0 µg/L)
11/7/2017: 0.67 J µg/L
2/12/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-36 (20-25 FT)
7/28/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/15/2018: ND (< 1.0 µg/L)
5/14/2018: ND (< 1.0 µg/L)

MW-9 (19.5-24.5 FT)
7/28/2017: 5.5 µg/L
11/10/2017: 7.1 µg/L
2/12/2018: 4.6 µg/L
5/11/2018: 2.2 µg/L

MW-24 (19-24 FT)
8/2/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/14/2018: ND (< 1.0 µg/L)

MW-20 (13.5-18.5 FT)
7/31/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-37 (18-23 FT)
8/1/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/12/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-38 (15-20 FT)
7/28/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/15/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-33 (14-19 FT)
7/28/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/14/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

LMW-15-07
LMW-15-06
LMW-15-08
LMW-15-10
LMW-15-09
LMW-15-02
LMW-15-05
LMW-15-03
LMW-15-04
LMW-15-01

ESD-1
ESD-2
ESD-3
ESD-4

LEVAN RD
WESTERN DIVERSION CHAMBER
EASTERN DIVERSION CHAMBER
VAULT V-ESD-5

LEGEND

- ON-SITE MONITORING WELL VINYL CHLORIDE ≤ 2.0 µg/L
- ON-SITE MONITORING WELL VINYL CHLORIDE > 2.0 µg/L
- BLUE/BOLD TEXT: EXCEEDANCE OF NONRESIDENTIAL DRINKING WATER CRITERIA FROM PAST AND PRESENT SAMPLING EVENTS
- WELL NOT SAMPLED
- VAULT (2 FT x 2 FT)
- VAULT (4 FT x 6 FT)
- WELL SCREEN (4-INCH SDR-11 HDPE, CUSTOM SLOTTED)
- WELL BLANK CASING (4-INCH SDR-11 HDPE)
- WELL BLANK CASING (6-INCH SDR-11 HDPE)
- FORD PROPERTY BOUNDARY

NOTES:
FIGURE ONLY SHOWS THE FOUR MOST RECENT QUARTERS OF DATA (JULY 2017, NOVEMBER 2017, FEBRUARY 2018, AND MAY 2018). FULL SET OF DATA CAN BE FOUND IN THE CORRESPONDING TABLES.

µg/L - MICROGRAMS PER LITER (PARTS PER BILLION)

≤ - LESS THAN OR EQUAL TO

> - GREATER THAN

THE NONRESIDENTIAL DRINKING WATER CRITERIA FOR VINYL CHLORIDE IS 2.0 µg/L.

THE GROUNDWATER-SURFACE WATER INTERFACE CRITERIA FOR VINYL CHLORIDE IS 13 µg/L.

FT = FEET BELOW GROUND SURFACE

"ND", "<" INDICATES VALUE IS BELOW THE LABORATORY REPORTING LIMIT OF 1.0 µg/L FOR VINYL CHLORIDE

J = ESTIMATED RESULT

MW = MONITORING WELL

LMW = LIGHT NON-AQUEOUS PHASE LIQUID MONITORING WELL

MDEQ = MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

HDPE = HIGH-DENSITY POLYETHYLENE

BLUE BOX INDICATES EXCEEDANCE OF NONRESIDENTIAL DRINKING WATER CRITERIA ASSOCIATED WITH THE MOST RECENT SAMPLING EVENT POSSIBLE

0 300 600
SCALE IN FEET

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

ON-SITE MONITORING WELLS VINYL CHLORIDE IN GROUNDWATER

ARCADIS Design & Consultancy for natural and built assets

FIGURE 7

CITY: Novi DIV: ENV DB: MG PROJECT NUMBER: MI001454.0004.00001 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
Z:\GISProjects_ENV\NoviBrighton_MIFordLivonia\GIS\docs\GEC\2018-06\Progress Report_Quarter 2\Figure 7_On-Site GWA VC.mxd PLOTTED: 7/13/2018 3:52:14 PM BY: vni00988

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MW-72 (15-20 FT)
7/26/2017: ND (< 1.0 µg/L)
11/7/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-85 (8-13 FT)
7/25/2017: ND (< 1.0 µg/L)
11/7/2017: ND (< 1.0 µg/L)
2/8/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-83 (8-13 FT)
7/25/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/8/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-73S (7-12 FT)
7/26/2017: 0.48 J µg/L
11/7/2017: 0.48 J µg/L
2/6/2018: 0.33 J µg/L
5/9/2018: 0.38 J µg/L

MW-73D (13.5-18.5 FT)
7/26/2017: ND (< 1.0 µg/L)
11/7/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-79D (10-15 FT)
7/25/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/8/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-79S (5-10 FT)
7/25/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/8/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-80S (7-12 FT)
7/25/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/8/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-82D (18-23 FT)
7/25/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-74 (14-19 FT)
7/26/2017: ND (< 1.0 µg/L)
11/7/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-84 (8-13 FT)
7/25/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/8/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-78 (7-12 FT)
7/25/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/8/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-82S (9-14 FT)
7/25/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-81 (8-13 FT)
7/25/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-86 (12-17 FT)
7/26/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/8/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-75S (5-10 FT)
7/26/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-75D (12-17 FT)
7/26/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-77 (9-14 FT)
7/26/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/8/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-87 (14-19 FT)
7/26/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/8/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-76 (15-20 FT)
7/26/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

ROSATI AVE
CAPITOL ST
BEACON ST
STARK RD
BREWSTER ST
WADSWORTH ST
BELDEN CT
BOSTON POST ST
STANDISH ST
PRISCILLA LN
PLYMOUTH RD
WAYNE RD
LAUREL ST

LEGEND

- PROPERTY BOUNDARY
- FORD PROPERTY BOUNDARY
- OFF-SITE MONITORING WELL TRICHLOROETHENE ≤ 1.0 µg/L

NOTES:
FIGURE ONLY SHOWS THE FOUR MOST RECENT QUARTERS OF DATA (JULY 2017, NOVEMBER 2017, FEBRUARY 2018, AND MAY 2018). FULL SET OF DATA CAN BE FOUND IN THE CORRESPONDING TABLES.

µg/L - MICROGRAMS PER LITER (PARTS PER BILLION)

≤ - LESS THAN OR EQUAL TO

THE PUBLISHED 2016 MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY REMEDIATION AND REDEVELOPMENT DIVISION TARGET DETECTION LIMIT FOR TRICHLOROETHENE IS 1.0 µg/L .

THE RESIDENTIAL DRINKING WATER CRITERIA FOR TRICHLOROETHENE IS 5.0 µg/L.

THE GROUNDWATER-SURFACE WATER INTERFACE CRITERIA FOR TRICHLOROETHENE IS 200 µg/L.

FT = FEET BELOW GROUND SURFACE

J = ESTIMATED CONCENTRATION ABOVE THE METHOD DETECTION LIMIT AND BELOW THE REPORTING LIMIT.

"ND", "<" INDICATES VALUE IS BELOW THE LABORATORY REPORTING LIMIT OF 1.0 µg/L FOR TRICHLOROETHENE.

MDEQ = MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

0 300 600
SCALE IN FEET

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

OFF-SITE MONITORING WELLS TRICHLOROETHENE IN GROUNDWATER

ARCADIS Design & Consultancy for natural and built assets

FIGURE
8

CITY: NOVI DIV: ENV DB: MG PIC: R. ELLIS PM: K. HINSKEY TM: A. DEGRANDIS TR: P. CURRY PROJECT NUMBER: MI001454.0004.00002 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
Z:\GISProjects_ENV\NoviBrighton_MIFordLivonia\GIS\docs\GEC\2018-06\Progress Report_Quarter 2\Figure 8_Off-Site GWA TCE.mxd PLOTTED: 7/13/2018 3:53:05 PM BY: vr00988

This document is a DRAFT document that has not received approval from the MDEQ. This document was prepared pursuant to a court Consent Decree. The opinions, findings, and conclusions expressed are those of the authors and not those of the MDEQ.

MW-72 (15-20 FT)
7/26/2017: 2.9 µg/L
11/7/2017: 1.6 µg/L
2/6/2018: 1.3 µg/L
5/9/2018: 1.5 J µg/L

MW-85 (8-13 FT)
7/25/2017: 7.3 µg/L
11/7/2017: 7.3 µg/L
2/8/2018: 5.5 µg/L
5/8/2018: 7.5 µg/L

ROSATI AVE

MW-83 (8-13 FT)
7/25/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/8/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

MW-73S (7-12 FT)
7/26/2017: 1.3 µg/L
11/7/2017: 1.9 µg/L
2/6/2018: 1.1 µg/L
5/9/2018: 1.2 µg/L

MW-73D (13.5-18.5 FT)
7/26/2017: 0.85 J µg/L
11/7/2017: 1.3 µg/L
2/6/2018: 0.79 J µg/L
5/9/2018: 0.80 J µg/L

MW-79D (10-15 FT)
7/25/2017: 4.1 µg/L
11/9/2017: 3.6 µg/L
2/8/2018: 1.9 µg/L
5/8/2018: 3.5 µg/L

MW-79S (5-10 FT)
7/25/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/8/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-80S (7-12 FT)
7/25/2017: 7.1 µg/L
11/8/2017: 7.6 µg/L
2/8/2018: 2.9 µg/L
5/8/2018: 6.3 µg/L

CAPITOL ST

MW-82D (18-23 FT)
7/25/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-74 (14-19 FT)
7/26/2017: 2.7 µg/L
11/7/2017: 2.4 µg/L
2/6/2018: 2.0 µg/L
5/9/2018: 0.70 J µg/L

MW-84 (8-13 FT)
7/25/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/8/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-78 (7-12 FT)
7/25/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/8/2018: ND (< 1.0 µg/L)
5/8/2018: ND (< 1.0 µg/L)

MW-82S (9-14 FT)
7/25/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

BEACON ST

STARK RD

MW-81 (8-13 FT)
7/25/2017: ND (< 1.0 µg/L)
11/9/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

BREWSTER ST

MW-86 (12-17 FT)
7/26/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/8/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

MW-75D (12-17 FT)
7/26/2017: 3.7 µg/L
11/8/2017: 4.9 J µg/L
2/6/2018: 1.9 µg/L
5/9/2018: 2.4 µg/L

BELDEN CT

MW-75S (5-10 FT)
7/26/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/9/2018: ND (< 1.0 µg/L)

MW-77 (9-14 FT)
7/26/2017: 0.45 J µg/L
11/10/2017: ND (< 1.0 µg/L)
2/8/2018: ND (< 1.0 µg/L)
5/11/2018: ND (< 1.0 µg/L)

WADSWORTH ST

MW-87 (14-19 FT)
7/26/2017: ND (< 1.0 µg/L)
11/10/2017: ND (< 1.0 µg/L)
2/8/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

BOSTON POST ST

STANDISH ST

PRISCILLA LN

MW-76 (15-20 FT)
7/26/2017: ND (< 1.0 µg/L)
11/8/2017: ND (< 1.0 µg/L)
2/6/2018: ND (< 1.0 µg/L)
5/10/2018: ND (< 1.0 µg/L)

PLYMOUTH RD

WAYNE RD

LAUREL ST

LEGEND

- PROPERTY BOUNDARY
- FORD PROPERTY BOUNDARY
- OFF-SITE MONITORING WELL VINYL CHLORIDE ≤ 1.0 µg/L
- OFF-SITE MONITORING WELL VINYL CHLORIDE > 1.0 µg/L
- **BLUE/BOLD TEXT** — EXCEEDANCE OF THE TDL FROM PAST AND PRESENT SAMPLING EVENTS

NOTES:
FIGURE ONLY SHOWS THE FOUR MOST RECENT QUARTERS OF DATA (JULY 2017, NOVEMBER 2017, FEBRUARY 2018, AND MAY 2018). FULL SET OF DATA CAN BE FOUND IN THE CORRESPONDING TABLES.

µg/L - MICROGRAMS PER LITER (PARTS PER BILLION)

≤ - LESS THAN OR EQUAL TO

> - GREATER THAN

TDL - TARGET DETECTION LIMIT

THE PUBLISHED 2016 MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY REMEDIATION AND REDEVELOPMENT DIVISION TARGET DETECTION LIMIT FOR VINYL CHLORIDE IS 1.0 µg/L.

THE RESIDENTIAL DRINKING WATER CRITERIA FOR VINYL CHLORIDE IS 2.0 µg/L.

THE GROUNDWATER-SURFACE WATER INTERFACE CRITERIA FOR VINYL CHLORIDE IS 13 µg/L.

FT = FEET BELOW GROUND SURFACE

J = ESTIMATED CONCENTRATION ABOVE THE METHOD DETECTION LIMIT AND BELOW THE REPORTING LIMIT.

"ND", "<" INDICATES VALUE IS BELOW THE LABORATORY REPORTING LIMIT OF 1.0 µg/L FOR VINYL CHLORIDE.

MW = MONITORING WELL

MDEQ = MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

BLUE BOX INDICATES EXCEEDANCE OF THE TARGET DETECTION LIMIT FOR VINYL CHLORIDE ASSOCIATED WITH THE MOST RECENT SAMPLING EVENT POSSIBLE

0 300 600
SCALE IN FEET

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

OFF-SITE MONITORING WELLS VINYL CHLORIDE IN GROUNDWATER

ARCADIS Design & Consultancy for natural and built assets

FIGURE
9

CITY: NOVI DIV: ENV DB: MG PIC: R. ELLIS PM: K. HINSKEY TM: A. DEGRANDIS TR: P. CURRY PROJECT NUMBER: MI001454.0004.00002 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
Z:\GISProjects_ENV\NoviBrighton_MIFord\LivoniaGIS\docs\GEC\2018-06\Progress Report_Quarter 2\Figure 9_Off-Site GWA VC.mxd PLOTTED: 7/13/2018 3:54:05 PM BY: vri00988

This document is a DRAFT document that has not received approval from the MDEQ. This document was prepared pursuant to a court Consent Decree. The opinions, findings, and conclusions expressed are those of the authors and not those of the MDEQ.

SVMP-25 (6.0 FT)
9/21/2017: ND (< 4.4 µg/m³)
11/21/2017: ND (< 4.7 µg/m³)
2/21/2018: ND (< 4.4 µg/m³)
5/29/2018: ND (< 5.1 µg/m³)

SVMP-25 (3.0 FT)
9/21/2017: ND (< 4.7 µg/m³)
11/21/2017: ND (< 4.5 µg/m³)
2/21/2018: ND (< 4.4 µg/m³)
5/29/2018: ND (< 5.0 µg/m³)

SVMP-26 (4.0 FT)
9/21/2017: ND (< 4.9 µg/m³)
11/21/2017: ND (< 4.4 µg/m³)
2/21/2018: ND (< 4.4 µg/m³)
5/29/2018: ND (< 4.9 µg/m³)

SVMP-27 (4.5 FT)
9/21/2017: 11 µg/m³
11/21/2017: ND (< 4.4 µg/m³)
2/21/2018: ND (< 4.4 µg/m³)
5/29/2018: ND (< 4.9 µg/m³)

SVMP-28 (3.0 FT)
9/21/2017: ND (< 4.8 µg/m³)
11/21/2017: ND (< 4.6 µg/m³)
2/21/2018: ND (< 4.3 µg/m³)
5/29/2018: ND (< 5.2 µg/m³)

SVMP-01 (7.0 FT)
9/20/2017: ND (< 4.8 µg/m³)
11/17/2017: ND (< 4.8 µg/m³)
2/19/2018: ND (< 4.5 µg/m³)
5/29/2018: ND (< 5.1 µg/m³)

SVMP-01 (3.5 FT)
9/20/2017: ND (< 5.0 µg/m³)
11/17/2017: ND (< 4.2 µg/m³)
2/19/2018: ND (< 4.6 µg/m³)
5/29/2018: ND (< 4.8 µg/m³)

SVMP-02 (4.5 FT)
9/20/2017: ND (< 5.2 µg/m³)
11/17/2017: ND (< 4.5 µg/m³)
2/19/2018: ND (< 8.3 µg/m³)
5/29/2018: ND (< 4.9 µg/m³)

SVMP-02 (8.5 FT)
9/20/2017: ND (< 5.2 µg/m³)
11/17/2017: ND (< 4.6 µg/m³)
2/19/2018: ND (< 8.3 µg/m³)
5/29/2018: ND (< 5.1 µg/m³)

SVMP-03 (7.0 FT)
9/21/2017: ND (< 4.7 µg/m³)
11/17/2017: ND (< 4.3 µg/m³)
2/19/2018: ND (< 4.6 µg/m³)
5/29/2018: ND (< 5.0 µg/m³)

SVMP-03 (3.5 FT)
9/21/2017: ND (< 4.9 µg/m³)
11/17/2017: ND (< 4.0 µg/m³)
2/19/2018: ND (< 4.3 µg/m³)
5/29/2018: ND (< 5.5 µg/m³)

SVMP-04 (3.5 FT)
9/20/2017: ND (< 4.9 µg/m³)
11/20/2017: ND (< 4.9 µg/m³)
2/21/2018: ND (< 4.7 µg/m³)
5/30/2018: ND (< 4.8 µg/m³)

SVMP-05 (4.5 FT)
9/20/2017: ND (< 4.8 µg/m³)
11/20/2017: ND (< 4.6 µg/m³)
2/21/2018: ND (< 4.2 µg/m³)
5/30/2018: ND (< 4.7 µg/m³)

SVMP-06 (4.5 FT)
9/20/2017: 8.0 µg/m³
11/20/2017: ND (< 4.5 µg/m³)
2/21/2018: ND (< 4.6 µg/m³)
5/30/2018: ND (< 4.7 µg/m³)

SVMP-07 (3.5 FT)
9/20/2017: ND (< 4.8 µg/m³)
11/20/2017: ND (< 4.7 µg/m³)
2/19/2018: ND (< 4.5 µg/m³)
5/30/2018: ND (< 4.9 µg/m³)

SVMP-08 (3.5 FT)
9/20/2017: ND (< 4.7 µg/m³)
11/20/2017: ND (< 4.6 µg/m³)
2/20/2018: ND (< 4.6 µg/m³)
5/29/2018: ND (< 5.0 µg/m³)

SVMP-09 (4.0 FT)
9/20/2017: ND (< 4.9 µg/m³)
11/20/2017: ND (< 4.5 µg/m³)
2/20/2018: ND (< 4.8 µg/m³)
5/30/2018: ND (< 4.5 µg/m³)

SVMP-10 (3.0 FT)
9/20/2017: ND (< 4.8 µg/m³)
11/21/2017: ND (< 4.4 µg/m³)
2/20/2018: ND (< 4.7 µg/m³)

SVMP-11 (3.5 FT)

SVMP-12 (3.5 FT)
9/19/2017: ND (< 4.8 µg/m³)
11/21/2017: ND (< 4.7 µg/m³)
2/20/2018: ND (< 4.7 µg/m³)
5/29/2018: ND (< 4.8 µg/m³)

SVMP-13 (2.0 FT)
9/19/2017: ND (< 4.6 µg/m³)
11/21/2017: ND (< 4.6 µg/m³)

SVMP-14 (2.0 FT)
9/19/2017: ND (< 4.5 µg/m³)
11/21/2017: ND (< 4.1 µg/m³)

SVMP-15 (2.0 FT)
9/19/2017: ND (< 4.7 µg/m³)
11/20/2017: ND (< 4.4 µg/m³)

SVMP-16 (2.0 FT)
9/19/2017: ND (< 4.5 µg/m³)
11/20/2017: ND (< 4.3 µg/m³)

SVMP-17 (2.0 FT)
9/19/2017: ND (< 4.8 µg/m³)
5/30/2018: ND (< 4.8 µg/m³)

SVMP-18 (3.0 FT)
9/18/2017: ND (< 4.6 µg/m³)
11/17/2017: ND (< 4.3 µg/m³)
2/20/2018: ND (< 4.5 µg/m³)
5/30/2018: ND (< 4.7 µg/m³)

SVMP-19 (3.0 FT)
9/18/2017: ND (< 5.1 µg/m³)
11/17/2017: ND (< 4.3 µg/m³)
2/20/2018: ND (< 4.1 µg/m³)

SVMP-20 (3.0 FT)
9/19/2017: ND (< 4.8 µg/m³)

SVMP-21 (2.0 FT)
9/19/2017: ND (< 4.6 µg/m³)
11/20/2017: ND (< 4.6 µg/m³)
5/30/2018: ND (< 4.8 µg/m³)

SVMP-22 (3.0 FT)
9/18/2017: ND (< 4.8 µg/m³)
11/17/2017: ND (< 4.9 µg/m³)
2/20/2018: ND (< 4.7 µg/m³)

SVMP-23 (3.0 FT)
9/18/2017: ND (< 4.6 µg/m³)
11/17/2017: ND (< 4.3 µg/m³)
2/20/2018: ND (< 4.2 µg/m³)

SVMP-24 (4.0 FT)
9/18/2017: ND (< 4.6 µg/m³)
11/17/2017: ND (< 4.4 µg/m³)
2/21/2018: ND (< 4.7 µg/m³)
5/30/2018: ND (< 4.6 µg/m³)

SVMP-29 (7.5 FT)

SVMP-29 (3.5 FT)

SVMP-30 (4.0 FT)

SVMP-31 (5.5 FT)

SVMP-32 (3.0 FT)

SVMP-32 (6.0 FT)

SVMP-33 (4.0 FT)

SVMP-34 (4.0 FT)

SVMP-35 (4.0 FT)

SVMP-36 (4.0 FT)

SVMP-37 (2.5 FT)

ROSATI AVE
CONCORD ST
CAPITOL ST
STARK RD
BEACON ST
BREWSTER ST
BOSTON POST ST
BELDEN CT
WADSWORTH ST
STANDISH ST
PRISCILLA LN
PLYMOUTH RD
WAYNE RD
LAUREL ST

LEGEND

- PROPERTY BOUNDARIES
- FORD PROPERTY BOUNDARY
- OFF-SITE SVMP CIS-1,2-DICHLOROETHENE < 280 µg/m³
- OFF-SITE SVMP NOT SAMPLED FOR CIS-1,2-DICHLOROETHENE

NOTES:
FIGURE ONLY SHOWS THE FOUR MOST RECENT QUARTERS OF DATA (SEPTEMBER 2017, NOVEMBER 2017, FEBRUARY 2018, AND MAY 2018). FULL SET OF DATA CAN BE FOUND IN THE CORRESPONDING TABLES.

µg/m³ - MICROGRAMS PER CUBIC METER

THE MDEQ PROVIDED RESIDENTIAL VOLATILIZATION TO INDOOR AIR SOIL VAPOR SCREENING LEVEL FOR CIS-1,2-DICHLOROETHENE IS 280 µg/m³

THE MDEQ PROVIDED COMMERCIAL VOLATILIZATION TO INDOOR AIR SOIL VAPOR SCREENING LEVEL FOR CIS-1,2-DICHLOROETHENE IS 410 µg/m³

MDEQ = MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

FT = FEET BELOW GROUND SURFACE

"ND", "<" = NON-DETECT INDICATES VALUE IS BELOW THE LABORATORY REPORTING LIMIT, RANGING FROM 4.0 TO 8.3 µg/m³, FOR CIS-1,2-DICHLOROETHENE

SVMP = SOIL VAPOR MONITORING POINT

SVMP-29 THROUGH 37 WERE NOT SAMPLED DURING THE SEPTEMBER 2017, NOVEMBER 2017, FEBRUARY 2018, OR MAY 2018 SAMPLING EVENTS.

SVMP-17 AND SVMP-20 WERE NOT SAMPLED DURING THE NOVEMBER 2017 EVENT DUE TO SATURATED SCREENS.

SVMP-13 THROUGH SVMP-17, SVMP-20, AND SVMP-21 WERE NOT SAMPLED DURING THE FEBRUARY 2018 EVENT DUE TO SATURATED SCREENS.

SVMP-10, SVMP-13 THROUGH SVMP-16, SVMP-19, SVMP-22, AND SVMP-23 WERE NOT SAMPLED DURING THE MAY 2018 SAMPLING EVENT DUE TO SATURATED SCREENS. SVMP-20 WAS NOT SAMPLED DURING THE MAY 2018 SAMPLING EVENT DUE TO A BLOCKAGE IN THE TUBING.

SVMP-11, WHICH RESIDED IN THE CITY OF LIVONIA RIGHT-OF-WAY, WAS REMOVED PER THE ADJACENT PROPERTY OWNERS REQUEST.

0 300 600
SCALE IN FEET

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

OFF-SITE VAPOR INTRUSION ASSESSMENT
CIS-1,2-DICHLOROETHENE IN SOIL VAPOR

ARCADIS Design & Consultancy for natural and built assets

FIGURE
10

CITY: NOVI DIV: ENV DB: MG PIC: R. ELLIS PM: K. HINSKEY TM: A. DEGRANDIS TR: M.WACKSMAN PROJECT NUMBER: MI001454.0004.00003 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
Z:\GISProjects_ENV\NoviBrighton_MIFord\Livonia\GIS\docs\GEC\2018-06\Progress Report_Quarter 2\Figure 10_Off-Site SVMP cis-DCE.mxd PLOTTED: 7/10/2018 11:57:49 AM BY: MA100749

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SVMP-25 (6.0 FT)
9/21/2017: 12 µg/m^3
11/21/2017: ND (< 8.1 µg/m^3)
2/21/2018: ND (< 7.6 µg/m^3)
5/29/2018: ND (< 8.8 µg/m^3)

SVMP-25 (3.0 FT)
9/21/2017: ND (< 8.1 µg/m^3)
11/21/2017: ND (< 7.7 µg/m^3)
2/21/2018: ND (< 7.6 µg/m^3)
5/29/2018: ND (< 8.5 µg/m^3)

SVMP-26 (4.0 FT)
9/21/2017: ND (< 8.4 µg/m^3)
11/21/2017: ND (< 7.6 µg/m^3)
2/21/2018: ND (< 7.5 µg/m^3)
5/29/2018: ND (< 8.4 µg/m^3)

SVMP-27 (4.5 FT)
9/21/2017: ND (< 7.6 µg/m^3)
11/21/2017: ND (< 7.5 µg/m^3)
2/21/2018: ND (< 7.6 µg/m^3)
5/29/2018: ND (< 8.4 µg/m^3)

SVMP-28 (3.0 FT)
9/21/2017: 25 µg/m^3
11/21/2017: ND (< 7.9 µg/m^3)
2/21/2018: ND (< 7.3 µg/m^3)
5/29/2018: ND (< 8.9 µg/m^3)

SVMP-22 (3.0 FT)
9/18/2017: ND (< 8.2 µg/m^3)
11/17/2017: ND (< 8.4 µg/m^3)
2/20/2018: ND (< 8.1 µg/m^3)

SVMP-23 (3.0 FT)
9/18/2017: ND (< 7.9 µg/m^3)
11/17/2017: ND (< 7.4 µg/m^3)
2/20/2018: ND (< 7.2 µg/m^3)

SVMP-24 (4.0 FT)
9/18/2017: ND (< 7.9 µg/m^3)
11/17/2017: ND (< 7.5 µg/m^3)
2/21/2018: ND (< 8.1 µg/m^3)
5/30/2018: ND (< 7.9 µg/m^3)

SVMP-36 (4.0 FT)

SVMP-18 (3.0 FT)
9/18/2017: ND (< 7.9 µg/m^3)
11/17/2017: ND (< 7.3 µg/m^3)
2/20/2018: ND (< 7.8 µg/m^3)
5/30/2018: ND (< 8.1 µg/m^3)

SVMP-19 (3.0 FT)
9/18/2017: ND (< 8.8 µg/m^3)
11/17/2017: ND (< 7.4 µg/m^3)
2/20/2018: ND (< 7.1 µg/m^3)

SVMP-20 (3.0 FT)
9/19/2017: ND (< 8.2 µg/m^3)

SVMP-21 (2.0 FT)
9/19/2017: ND (< 7.9 µg/m^3)
11/20/2017: ND (< 7.9 µg/m^3)
5/30/2018: ND (< 8.3 µg/m^3)

SVMP-37 (2.5 FT)

SVMP-12 (3.5 FT)
9/19/2017: ND (< 8.2 µg/m^3)
11/21/2017: ND (< 8.0 µg/m^3)
2/20/2018: ND (< 8.1 µg/m^3)
5/29/2018: ND (< 8.2 µg/m^3)

SVMP-11 (3.5 FT)

SVMP-34 (4.0 FT)

SVMP-33 (4.0 FT)

SVMP-32 (3.0 FT)

SVMP-32 (6.0 FT)

SVMP-10 (3.0 FT)
9/20/2017: ND (< 8.2 µg/m^3)
11/21/2017: ND (< 7.5 µg/m^3)
2/20/2018: ND (< 8.1 µg/m^3)

SVMP-16 (2.0 FT)
9/19/2017: ND (< 7.8 µg/m^3)
11/20/2017: ND (< 7.4 µg/m^3)

SVMP-15 (2.0 FT)
9/19/2017: ND (< 8.1 µg/m^3)
11/20/2017: ND (< 7.6 µg/m^3)

SVMP-17 (2.0 FT)
9/19/2017: ND (< 8.2 µg/m^3)
5/30/2018: ND (< 8.1 µg/m^3)

SVMP-08 (3.5 FT)
9/20/2017: ND (< 8.1 µg/m^3)
11/20/2017: ND (< 7.9 µg/m^3)
2/20/2018: ND (< 7.9 µg/m^3)
5/29/2018: ND (< 8.6 µg/m^3)

SVMP-09 (4.0 FT)
9/20/2017: ND (< 8.4 µg/m^3)
11/20/2017: ND (< 7.7 µg/m^3)
2/20/2018: ND (< 8.2 µg/m^3)
5/30/2018: ND (< 7.7 µg/m^3)

SVMP-14 (2.0 FT)
9/19/2017: ND (< 7.8 µg/m^3)
11/21/2017: ND (< 7.0 µg/m^3)

SVMP-13 (2.0 FT)
9/19/2017: ND (< 7.9 µg/m^3)
11/21/2017: ND (< 7.8 µg/m^3)

SVMP-07 (3.5 FT)
9/20/2017: ND (< 8.2 µg/m^3)
11/20/2017: ND (< 8.1 µg/m^3)
2/19/2018: ND (< 7.7 µg/m^3)
5/30/2018: ND (< 8.4 µg/m^3)

SVMP-05 (4.5 FT)
9/20/2017: ND (< 8.2 µg/m^3)
11/20/2017: ND (< 7.8 µg/m^3)
2/21/2018: ND (< 7.2 µg/m^3)
5/30/2018: ND (< 8.0 µg/m^3)

SVMP-04 (3.5 FT)
9/20/2017: 8.3 J µg/m^3
11/20/2017: ND (< 8.4 µg/m^3)
2/21/2018: ND (< 8.1 µg/m^3)
5/30/2018: ND (< 8.2 µg/m^3)

SVMP-35 (4.0 FT)

SVMP-31 (5.5 FT)

SVMP-06 (4.5 FT)
9/20/2017: 24 µg/m^3
11/20/2017: ND (< 7.7 µg/m^3)
2/21/2018: ND (< 7.8 µg/m^3)
5/30/2018: ND (< 8.1 µg/m^3)

SVMP-30 (4.0 FT)

SVMP-29 (7.5 FT)

SVMP-29 (3.5 FT)

SVMP-01 (7.0 FT)
9/20/2017: ND (< 8.2 µg/m^3)
11/17/2017: ND (< 8.2 µg/m^3)
2/19/2018: ND (< 7.6 µg/m^3)
5/29/2018: ND (< 8.7 µg/m^3)

SVMP-01 (3.5 FT)
9/20/2017: ND (< 8.5 µg/m^3)
11/17/2017: ND (< 7.1 µg/m^3)
2/19/2018: ND (< 7.8 µg/m^3)
5/29/2018: ND (< 8.3 µg/m^3)

SVMP-03 (3.5 FT)
9/21/2017: ND (< 8.3 µg/m^3)
11/17/2017: ND (< 6.9 µg/m^3)
2/19/2018: ND (< 7.3 µg/m^3)
5/29/2018: ND (< 9.4 µg/m^3)

SVMP-03 (7.0 FT)
9/21/2017: ND (< 8.1 µg/m^3)
11/17/2017: ND (< 7.4 µg/m^3)
2/19/2018: ND (< 7.9 µg/m^3)
5/29/2018: ND (< 8.5 µg/m^3)

SVMP-02 (8.5 FT)
9/20/2017: ND (< 9.0 µg/m^3)
11/17/2017: ND (< 7.9 µg/m^3)
2/19/2018: ND (< 14 µg/m^3)
5/29/2018: ND (< 8.7 µg/m^3)

SVMP-02 (4.5 FT)
9/20/2017: ND (< 9.0 µg/m^3)
11/17/2017: ND (< 7.8 µg/m^3)
2/19/2018: ND (< 14 µg/m^3)
5/29/2018: ND (< 8.4 µg/m^3)

ROSATI AVE
CONCORD ST
CAPITOL ST
STARK RD
BEACON ST
BELDEN CT
BOSTON POST ST
BREWSTER ST
WADSWORTH ST
STANDISH ST
PRISCILLA LN
PLYMOUTH RD
WAYNE RD
LAUREL ST

LEGEND

- PROPERTY BOUNDARIES
- FORD PROPERTY BOUNDARY
- OFF-SITE SVMP TETRACHLOROETHENE < 1,400 µg/m^3
- OFF-SITE SVMP NOT SAMPLED FOR TETRACHLOROETHENE

NOTES:
FIGURE ONLY SHOWS THE FOUR MOST RECENT QUARTERS OF DATA (SEPTEMBER 2017, NOVEMBER 2017, FEBRUARY 2018, AND MAY 2018). FULL SET OF DATA CAN BE FOUND IN THE CORRESPONDING TABLES.

µg/m^3 - MICROGRAMS PER CUBIC METER

THE MDEQ PROVIDED VOLATILIZATION TO INDOOR AIR SOIL VAPOR SCREENING LEVEL (RESIDENTIAL AND COMMERCIAL) FOR TETRACLOROETHENE IS 1,400 µg/m^3

MDEQ = MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

FT = FEET BELOW GROUND SURFACE

J = REPORTED VALUE IS ESTIMATED

"ND", "<" = NON-DETECT INDICATES VALUE IS BELOW THE LABORATORY REPORTING LIMIT, RANGING FROM 6.9 TO 14 µg/m^3, FOR TETRACHLOROETHENE

SVMP = SOIL VAPOR MONITORING POINT

SVMP-29 THROUGH 37 WERE NOT SAMPLED DURING THE SEPTEMBER 2017, NOVEMBER 2017, FEBRUARY 2018, OR MAY 2018 SAMPLING EVENTS.

SVMP-17 AND SVMP-20 WERE NOT SAMPLED DURING THE NOVEMBER 2017 EVENT DUE TO SATURATED SCREENS.

SVMP-13 THROUGH SVMP-17, SVMP-20, AND SVMP-21 WERE NOT SAMPLED DURING THE FEBRUARY 2018 EVENT DUE TO SATURATED SCREENS.

SVMP-10, SVMP-13 THROUGH SVMP-16, SVMP-19, SVMP-22, AND SVMP-23 WERE NOT SAMPLED DURING THE MAY 2018 SAMPLING EVENT DUE TO SATURATED SCREENS. SVMP-20 WAS NOT SAMPLED DURING THE MAY 2018 SAMPLING EVENT DUE TO A BLOCKAGE IN THE TUBING.

SVMP-11, WHICH RESIDED IN THE CITY OF LIVONIA RIGHT-OF-WAY, WAS REMOVED PER THE ADJACENT PROPERTY OWNERS REQUEST.

0 300 600
SCALE IN FEET

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

OFF-SITE VAPOR INTRUSION ASSESSMENT
TETRACHLOROETHENE IN SOIL VAPOR

ARCADIS Design & Consultancy for natural and built assets

FIGURE
11

CITY: NOVI DIV: ENV DB: MG PIC: R. ELLIS PM: K. HINSKEY TM: A. DEGRANDIS TR: M.WACKSMAN PROJECT NUMBER: MI001454.0004.00003 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
Z:\GISProjects_ENV\NoviBrighton_MI\Ford\Livonia\GIS\docs\GEC\2018-06\Progress Report_Quarter 2\Figure 11_Off-Site SVMP PCE.mxd PLOTTED: 7/10/2018 11:43:10 AM BY: MAI00749

This document is a DRAFT document that has not received approval from the MDEQ. This document was prepared pursuant to a court Consent Decree. The opinions, findings, and conclusions expressed are those of the authors and not those of the MDEQ.

SVMP-25 (3.0 FT)
9/21/2017: ND (< 6.4 µg/m^3)
11/21/2017: ND (< 6.1 µg/m^3)
2/21/2018: ND (< 6.0 µg/m^3)
5/29/2018: ND (< 6.7 µg/m^3)

SVMP-25 (6.0 FT)
9/21/2017: ND (< 6.0 µg/m^3)
11/21/2017: ND (< 6.4 µg/m^3)
2/21/2018: ND (< 6.0 µg/m^3)
5/29/2018: ND (< 7.0 µg/m^3)

SVMP-26 (4.0 FT)
9/21/2017: ND (< 6.6 µg/m^3)
11/21/2017: ND (< 6.0 µg/m^3)
2/21/2018: ND (< 5.9 µg/m^3)
5/29/2018: ND (< 6.7 µg/m^3)

SVMP-27 (4.5 FT)
9/21/2017: 7.2 µg/m^3
11/21/2017: ND (< 5.9 µg/m^3)
2/21/2018: ND (< 6.0 µg/m^3)
5/29/2018: ND (< 6.7 µg/m^3)

SVMP-32 (6.0 FT)

SVMP-32 (3.0 FT)

SVMP-08 (3.5 FT)
9/20/2017: ND (< 6.4 µg/m^3)
11/20/2017: ND (< 6.2 µg/m^3)
2/20/2018: ND (< 6.3 µg/m^3)
5/29/2018: 11 µg/m^3

SVMP-28 (3.0 FT)
9/21/2017: ND (< 6.5 µg/m^3)
11/21/2017: ND (< 6.3 µg/m^3)
2/21/2018: ND (< 5.8 µg/m^3)
5/29/2018: ND (< 7.1 µg/m^3)

SVMP-29 (3.5 FT)

SVMP-29 (7.5 FT)

SVMP-01 (7.0 FT)
9/20/2017: ND (< 6.5 µg/m^3)
11/17/2017: ND (< 6.5 µg/m^3)
2/19/2018: ND (< 6.0 µg/m^3)
5/29/2018: ND (< 6.9 µg/m^3)

SVMP-01 (3.5 FT)
9/20/2017: ND (< 6.8 µg/m^3)
11/17/2017: ND (< 5.6 µg/m^3)
2/19/2018: ND (< 6.2 µg/m^3)
5/29/2018: ND (< 6.6 µg/m^3)

SVMP-22 (3.0 FT)
9/18/2017: ND (< 6.5 µg/m^3)
11/17/2017: ND (< 6.7 µg/m^3)
2/20/2018: ND (< 6.4 µg/m^3)

SVMP-11 (3.5 FT)

SVMP-34 (4.0 FT)

SVMP-33 (4.0 FT)

SVMP-09 (4.0 FT)
9/20/2017: ND (< 6.6 µg/m^3)
11/20/2017: ND (< 6.1 µg/m^3)
2/20/2018: ND (< 6.5 µg/m^3)
5/30/2018: ND (< 6.1 µg/m^3)

SVMP-06 (4.5 FT)
9/20/2017: ND (< 6.3 µg/m^3)
11/20/2017: ND (< 6.1 µg/m^3)
2/21/2018: ND (< 6.2 µg/m^3)
5/30/2018: ND (< 6.4 µg/m^3)

SVMP-07 (3.5 FT)
9/20/2017: ND (< 6.5 µg/m^3)
11/20/2017: ND (< 6.4 µg/m^3)
2/19/2018: ND (< 6.1 µg/m^3)
5/30/2018: ND (< 6.7 µg/m^3)

SVMP-31 (5.5 FT)

SVMP-35 (4.0 FT)

SVMP-02 (8.5 FT)
9/20/2017: ND (< 7.1 µg/m^3)
11/17/2017: ND (< 6.3 µg/m^3)
2/19/2018: ND (< 11 µg/m^3)
5/29/2018: ND (< 6.9 µg/m^3)

SVMP-02 (4.5 FT)
9/20/2017: ND (< 7.1 µg/m^3)
11/17/2017: ND (< 6.2 µg/m^3)
2/19/2018: ND (< 11 µg/m^3)
5/29/2018: ND (< 6.7 µg/m^3)

SVMP-12 (3.5 FT)
9/19/2017: ND (< 6.5 µg/m^3)
11/21/2017: ND (< 6.3 µg/m^3)
2/20/2018: ND (< 6.4 µg/m^3)
5/29/2018: ND (< 6.5 µg/m^3)

SVMP-13 (2.0 FT)
9/19/2017: ND (< 6.3 µg/m^3)
11/21/2017: ND (< 6.2 µg/m^3)

SVMP-10 (3.0 FT)
9/20/2017: ND (< 6.5 µg/m^3)
11/21/2017: ND (< 5.9 µg/m^3)
2/20/2018: ND (< 6.4 µg/m^3)

SVMP-05 (4.5 FT)
9/20/2017: ND (< 6.5 µg/m^3)
11/20/2017: ND (< 6.2 µg/m^3)
2/21/2018: ND (< 5.7 µg/m^3)
5/30/2018: ND (< 6.3 µg/m^3)

SVMP-03 (3.5 FT)
9/21/2017: ND (< 6.6 µg/m^3)
11/17/2017: ND (< 5.5 µg/m^3)
2/19/2018: ND (< 5.8 µg/m^3)
5/29/2018: ND (< 7.4 µg/m^3)

SVMP-03 (7.0 FT)
9/21/2017: ND (< 6.4 µg/m^3)
11/17/2017: ND (< 5.8 µg/m^3)
2/19/2018: ND (< 6.3 µg/m^3)
5/29/2018: ND (< 6.7 µg/m^3)

SVMP-19 (3.0 FT)
9/18/2017: ND (< 6.9 µg/m^3)
11/17/2017: ND (< 5.9 µg/m^3)
2/20/2018: ND (< 5.6 µg/m^3)

SVMP-21 (2.0 FT)
9/19/2017: ND (< 6.3 µg/m^3)
11/20/2017: ND (< 6.2 µg/m^3)
5/30/2018: ND (< 6.6 µg/m^3)

SVMP-15 (2.0 FT)
9/19/2017: ND (< 6.4 µg/m^3)
11/20/2017: ND (< 6.0 µg/m^3)

SVMP-14 (2.0 FT)
9/19/2017: ND (< 6.2 µg/m^3)
11/21/2017: ND (< 5.6 µg/m^3)

SVMP-16 (2.0 FT)
9/19/2017: ND (< 6.2 µg/m^3)
11/20/2017: ND (< 5.9 µg/m^3)

SVMP-04 (3.5 FT)
9/20/2017: ND (< 6.6 µg/m^3)
11/20/2017: ND (< 6.7 µg/m^3)
2/21/2018: ND (< 6.4 µg/m^3)
5/30/2018: ND (< 6.5 µg/m^3)

SVMP-30 (4.0 FT)

SVMP-23 (3.0 FT)
9/18/2017: ND (< 6.3 µg/m^3)
11/17/2017: ND (< 5.8 µg/m^3)
2/20/2018: ND (< 5.7 µg/m^3)

SVMP-24 (4.0 FT)
9/18/2017: ND (< 6.3 µg/m^3)
11/17/2017: ND (< 5.9 µg/m^3)
2/21/2018: ND (< 6.4 µg/m^3)
5/30/2018: ND (< 6.3 µg/m^3)

SVMP-36 (4.0 FT)

SVMP-18 (3.0 FT)
9/18/2017: ND (< 6.3 µg/m^3)
11/17/2017: ND (< 5.8 µg/m^3)
2/20/2018: ND (< 6.2 µg/m^3)
5/30/2018: ND (< 6.4 µg/m^3)

SVMP-20 (3.0 FT)
9/19/2017: ND (< 6.5 µg/m^3)

SVMP-37 (2.5 FT)

SVMP-17 (2.0 FT)
9/19/2017: 22 µg/m^3
5/30/2018: ND (< 6.4 µg/m^3)

ROSATI AVE
CONCORD ST
CAPITOL ST
BEACON ST
STARK RD
BREWSTER ST
WADSWORTH ST
BOSTON POST ST
PRISCILLA LN
BELDEN CT
WAYNE RD
LAUREL ST
PLYMOUTH RD

LEGEND

- PROPERTY BOUNDARIES
- FORD PROPERTY BOUNDARY
- OFF-SITE SVMP TRICHLOROETHENE < 67 µg/m^3

NOTES:
FIGURE ONLY SHOWS THE FOUR MOST RECENT QUARTERS OF DATA (SEPTEMBER 2017, NOVEMBER 2017, FEBRUARY 2018, AND MAY 2018). FULL SET OF DATA CAN BE FOUND IN THE CORRESPONDING TABLES.

µg/m^3 - MICROGRAMS PER CUBIC METER

THE MDEQ PROVIDED VOLATILIZATION TO INDOOR AIR SOIL VAPOR SCREENING LEVEL (RESIDENTIAL AND COMMERCIAL) FOR TRICHLOROETHENE IS 67 µg/m^3

MDEQ = MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

FT = FEET BELOW GROUND SURFACE

"ND", "<" = NON-DETECT INDICATES VALUE IS BELOW THE LABORATORY REPORTING LIMIT, RANGING FROM 5.5 TO 11 µg/m^3, FOR TRICHLOROETHENE

SVMP = SOIL VAPOR MONITORING POINT

SVMP-29 THROUGH 37 WERE NOT SAMPLED DURING THE SEPTEMBER 2017, NOVEMBER 2017, FEBRUARY 2018, OR MAY 2018 SAMPLING EVENTS.

SVMP-17 AND SVMP-20 WERE NOT SAMPLED DURING THE NOVEMBER 2017 EVENT DUE TO SATURATED SCREENS.

SVMP-13 THROUGH SVMP-17, SVMP-20, AND SVMP-21 WERE NOT SAMPLED DURING THE FEBRUARY 2018 EVENT DUE TO SATURATED SCREENS.

SVMP-10, SVMP-13 THROUGH SVMP-16, SVMP-19, SVMP-22, AND SVMP-23 WERE NOT SAMPLED DURING THE MAY 2018 SAMPLING EVENT DUE TO SATURATED SCREENS. SVMP-20 WAS NOT SAMPLED DURING THE MAY 2018 SAMPLING EVENT DUE TO A BLOCKAGE IN THE TUBING.

SVMP-11, WHICH RESIDED IN THE CITY OF LIVONIA RIGHT-OF-WAY, WAS REMOVED PER THE ADJACENT PROPERTY OWNERS REQUEST.

0 300 600
SCALE IN FEET

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

OFF-SITE VAPOR INTRUSION ASSESSMENT TRICHLOROETHENE IN SOIL VAPOR

ARCADIS Design & Consultancy for natural and built assets

FIGURE
12

CITY: NOVI DIV: ENV DB: MG PIC: R. ELLIS PM: K. HINSKEY TM: A. DEGRANDIS TR: M.WACKSMAN PROJECT NUMBER: MI001454.0004.00003 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
Z:\GISProjects_ENV\NoviBrighton_MIFord\Livonia\GIS\docs\GEC\2018-06\Progress Report_Quarter 2\Figure 12_Off-Site SVMP TCE.mxd PLOTTED: 7/10/2018 11:43:38 AM BY: MAI00749

This document is a DRAFT document that has not received approval from the MDEQ. This document was prepared pursuant to a court Consent Decree. The opinions, findings, and conclusions expressed are those of the authors and not those of the MDEQ.

SVMP-25 (3.0 FT)
9/21/2017: ND (< 3.0 µg/m³)
11/21/2017: ND (< 2.9 µg/m³)
2/21/2018: ND (< 2.9 µg/m³)
5/29/2018: ND (< 3.2 µg/m³)

SVMP-25 (6.0 FT)
9/21/2017: ND (< 2.9 µg/m³)
11/21/2017: ND (< 3.0 µg/m³)
2/21/2018: ND (< 2.9 µg/m³)
5/29/2018: ND (< 3.3 µg/m³)

SVMP-26 (4.0 FT)
9/21/2017: ND (< 3.2 µg/m³)
11/21/2017: ND (< 2.9 µg/m³)
2/21/2018: ND (< 2.8 µg/m³)
5/29/2018: ND (< 3.2 µg/m³)

SVMP-32 (3.0 FT)

SVMP-32 (6.0 FT)

SVMP-27 (4.5 FT)
9/21/2017: ND (< 2.9 µg/m³)
11/21/2017: ND (< 2.8 µg/m³)
2/21/2018: ND (< 2.9 µg/m³)
5/29/2018: ND (< 3.2 µg/m³)

SVMP-08 (3.5 FT)
9/20/2017: ND (< 3.0 µg/m³)
11/20/2017: ND (< 3.0 µg/m³)
2/20/2018: ND (< 3.0 µg/m³)
5/29/2018: ND (< 3.2 µg/m³)

SVMP-09 (4.0 FT)
9/20/2017: ND (< 3.2 µg/m³)
11/20/2017: ND (< 2.9 µg/m³)
2/20/2018: ND (< 3.1 µg/m³)
5/30/2018: ND (< 2.9 µg/m³)

SVMP-10 (3.0 FT)
9/20/2017: ND (< 3.1 µg/m³)
11/21/2017: ND (< 2.8 µg/m³)
2/20/2018: ND (< 3.0 µg/m³)

SVMP-14 (2.0 FT)
9/19/2017: ND (< 2.9 µg/m³)
11/21/2017: ND (< 2.6 µg/m³)

SVMP-16 (2.0 FT)
9/19/2017: ND (< 2.9 µg/m³)
11/20/2017: ND (< 2.8 µg/m³)

SVMP-06 (4.5 FT)
9/20/2017: ND (< 3.0 µg/m³)
11/20/2017: ND (< 2.9 µg/m³)
2/21/2018: ND (< 3.0 µg/m³)
5/30/2018: ND (< 3.0 µg/m³)

SVMP-05 (4.5 FT)
9/20/2017: ND (< 3.1 µg/m³)
11/20/2017: ND (< 2.9 µg/m³)
2/21/2018: ND (< 2.7 µg/m³)
5/30/2018: ND (< 3.0 µg/m³)

SVMP-04 (3.5 FT)
9/20/2017: ND (< 3.2 µg/m³)
11/20/2017: ND (< 3.2 µg/m³)
2/21/2018: ND (< 3.0 µg/m³)
5/30/2018: ND (< 3.1 µg/m³)

SVMP-07 (3.5 FT)
9/20/2017: ND (< 3.1 µg/m³)
11/20/2017: ND (< 3.0 µg/m³)
2/19/2018: ND (< 2.9 µg/m³)
5/30/2018: ND (< 3.2 µg/m³)

SVMP-31 (5.5 FT)

SVMP-35 (4.0 FT)

SVMP-30 (4.0 FT)

SVMP-28 (3.0 FT)
9/21/2017: ND (< 3.1 µg/m³)
11/21/2017: ND (< 3.0 µg/m³)
2/21/2018: ND (< 2.8 µg/m³)
5/29/2018: ND (< 3.4 µg/m³)

SVMP-29 (3.5 FT)

SVMP-29 (7.5 FT)

SVMP-03 (7.0 FT)
9/21/2017: ND (< 3.0 µg/m³)
11/17/2017: ND (< 2.8 µg/m³)
2/19/2018: ND (< 3.0 µg/m³)
5/29/2018: ND (< 3.2 µg/m³)

SVMP-01 (7.0 FT)
9/20/2017: ND (< 3.1 µg/m³)
11/17/2017: ND (< 3.1 µg/m³)
2/19/2018: ND (< 2.9 µg/m³)
5/29/2018: ND (< 3.3 µg/m³)

SVMP-03 (3.5 FT)
9/21/2017: ND (< 3.1 µg/m³)
11/17/2017: ND (< 2.6 µg/m³)
2/19/2018: ND (< 2.8 µg/m³)
5/29/2018: ND (< 3.5 µg/m³)

SVMP-01 (3.5 FT)
9/20/2017: ND (< 3.2 µg/m³)
11/17/2017: ND (< 2.7 µg/m³)
2/19/2018: ND (< 2.9 µg/m³)
5/29/2018: ND (< 3.1 µg/m³)

SVMP-02 (8.5 FT)
9/20/2017: ND (< 3.4 µg/m³)
11/17/2017: ND (< 3.0 µg/m³)
2/19/2018: ND (< 5.3 µg/m³)
5/29/2018: ND (< 3.3 µg/m³)

SVMP-02 (4.5 FT)
9/20/2017: ND (< 3.4 µg/m³)
11/17/2017: ND (< 2.9 µg/m³)
2/19/2018: ND (< 5.3 µg/m³)
5/29/2018: ND (< 3.2 µg/m³)

SVMP-11 (3.5 FT)

SVMP-12 (3.5 FT)
9/19/2017: ND (< 3.1 µg/m³)
11/21/2017: ND (< 3.0 µg/m³)
2/20/2018: ND (< 3.0 µg/m³)
5/29/2018: ND (< 3.1 µg/m³)

SVMP-34 (4.0 FT)

SVMP-33 (4.0 FT)

SVMP-13 (2.0 FT)
9/19/2017: ND (< 3.0 µg/m³)
11/21/2017: ND (< 2.9 µg/m³)

SVMP-22 (3.0 FT)
9/18/2017: ND (< 3.1 µg/m³)
11/17/2017: ND (< 3.2 µg/m³)
2/20/2018: ND (< 3.0 µg/m³)

SVMP-19 (3.0 FT)
9/18/2017: ND (< 3.3 µg/m³)
11/17/2017: ND (< 2.8 µg/m³)
2/20/2018: ND (< 2.7 µg/m³)

SVMP-21 (2.0 FT)
9/19/2017: ND (< 3.0 µg/m³)
11/20/2017: ND (< 3.0 µg/m³)
5/30/2018: ND (< 3.1 µg/m³)

SVMP-15 (2.0 FT)
9/19/2017: ND (< 3.0 µg/m³)
11/20/2017: ND (< 2.9 µg/m³)

SVMP-23 (3.0 FT)
9/18/2017: ND (< 3.0 µg/m³)
11/17/2017: ND (< 2.8 µg/m³)
2/20/2018: ND (< 2.7 µg/m³)

SVMP-24 (4.0 FT)
9/18/2017: ND (< 3.0 µg/m³)
11/17/2017: ND (< 2.8 µg/m³)
2/21/2018: ND (< 3.0 µg/m³)
5/30/2018: ND (< 3.0 µg/m³)

SVMP-36 (4.0 FT)

SVMP-18 (3.0 FT)
9/18/2017: ND (< 3.0 µg/m³)
11/17/2017: ND (< 2.8 µg/m³)
2/20/2018: ND (< 2.9 µg/m³)
5/30/2018: ND (< 3.0 µg/m³)

SVMP-20 (3.0 FT)
9/19/2017: ND (< 3.1 µg/m³)

SVMP-37 (2.5 FT)

SVMP-17 (2.0 FT)
9/19/2017: ND (< 3.1 µg/m³)
5/30/2018: ND (< 3.1 µg/m³)

ROSATI AVE
CONCORD ST
CAPITOL ST
BEACON ST
STARK RD
BREWSTER ST
WADSWORTH ST
BELDEN CT
STANDISH ST
BOSTON POST ST
PRISCILLA LN
PLYMOUTH RD
WAYNE RD
LAUREL ST

LEGEND

- PROPERTY BOUNDARIES
- FORD PROPERTY BOUNDARY
- OFF-SITE SVMP VINYL CHLORIDE < 54 µg/m³

NOTES:
FIGURE ONLY SHOWS THE FOUR MOST RECENT QUARTERS OF DATA (SEPTEMBER 2017, NOVEMBER 2017, FEBRUARY 2018, AND MAY 2018). FULL SET OF DATA CAN BE FOUND IN THE CORRESPONDING TABLES.

µg/m³ - MICROGRAMS PER CUBIC METER

THE MDEQ PROVIDED RESIDENTIAL VOLATILIZATION TO INDOOR AIR SOIL VAPOR SCREENING LEVEL FOR VINYL CHLORIDE IS 54 µg/m³

THE MDEQ PROVIDED COMMERCIAL VOLATILIZATION TO INDOOR AIR SOIL VAPOR SCREENING LEVEL FOR VINYL CHLORIDE IS 450 µg/m³

MDEQ = MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

FT = FEET BELOW GROUND SURFACE

"ND", "<" = NON-DETECT INDICATES VALUE IS BELOW THE LABORATORY REPORTING LIMIT, RANGING FROM 2.6 TO 5.3 µg/m³, FOR VINYL CHLORIDE

SVMP = SOIL VAPOR MONITORING POINT

SVMP-29 THROUGH 37 WERE NOT SAMPLED DURING THE SEPTEMBER 2017, NOVEMBER 2017, FEBRUARY 2018, OR MAY 2018 SAMPLING EVENTS.

SVMP-17 AND SVMP-20 WERE NOT SAMPLED DURING THE NOVEMBER 2017 EVENT DUE TO SATURATED SCREENS.

SVMP-13 THROUGH SVMP-17, SVMP-20, AND SVMP-21 WERE NOT SAMPLED DURING THE FEBRUARY 2018 EVENT DUE TO SATURATED SCREENS.

SVMP-10, SVMP-13 THROUGH SVMP-16, SVMP-19, SVMP-22, AND SVMP-23 WERE NOT SAMPLED DURING THE MAY 2018 SAMPLING EVENT DUE TO SATURATED SCREENS. SVMP-20 WAS NOT SAMPLED DURING THE MAY 2018 SAMPLING EVENT DUE TO A BLOCKAGE IN THE TUBING.

SVMP-11, WHICH RESIDED IN THE CITY OF LIVONIA RIGHT-OF-WAY, WAS REMOVED PER THE ADJACENT PROPERTY OWNERS REQUEST.

0 300 600
SCALE IN FEET

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

OFF-SITE VAPOR INTRUSION ASSESSMENT VINYL CHLORIDE IN SOIL VAPOR

ARCADIS Design & Consultancy for natural and built assets

FIGURE 13

CITY: NOVI DIV: ENV DB: MG PIC: R_ELLIS PM: K_HINSKEY TM: A_DEGRANDIS TR: M.WACKSMAN PROJECT NUMBER: MI001454.0004.00003 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
Z:\GISProjects_ENV\NoviBrighton_MI\FordLivonia\GIS\docs\GEC2018-06\Progress Report_Quarter 2\Figure 13_Off-Site SVMP VC.mxd PLOTTED: 7/10/2018 5:31:05 PM BY: MAI00749

APPENDIX A

On-Site Groundwater Field Sampling Logs

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page: 1 of 2

Location: Livonia, MI | Date: 5/7/18

Site/Well No.: MW-23 | Replicate No.: | Code No.:

Weather: | Sampling Time: Begin 1527 End 1530

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	19.70
Depth to Water (ft bmp)	5.67
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	14.03
Casing Diameter/Type	2" PVC
Gallons in Well	
Gallons Pumped/Bailed Prior to Sampling	
Sample Pump Intake Setting (ft bmp)	
Purge Time	begin 1415 end 1530
Pumping Rate (ml/min)	
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	12.65
SpC (mS/cm)	1.096
CND (mS/cm)	0.850
Dissolved Oxygen (%)	2.1
Dissolved Oxygen (mg/L)	0.22
pH (s.u.)	9.13
ORP (mV)	216.3
Turbidity (NTU)	9.91
Color	Clear
Odor	none
Appearance	
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel:

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-23 PROJ #: MI001454.0004.00001

DATE : 5/7/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1425	13.00	0.589	0.454	34.6	3.62	8.97	222.5	150	58.2	5.85
1430	12.73	0.560	0.429	22.3	2.35	9.22	216.6	150	32.3	5.85
1435	12.49	0.549	0.418	14.4	1.53	9.32	215.1	150	25.3	5.85
1440	12.28	0.538	0.407	10.2	1.09	9.36	215.9	150	20.5	5.85
1445	12.25	0.532	0.402	7.5	0.80	9.39	216.4	150	18.7	5.85
1450	12.30	0.528	0.400	5.9	0.63	9.40	216.0	150	17.3	5.85
1455	12.44	0.548	0.419	4.4	0.47	9.38	216.5	150	14.5	5.85
1500	12.62	0.611	0.467	3.7	0.39	9.33	217.5	150	12.3	5.85
1505	12.57	0.712	0.544	3.1	0.33	9.26	218.4	150	11.2	5.85
1510	12.61	0.800	0.612	2.8	0.30	9.25	218.6	150	10.8	5.85
1515	12.64	0.913	0.698	AB 2.5	0.26	9.19	218.8	150	9.75	5.85
1520	12.65	1.063	0.817	2.2	0.23	9.14	216.6	150	10.7	5.85
1525	12.65	1.096	0.850	2.1	0.22	9.13	216.3	150	9.91	5.85
	Sampled @ 1527									
Total Depth of Well:		19.70								
Depth To Water Before Purging:			5.67							
Depth To Water After Purging:										

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5/11/18

Site/Well No.: TW-16-04 | Replicate No.: | Code No.:

Weather: Rain 46°F | Sampling Time: Begin: | End:

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	8.90
Depth to Water (ft bmp)	4.91
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	
Casing Diameter/Type	2" PVC
Gallons in Well	
Gallons Pumped/Bailed Prior to Sampling	
Sample Pump Intake Setting (ft bmp)	
Purge Time	begin 1155 end
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	5.92
SpC (mS/cm)	1.369
CND (mS/cm)	
Dissolved Oxygen (%)	
Dissolved Oxygen (mg/L)	
pH (s.u.)	
ORP (mV)	
Turbidity (NTU)	
Color	
Odor	
Appearance	
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: ARuibal

Well Casing Volumes

Gal./Ft.				
0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : TW-16-04 PROJ #: MI001454.0004.00001

DATE : 5/11/16 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1200	5.93	1.369	0.870	23.3	2.60	7.15	-74.0	150	17.0	5.00
1205	5.89	1.363	0.866	11.4	1.42	7.08	-78.6	150	8.35	5.05
1210	5.87	1.362	0.865	15.6	2.35	6.98	-82.0	150	6.28	5.05
1215	5.85	1.363	0.865	13.2	1.65	6.97	-82.6	150	5.95	5.05
1220	5.83	1.365	0.865	-3.0	-0.31	6.95	-84.5	150	5.07	5.05
1225	5.88	1.362	0.865	-2.0	-0.25	6.94	-85.2	150	5.43	5.05
1230	5.91	1.365	0.867	-4.7	-0.49	6.93	-87.3	150	5.86	5.05
1235	5.91	1.367	0.869	-2.4	-0.41	6.92	-88.6	150	6.29	5.05
1240	5.87	1.368	0.868	2.0	0.25	6.92	-90.5	150	6.43	5.05
1245	5.93	1.369	0.870	8.2	1.26	6.92	-93.7	150	5.98	5.05
1250	5.90	1.369	0.869	8.6	0.76	6.92	-95.2	150	5.67	5.05
1255	5.92	1.370	0.870	6.0	0.74	6.91	-96.9	150	4.92	5.05
1300	5.92	1.369	0.871	9.3	1.16	6.91	-97.0	150	4.86	5.05
	Sampled @ 1302									
Total Depth of Well:										
Depth To Water Before Purging:			4.91							
Depth To Water After Purging:										

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date:

Site/Well No.: TW-16-03 | Replicate No.: | Code No.:

Weather: | Sampling Time: Begin 1352 End 1355

Evacuation Data

Measuring Point: TOC

MP Elevation (ft): NA

Land Surface Elevation (ft): NA

Sounded Well Depth (ft bmp):

Depth to Water (ft bmp):

Water-Level Elevation (ft): NA

Water Column in Well (ft):

Casing Diameter/Type: 2" PVC

Gallons in Well:

Gallons Pumped/Bailed Prior to Sampling:

Sample Pump Intake Setting (ft bmp):

Purge Time: begin 1312 end 1355

Pumping Rate (ml/min): 150

Evacuation Method: Peristaltic Pump

Field Parameters

Temperature (°C):

SpC (mS/cm):

CND (mS/cm):

Dissolved Oxygen (%):

Dissolved Oxygen (mg/L):

pH (s.u.):

ORP (mV):

Turbidity (NTU):

Color:

Odor:

Appearance:

Sampling Method: Low Flow

Remarks:

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: Abibel

Well Casing Volumes

Gal./Ft.					
0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	
1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47	

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : TM-16-03 PROJ #: MI001454.0004.00001

DATE : LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1320	5.98	1.243	0.791	8.1	0.97	6.99	-64.4	150	10.7	~~5.~~60
1325	5.97	1.242	0.790	6.4	0.80	6.97	-65.3	150	10.3	5.60
1330	5.92	1.242	0.789	4.8	0.59	6.93	-65.7	150	9.65	5.60
1335	5.90	1.243	0.790	4.6	0.58	6.92	-61.0	150	9.26	5.60
1340	5.89	1.247	0.792	4.2	0.56	6.91	-57.0	150	9.69	5.60
1345	5.87	1.259	0.799	4.1	0.54	6.90	-53.7	150	8.99	5.60
1350	5.87	1.259	0.799	4.0	0.52	6.91	-51.5	150	7.26	5.60
		Sampled @ 1352								
Total Depth of Well:										
Depth To Water Before Purging:		5.49								
Depth To Water After Purging:										

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date:

Site/Well No.: PW-16-02 | Replicate No.: | Code No.:

Weather: Cloudy 45°F | Sampling Time: Begin 1502 End 1506

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	
Depth to Water (ft bmp)	
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	
Casing Diameter/Type	2" PVC
Gallons in Well	
Gallons Pumped/Bailed Prior to Sampling	
Sample Pump Intake Setting (ft bmp)	
Purge Time	begin 1425 end 1505
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	16.18
SpC (mS/cm)	0.850
CND (mS/cm)	0.545
Dissolved Oxygen (%)	10.1
Dissolved Oxygen (mg/L)	1.29
pH (s.u.)	6.94
ORP (mV)	44.9
Turbidity (NTU)	2.01
Color	Clear
Odor	none
Appearance	—
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: AReibel

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : PW-16-02 PROJ #: MI001454.0004.00001

DATE : 5/11/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1430	6.36	0.864	0.557	37.2	4.48	7.33	28.5	150	5.87	5.17
1435	6.34	0.858	0.552	19.9	2.45	7.08	34.2	150	3.51	5.20
1440	6.26	0.853	0.548	15.8	1.95	7.01	38.5	150	2.21	5.20
1445	6.24	0.852	0.546	11.5	1.41	6.98	42.1	150	2.29	5.23
1450	6.23	0.852	0.546	10.6	1.32	6.96	43.8	150	2.26	5.23
1455	6.19	0.850	0.545	10.2	1.30	6.94	44.7	150	2.17	5.23
1500	6.18	0.850	0.545	10.1	1.29	6.94	44.9	150	2.01	5.23
	Sampled @ 1502									
Total Depth of Well:										
Depth To Water Before Purging: 5.09										
Depth To Water After Purging:										

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5/11/18

Site/Well No.: TW-16-02 | Replicate No.: | Code No.:

Weather: Cloudy 45°F | Sampling Time: Begin 1602 End 1605

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	
Depth to Water (ft bmp)	
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	
Casing Diameter/Type	2" PVC
Gallons in Well	
Gallons Pumped/Bailed Prior to Sampling	
Sample Pump Intake Setting (ft bmp)	
Purge Time	begin 1525 end 1605
Pumping Rate (ml/min)	
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	7.87
SpC (mS/cm)	4.011
CND (mS/cm)	27.03
Dissolved Oxygen (%)	1.4
Dissolved Oxygen (mg/L)	0.19
pH (s.u.)	7.27
ORP (mV)	-111.3
Turbidity (NTU)	3.32
Color	Clear
Odor	None
Appearance	
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel:

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : TW-16-02 PROJ #: MI001454.0004.00001

DATE : 5/11/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1530	8.06	4.916	3.326	1.7	0.24	7.26	-114.3	150	2.29	6.72
1535	8.07	4.910	3.318	1.7	0.19	7.26	-114.5	150	26.4	6.72
1540	8.02	4.636	3.127	2.2	0.25	7.30	-117.5	150	18.2	6.72
1545	7.90	4.022	2.707	1.6	0.19	7.28	-114.0	150	7.33	6.72
1550	7.87	4.013	2.700	1.5	0.19	7.27	-110.0	150	3.86	6.72
1555	7.87	4.012	2.701	1.5	0.19	7.27	-111.2	150	3.46	6.72
1600	7.87	4.011	2.703	1.4	0.19	7.27	-111.3	150	3.32	6.72
	Sampled @			1602						
Total Depth of Well:										
Depth To Water Before Purging:			6.61							
Depth To Water After Purging:			6.72							

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page: 1 of 2

Location: Livonia, MI | Date: 8th May '18

Site/Well No.: NW-71 | Replicate No.: – | Code No.: –

Weather: SUNNY, 77°F | Sampling Time: Begin 1350 End 1355

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	10.20*
Depth to Water (ft bmp)	20.35
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	10.15
Casing Diameter/Type	2" PVC
Gallons in Well	1.624
Gallons Pumped/Bailed Prior to Sampling	~1.5
Sample Pump Intake Setting (ft bmp)	18.35
Purge Time	begin 1315 end 1350
Pumping Rate (ml/min)	200
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	17.93
SpC (mS/cm)	13.76
CND (mS/cm)	11.89
Dissolved Oxygen (%)	17.3
Dissolved Oxygen (mg/L)	1.56
pH (s.u.)	6.72
ORP (mV)	-118.2
Turbidity (NTU)	4.64
Color	NONE
Odor	NONE
Appearance	CLEAR
Sampling Method	Low Flow
Remarks	*New TOC after transducer install

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: DKAMATH

Well Casing Volumes

Gal./Ft.	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-71 PROJ #: MI001454.0004.00001

DATE : 8th May '18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1320	17.84	13.72	11.85	30.6	2.77	6.81	-114.7	200	8.71	10.20
1325	18.22	13.71	11.94	26.2	2.35	6.76	-116.1	↓	7.91	↓
1330	17.99	13.74	11.90	23.5	2.11	6.74	-117.0		6.01	
1335	17.86	13.74	11.87	22.0	1.99	6.73	-117.6		6.37	
1340	17.80	13.76	11.86	21.2	1.92	6.72	-117.9		5.08	
1345	17.93	13.76	11.89	17.3	1.56	6.72	-118.2	↓	4.64	↓
1350	COLLECT SAMPLE									

Total Depth of Well:	20.35	
Depth To Water Before Purging:	10.20	
Depth To Water After Purging:	10.20	

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page: 1 of 2

Location: Livonia, MI | Date: 5/8/18

Site/Well No.: MW-45 | Replicate No.: — | Code No.: —

Weather: SUNNY, 77°F | Sampling Time: Begin 1450 End 1455

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	19.99*
Depth to Water (ft bmp)	9.40
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	10.59
Casing Diameter/Type	2" PVC
Gallons in Well	1.6944
Gallons Pumped/Bailed Prior to Sampling	~2
Sample Pump Intake Setting (ft bmp)	17.99
Purge Time	begin 1445 end 1450
Pumping Rate (ml/min)	220
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	15.77
SpC (mS/cm)	2.063
CND (mS/cm)	1.699
Dissolved Oxygen (%)	1.1
Dissolved Oxygen (mg/L)	0.11
pH (s.u.)	6.95
ORP (mV)	-93.8
Turbidity (NTU)	3.97
Color	NONE
Odor	NONE
Appearance	CLEAR
Sampling Method	Low Flow
Remarks	*New TOC after transducer install 5/4/18

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: D KAMATH

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-45 PROJ #: MI001454.0004.00001

DATE : 5/8/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1420	15.92	2.336	1.928	4.2	0.41	7.21	-75.5	220	8.39	9.40
1425	15.72	2.288	1.879	3.3	0.32	7.17	-75.4	↓	4.50	↓
1430	15.98	2.205	1.824	2.5	0.24	7.12	-78.3		3.44	
1435	15.60	2.104	1.725	1.7	0.17	6.98	-85.6		2.54	
1440	15.57	2.055	1.685	1.4	0.14	6.93	-96.9		1.52	
1445	15.77	2.063	1.699	1.1	0.11	6.95	-93.8		3.97	
1450	COLLECT SAMPLE									

Total Depth of Well:	19.99	
Depth To Water Before Purging:	9.40	
Depth To Water After Purging:	9.40	

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5/8/18

Site/Well No.: MW-18 | Replicate No.: — | Code No.: —

Weather: SUNNY, 82°F | Sampling Time: Begin 1640 End 1645

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	18.01
Depth to Water (ft bmp)	6.73 *
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	11.28
Casing Diameter/Type	2" PVC
Gallons in Well	1.8048
Gallons Pumped/Bailed Prior to Sampling	~2
Sample Pump Intake Setting (ft bmp)	16.01
Purge Time	begin 1550 end 1640
Pumping Rate (ml/min)	220
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	15.51
SpC (mS/cm)	2.163
CND (mS/cm)	1.770
Dissolved Oxygen (%)	1.3
Dissolved Oxygen (mg/L)	0.13
pH (s.u.)	6.85
ORP (mV)	-102.8
Turbidity (NTU)	5.61
Color	NONE
Odor	CLEAR
Appearance	CLEAR
Sampling Method	Low Flow

Remarks: DTW NOT CONT. MONITORED BC OF TRANSDUCER PUCK

*NEW TOC AFTER TRANSDUCER INSTALL

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: DKAMATH

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-18 PROJ #: MI001454.0004.00001

DATE : 5/8/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1600	16.80	2.153	1.817	4.0	0.38	6.95	-94.7	220	63.5	6.73
1605	16.85	2.157	1.821	3.8	0.36	6.92	-96.0	↓	31.9	↓
1610	15.49	2.139	1.753	3.2	0.32	6.88	-96.1	↓	17.5	↓
1615	15.82	2.153	1.776	2.3	0.22	6.88	-100.2	↓	15.6	↓
1620	15.71	2.153	1.772	1.7	0.17	6.87	-100.5	↓	11.0	↓
1625	15.78	2.149	1.772	1.5	0.15	6.86	-101.5	↓	8.37	↓
1635	15.51	2.163	1.770	1.3	0.13	6.85	-102.8	↓	5.61	↓
1640	COLLECT SAMPLE									

Total Depth of Well:	18.01	
Depth To Water Before Purging:		6.73
Depth To Water After Purging:		6.73

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 9th May '18

Site/Well No.: MW-25 | Replicate No.: - | Code No.: -

Weather: SUNNY, 78°F | Sampling Time: Begin 1230 | End 1235

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	20.25
Depth to Water (ft bmp)	5.15
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	15.10
Casing Diameter/Type	2" PVC
Gallons in Well	2.416
Gallons Pumped/Bailed Prior to Sampling	~2
Sample Pump Intake Setting (ft bmp)	18.25
Purge Time	begin 1155 end 1220
Pumping Rate (ml/min)	220
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	15.43
SpC (mS/cm)	5.563
CND (mS/cm)	4.547
Dissolved Oxygen (%)	4.4
Dissolved Oxygen (mg/L)	0.43
pH (s.u.)	7.17
ORP (mV)	-109.3
Turbidity (NTU)	1.98
Color	NONE
Odor	NONE
Appearance	CLEAR
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: DICAMATH

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-25 PROJ #: MI001454.0004.00001

DATE : 9th May '18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1200	15.53	5.517	4.518	20.2	1.98	7.25	-75.5	220	4.71	5.55
1205	15.66	5.518	4.533	11.2	1.09	7.18	-97.6	↓	3.30	"
1210	15.51	5.523	4.522	9.6	0.94	7.18	-100.5		3.30	"
1215	15.40	5.550	4.533	5.8	0.57	7.17	-101.3		3.58	"
1220	15.43	5.563	4.547	4.4	0.43	7.17	-109.8	↓	1.98	"
~~1225~~										AK
1230	COLLECT SAMPLE									

Total Depth of Well:	20.25
Depth To Water Before Purging:	5.15
Depth To Water After Purging:	5.55

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page: 1 of 2

Location: Livonia, MI | Date: 5/9/18

Site/Well No.: MW-62 | Replicate No.: — | Code No.: —

Weather: SUNNY, 79°F | Sampling Time: Begin 1425 End 1430

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	21.15
Depth to Water (ft bmp)	7.83
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	13.32
Casing Diameter/Type	2" PVC
Gallons in Well	2.1312
Gallons Pumped/Bailed Prior to Sampling	~4
Sample Pump Intake Setting (ft bmp)	19.15
Purge Time	begin 1310 end 1425
Pumping Rate (ml/min)	220
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	15.57
SpC (mS/cm)	5.910
CND (mS/cm)	4.847
Dissolved Oxygen (%)	0.5
Dissolved Oxygen (mg/L)	0.04
pH (s.u.)	6.94
ORP (mV)	-118.5
Turbidity (NTU)	6.18
Color	NONE
Odor	NONE
Appearance	CLEAR
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: DKAMATH

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

(X) DUMPED OUT WATER FROM FLOW CELL AND RESTARTED PURGING

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-62 PROJ #: MI001454.0004.00001

DATE : 5/9/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1315	15.44	5.513	4.505	5.5	0.54	7.19	-56.3	220	101	7.93 (X)
1330	15.47	5.652	4.624	3.2	0.32	7.04	-91.9	|	52.6	"
1335	15.46	5.814	4.754	1.3	0.13	6.98	-108.9	|	26.8	"
1345	15.49	5.825	4.767	1.0	0.10	6.97	-111.0	|	21.0	"
1350	15.47	5.826	4.765	0.9	0.09	6.97	-112.9	|	18.6	"
1400	15.61	5.855	4.800	0.8	0.08	6.96	-116.8	|	12.5	"
1405	15.53	5.888	4.823	0.6	0.06	6.95	-118.7	|	10.1	"
1415	15.40	5.903	4.821	0.6	0.06	6.95	-118.9	|	9.18	"
1420	15.57	5.910	4.847	0.5	0.04	6.94	-118.5	V	6.18	"
1425	COLLECT SAMPLE									

Total Depth of Well:	21.15
Depth To Water Before Purging:	7.83
Depth To Water After Purging:	7.85

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page: 1 of 2

Location: Livonia, MI | Date: 5/9/18

Site/Well No.: MW-50 | Replicate No.: – | Code No.: –

Weather: SUNNY, 79°F | Sampling Time: Begin 1525 End 1530

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	19.00
Depth to Water (ft bmp)	6.98*
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	12.02
Casing Diameter/Type	2" PVC
Gallons in Well	1.9232
Gallons Pumped/Bailed Prior to Sampling	~2.5
Sample Pump Intake Setting (ft bmp)	~17
Purge Time	begin 1450 end 1525
Pumping Rate (ml/min)	220
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	14.85
SpC (mS/cm)	2.178
CND (mS/cm)	1.760
Dissolved Oxygen (%)	2.0
Dissolved Oxygen (mg/L)	0.20
pH (s.u.)	6.98
ORP (mV)	-1.4
Turbidity (NTU)	1.49
Color	NONE
Odor	NONE
Appearance	CLEAR
Sampling Method	Low Flow
Remarks	*MEASURED FROM NEW TOC AFTER TRANSDUCER INSTALL

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: DICAMATH

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

DK

~~DTW NOT MONITORED DUE TO PH~~

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-50 PROJ #: MI001454.0004.00001

DATE : 3/9/18 LOC: Ford LTP, Livonia, MI

13.7

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1455	15.67	0.612	0.503	36.5	3.57	7.78	-15.0	220	~~6.44~~	6.98
1500	15.28	1.224	1.009	17.8	1.78	7.18	1.6		8.78	"
1505	15.09	1.680	1.364	5.6	0.56	7.05	0.7		3.37	"
1510	15.09	1.802	1.463	4.3	0.43	7.03	-0.2		1.97	"
1515	15.18	2.005	1.631	3.1	0.30	7.01	-1.5		1.49	"
1520	14.85	2.178	1.760	2.0	0.20	6.98	-1.4	↓	1.49	"
1525	COLLECT SAMPLE									

Total Depth of Well:	19.00	
Depth To Water Before Purging:		6.98
Depth To Water After Purging:		6.98

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page: 1 of 2

Location: Livonia, MI | Date: 5/9/18

Site/Well No.: MW-63 | Replicate No.: — | Code No.: —

Weather: OVERCAST/SCATTERED RAIN, 78°F | Sampling Time: Begin 1630 End 1635

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	11.80
Depth to Water (ft bmp)	7.45
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	4.35
Casing Diameter/Type	2" PVC
Gallons in Well	0.696
Gallons Pumped/Bailed Prior to Sampling	200
Sample Pump Intake Setting (ft bmp)	~25
Purge Time	begin 1550 end 1630
Pumping Rate (ml/min)	220
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	12.69
SpC (mS/cm)	5.350
CND (mS/cm)	4.091
Dissolved Oxygen (%)	2.9
Dissolved Oxygen (mg/L)	0.30
pH (s.u.)	7.33
ORP (mV)	-76.9
Turbidity (NTU)	1.62
Color	NONE
Odor	NONE
Appearance	CLEAR
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: DKAMATH

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-63 PROJ #: MI001454.0004.00001

DATE : 5/9/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1600	12.71	5.183	3.965	4.8	0.50	7.42	13.8	220	10.8	7.51
1605	12.82	5.180	3.974	5.0	0.52	7.40	8.4	↓	6.51	"
1610	12.59	5.222	3.984	3.0	0.32	7.37	-12.6	↓	3.94	"
1615	12.48	5.266	4.007	2.5	0.27	7.35	-43.9	↓	3.15	"
1620	12.70	5.310	4.065	2.6	0.27	7.34	-72.0	↓	2.55	"
1625	12.69	5.350	4.091	2.9	0.30	7.33	-76.9	↓	1.62	"
1630	COLLECT SAMPLE									

Total Depth of Well:	11.80	
Depth To Water Before Purging:	7.45	
Depth To Water After Purging:	7.51	

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page: 1 of 2

Location: Livonia, MI | Date: 5/10/18

Site/Well No.: MW-66 | Replicate No.: — | Code No.: —

Weather: OVERCAST, 60s | Sampling Time: Begin 1080 End 1085

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	19.02
Depth to Water (ft bmp)	6.94
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	12.08
Casing Diameter/Type	2" PVC
Gallons in Well	1.9328
Gallons Pumped/Bailed Prior to Sampling	~3
Sample Pump Intake Setting (ft bmp)	16.52
Purge Time	begin 0940 end 1030
Pumping Rate (ml/min)	220
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	12.02
SpC (mS/cm)	4.377
CND (mS/cm)	3.291
Dissolved Oxygen (%)	1.3
Dissolved Oxygen (mg/L)	0.14
pH (s.u.)	7.16
ORP (mV)	-99.4
Turbidity (NTU)	8.62
Color	NONE
Odor	NONE
Appearance	CLEAR
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: DICAMATH

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-66 PROJ #: MI001454.0004.00001

DATE : 10th May '18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
0945	11.98	4.117	3.093	10.2	1.09	7.07	-89.6	220	41.7	7.16
0950	11.94	4.151	3.117	5.7	0.61	7.06	-91.0	"	42.5	"
0955	11.87	4.236	3.174	2.2	0.23	7.10	-92.5	"	29.0	"
1000	12.05	4.257	3.205	1.6	0.17	7.12	-99.0	"	24.1	"
1005	11.96	4.289	3.220	1.7	0.19	7.14	-101.5	"	19.9	"
1010	11.98	4.332	3.254	1.4	0.15	7.15	-102.2	"	14.8	"
1015	12.00	4.345	3.267	1.5	0.16	7.16	-101.8	"	12.9	"
1020	11.94	4.370	3.279	1.5	0.16	7.17	-99.8	"	9.75	"
1025	12.02	4.377	3.291	1.3	0.14	7.16	-99.4	↓	8.62	"
1030	COLLECT SAMPLE									

Total Depth of Well:	19.02	
Depth To Water Before Purging:	6.94	
Depth To Water After Purging:	6.95	

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page: 1 of 2

Location: Livonia, MI | Date: 5/10/18

Site/Well No.: MW-65 | Replicate No.: - | Code No.: -

Weather: OVERCAST, 60S | Sampling Time: Begin 1125 End 1130

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	21.04
Depth to Water (ft bmp)	8.41
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	12.63
Casing Diameter/Type	2" PVC
Gallons in Well	2.0208
Gallons Pumped/Bailed Prior to Sampling	~2.5
Sample Pump Intake Setting (ft bmp)	18.04
Purge Time	begin 1045 end 1125
Pumping Rate (ml/min)	220
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	11.75
SpC (mS/cm)	3.667
CND (mS/cm)	2.740
Dissolved Oxygen (%)	1.5
Dissolved Oxygen (mg/L)	0.16
pH (s.u.)	7.13
ORP (mV)	-101.1
Turbidity (NTU)	1.86
Color	NONE
Odor	NONE
Appearance	CLEAR
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: SKAMATH

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

⊗ Readings after dumping turbid water out of flow cell & started repurging

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-65 PROJ #: MI001454.0004.00001

DATE : 5/10/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1050	11.60	3.171	2.359	3.2	0.35	7.24	-11.4	220	25.9	8.74
1055	11.52	3.164	2.349	1.6	0.17	7.17	-12.9	↓	27.3	↓
1105	12.27	3.254	2.464	13.7	1.42	7.26	-64.0	↓	9.93	↓ ⊗
1110	12.37	3.400	2.580	3.6	0.38	7.19	-82.0	↓	4.62	↓
1115	12.53	3.502	2.670	1.7	0.18	7.16	-88.3	↓	1.96	↓
1120	11.75	3.667	2.740	1.5	0.16	7.13	-101.1	↓	1.86	↓
1125	COLLECT SAMPLE									

Total Depth of Well:	21.04	
Depth To Water Before Purging:	8.41	
Depth To Water After Purging:	8.75	

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page: 1 of 2

Location: Livonia, MI | Date: 5/10/18

Site/Well No.: MW-22 | Replicate No.: — | Code No.: —

Weather: OVERCAST, 60s | Sampling Time: Begin 1220 End 1225

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	20.50
Depth to Water (ft bmp)	6.66
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	13.84
Casing Diameter/Type	2" PVC
Gallons in Well	2.2144
Gallons Pumped/Bailed Prior to Sampling	~2.5
Sample Pump Intake Setting (ft bmp)	18.50
Purge Time	begin 1140 end 1200
Pumping Rate (ml/min)	200
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	13.37
SpC (mS/cm)	9.078
CND (mS/cm)	7.063
Dissolved Oxygen (%)	1.1
Dissolved Oxygen (mg/L)	0.11
pH (s.u.)	7.01
ORP (mV)	-100.2
Turbidity (NTU)	1.45
Color	NONE
Odor	NONE
Appearance	CLEAR
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KLAMATH

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-22 PROJ #: MI001454.0004.00001

DATE : 10th May '18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1145	13.51	8.032	6.273	5.3	0.53	7.17	-35.7	200	15.2	6.96
1150	13.33	8.984	6.986	1.8	0.19	7.06	-56.1	↓	3.43	"
1155	13.49	9.092	7.092	2.2	0.22	7.03	-84.9		2.01	"
1200	13.37	9.120	7.095	2.3	0.23	7.03	-92.0		1.74	"
1205	13.37	9.101	7.078	2.0	0.20	7.02	-95.6		1.70	"
1210	13.39	9.078	7.067	2.0	0.20	7.02	-97.8		2.06	"
1215	13.37	9.078	7.063	1.1	0.11	7.01	-100.2	↓	1.45	"
1220	COLLECT SAMPLE									

Total Depth of Well:	20.50	
Depth To Water Before Purging:	6.66	
Depth To Water After Purging:	6.96	

ARCADIS

Water Sampling Log

Project	Ford LTP	Project No.	MI001454.0004.00001	Page	1 of 2
Location	Livonia, MI			Date	5/10/18
Site/Well No.	MW-47	Replicate No.	—	Code No.	—
Weather	SUNNY, 73°F	Sampling Time:	Begin 1700	End	1705

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	19.94
Depth to Water (ft bmp)	9.49
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	10.45
Casing Diameter/Type	2" PVC
Gallons in Well	1.672
Gallons Pumped/Bailed Prior to Sampling	~2
Sample Pump Intake Setting (ft bmp)	17.94
Purge Time	begin 1610 end 1700
Pumping Rate (ml/min)	220
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	15.47
SpC (mS/cm)	7.313
CND (mS/cm)	5.978
Dissolved Oxygen (%)	1.3
Dissolved Oxygen (mg/L)	0.13
pH (s.u.)	7.01
ORP (mV)	-67.7
Turbidity (NTU)	10.8
Color	NONE
Odor	NONE
Appearance	CLEAR
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: DKAMATH

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-47 PROJ #: MI001454.0004.00001

DATE : 5/10/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1615	14.64	6.559	5.272	10.5	1.05	7.21	6.1	220	27.7	9.96
1620	14.10	6.973	5.522	3.2	0.32	7.01	-38.8	↓	60.7	"
1625	14.60	6.869	5.516	6.7	0.66	7.01	-41.3		31.2	"
1630	14.71	7.007	5.636	4.2	0.36	6.99	-50.3		34.2	"
1635	15.13	7.164	5.821	1.9	0.18	6.99	-58.6		35.0	"
1640	15.33	7.166	5.860	2.3	0.26	7.00	-62.1		26.5	"
1645	15.09	7.249	5.865	1.9	0.19	7.00	-67.5		21.2	"
1650	15.36	7.303	5.958	1.5	0.15	7.00	-67.0		13.0	"
1655	15.47	7.313	5.978	1.3	0.13	7.01	-67.7	↓	10.8	"
1700	COLLECT SAMPLE									

Total Depth of Well:	19.94	
Depth To Water Before Purging:		9.49
Depth To Water After Purging:		9.96

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page: 1 of 2

Location: Livonia, MI | Date: 5/11/18

Site/Well No.: MW-15-60D | Replicate No.: — | Code No.: —

Weather: OVERCAST, 40s | Sampling Time: Begin 1050 End 1055

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	99.42
Depth to Water (ft bmp)	20.22
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	79.2
Casing Diameter/Type	2" PVC
Gallons in Well	12.672
Gallons Pumped/Bailed Prior to Sampling	~10gal.
Sample Pump Intake Setting (ft bmp)	96.42
Purge Time	begin 0935 end 1050
Pumping Rate (ml/min)	400
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	14.15
SpC (mS/cm)	0.513
CND (mS/cm)	0.407
Dissolved Oxygen (%)	0.8
Dissolved Oxygen (mg/L)	0.08
pH (s.u.)	8.12
ORP (mV)	-182.5
Turbidity (NTU)	8.97
Color	NONE
Odor	NONE
Appearance	CLEAR
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: DKAMATH

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-15-60D

PROJ #: MI001454.0004.00001

DATE : 5/11/18

LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
0940	13.63	0.550	0.430	16.4	1.66	8.69	48.3	350	62.9	20.17
0945	12.81	0.520	0.399	7.8	0.83	8.32	-28.6	↓	79.8	21.75
1000	13.68	0.512	0.401	1.1	0.11	8.17	-142.8		28.3	22.31
1010	13.78	0.513	0.403	1.0	0.11	8.16	-168.0		18.4	"
1020	14.32	0.514	0.409	1.3	0.13	8.16	-173.4		19.3	"
1030	14.28	0.516	0.410	0.3	0.04	8.14	-179.9		10.9	"
1040	14.15	0.513	0.409	0.8	0.08	8.12	-182.5		8.97	"
1050	COLLECT SAMPLE									
Total Depth of Well:		99.42								
Depth To Water Before Purging:			20.22							
Depth To Water After Purging:			22.31							

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page: 1 of 2

Location: Livonia, MI | Date: 5/14/18

Site/Well No.: MW-44 | Replicate No.: – | Code No.: –

Weather: OVERCAST, RAINY, 60s | Sampling Time: Begin 1155 End 1200

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	20.75
Depth to Water (ft bmp)	7.15
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	13.60
Casing Diameter/Type	2" PVC
Gallons in Well	2.176
Gallons Pumped/Bailed Prior to Sampling	~2
Sample Pump Intake Setting (ft bmp)	18.75
Purge Time	begin 1120 end 1155
Pumping Rate (ml/min)	220
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	12.48
SpC (mS/cm)	6.021
CND (mS/cm)	4.581
Dissolved Oxygen (%)	2.7
Dissolved Oxygen (mg/L)	0.28
pH (s.u.)	7.33
ORP (mV)	-123.3
Turbidity (NTU)	1.71
Color	NONE
Odor	NONE
Appearance	CLEAR
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: DICAMATH

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-44 PROJ #: MI001454.0004.00001

DATE : 6/14/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1125	12.67	6.071	4.644	20.0	2.08	7.52	-47.5	220	2.71	7.34
1130	12.47	5.977	4.545	5.9	0.62	7.36	-99.1	↓	2.09	"
1135	12.45	5.980	4.547	5.1	0.53	7.33	-107.9	↓	1.85	"
1140	12.44	5.999	4.560	4.3	0.45	7.32	-114.2	↓	1.83	"
1145	12.44	6.022	4.578	3.2	0.34	7.33	-119.4	↓	1.83	7.31
1150	12.48	6.021	4.581	2.7	0.28	7.33	-123.3	↓	1.71	"
1155	COLLECT SAMPLE									
Total Depth of Well:		20.75								
Depth To Water Before Purging:		7.15								
Depth To Water After Purging:		7.31								

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00002 | Page: 1 of 2

Location: Livonia, MI | Date: 5/16/18

Site/Well No.: MW-67 | Replicate No.: — | Code No.: —

Weather: SUNNY, 60s | Sampling Time: Begin 1400 End 1405

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	14.01
Depth to Water (ft bmp)	8.96
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	5.05
Casing Diameter/Type	2" PVC
Gallons in Well	0.808
Gallons Pumped/Bailed Prior to Sampling	~2
Sample Pump Intake Setting (ft bmp)	12.01
Purge Time	begin 1325 end 1400
Pumping Rate (ml/min)	220
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	12.38
SpC (mS/cm)	6.367
CND (mS/cm)	4.834
Dissolved Oxygen (%)	1.6
Dissolved Oxygen (mg/L)	0.16
pH (s.u.)	6.73
ORP (mV)	-13.9
Turbidity (NTU)	2.16
Color	NONE
Odor	NONE
Appearance	CLEAR
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, PCE, TCE, VC	40mL voa	3	HCL

Sampling Personnel: NICAMATH

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-67 PROJ #: MI001454.0004.00002

DATE : 5/14/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1330	11.87	6.109	4.578	3.7	0.39	6.88	-2.8	220	4.30	8.93
1340	13.01	6.324	4.876	2.0	0.21	6.73	-17.6	↓	2.20	"
1345	12.47	6.366	4.839	1.8	0.18	6.72	-15.5	↓	3.05	"
1350	12.32	6.366	4.823	1.3	0.14	6.71	-15.2	↓	2.90	"
1355	12.38	6.367	4.834	1.6	0.16	6.73	-13.9	↓	2.16	"
1400	COLLECT SAMPLE									
Total Depth of Well:		14.01								
Depth To Water Before Purging:		8.96								
Depth To Water After Purging:		8.93								

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00002 | Page: 1 of 2

Location: Livonia, MI | Date: 5/14/18

Site/Well No.: MW-29 | Replicate No.: - | Code No.: -

Weather: SUNNY, 70s | Sampling Time: Begin 1605 End 1610

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	14.80
Depth to Water (ft bmp)	4.41
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	10.39
Casing Diameter/Type	2" PVC
Gallons in Well	1.6624
Gallons Pumped/Bailed Prior to Sampling	~2
Sample Pump Intake Setting (ft bmp)	12.80
Purge Time	begin 1530 end 1600
Pumping Rate (ml/min)	220
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	11.86
SpC (mS/cm)	14.63
CND (mS/cm)	10.96
Dissolved Oxygen (%)	1.9
Dissolved Oxygen (mg/L)	0.19
pH (s.u.)	6.99
ORP (mV)	-57.4
Turbidity (NTU)	5.22
Color	NONE
Odor	NONE
Appearance	CLEAR
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, PCE, TCE, VC	40mL voa	3	HCL

Sampling Personnel: DKAMATH

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-29 PROJ #: MI001454.0004.00002

DATE : 5/14/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1535	11.98	15.68	11.78	5.3	0.54	7.33	-49.4	220	6.58	4.36
1540	11.95	15.37	11.53	1.5	0.15	7.15	-59.8	↓	6.08	"
1545	11.88	15.11	11.32	1.3	0.13	7.10	-60.0		5.91	"
1550	11.86	14.74	11.04	1.6	0.16	7.05	-58.8		6.08	"
1555	11.84	14.65	10.97	1.6	0.17	7.02	-58.0		5.22	"
1600	11.86	14.63	10.96	1.9	0.19	6.99	-57.4	↓	5.22	
1605	COLLECT SAMPLE									
Total Depth of Well:		14.80								
Depth To Water Before Purging:			4.41							
Depth To Water After Purging:			4.36							

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5/14/18

Site/Well No.: MW-19 | Replicate No.: — | Code No.: —

Weather: SUNNY, 70s | Sampling Time: Begin 1720 End 1725

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	19.98
Depth to Water (ft bmp)	5.54
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	14.44
Casing Diameter/Type	2" PVC
Gallons in Well	2.3104
Gallons Pumped/Bailed Prior to Sampling	~2.5
Sample Pump Intake Setting (ft bmp)	17.98
Purge Time	begin 1645 end 1720
Pumping Rate (ml/min)	220
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	14.12
SpC (mS/cm)	9.292
CND (mS/cm)	7.366
Dissolved Oxygen (%)	1.0
Dissolved Oxygen (mg/L)	0.10
pH (s.u.)	6.81
ORP (mV)	-102.6
Turbidity (NTU)	4.24
Color	NONE
Odor	NONE
Appearance	CLEAR
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: NCAMATH

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-19 PROJ #: MI001454.0004.00001

DATE : 5/14/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1650	14.47	9.521	7.602	3.1	0.30	6.93	-92.2	220	16.3	5.56
1655	14.23	9.430	7.483	1.6	0.16	6.89	-96.2	↓	10.9	"
1700	14.30	9.336	7.428	1.4	0.14	6.83	-100.3	↓	5.16	"
1705	14.25	9.371	7.445	1.4	0.14	6.82	-101.5	↓	4.79	"
1710	14.12	9.363	7.411	1.2	0.12	6.82	-102.2	↓	4.24	"
1715	14.12	9.292	7.366	1.0	0.10	6.81	-102.6	↓	4.24	"
1720	COLLECT SAMPLE									

Total Depth of Well:	19.98	
Depth To Water Before Purging:	5.54	
Depth To Water After Purging:	5.56	

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page: 1 of 2

Location: Livonia, MI | Date: 5/15/18

Site/Well No.: MW-26 | Replicate No.: — | Code No.: —

Weather: OVERCAST, 60S | Sampling Time: Begin 0915 End 0920

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	13.90
Depth to Water (ft bmp)	5.24
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	8.66
Casing Diameter/Type	2" PVC
Gallons in Well	1.3856
Gallons Pumped/Bailed Prior to Sampling	~2
Sample Pump Intake Setting (ft bmp)	13.90
Purge Time	begin 0840 end 0915
Pumping Rate (ml/min)	220
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	11.32
SpC (mS/cm)	1.534
CND (mS/cm)	1.133
Dissolved Oxygen (%)	1.5
Dissolved Oxygen (mg/L)	0.16
pH (s.u.)	7.26
ORP (mV)	14.2
Turbidity (NTU)	DK ~~NOT~~ 7.92
Color	NONE
Odor	NONE
Appearance	CLEAR
Sampling Method	Low Flow

Remarks: VERY, VERY FEW BLACK COLORED SUSPENDED PARTICLES BUT MUCH LESSER THAN OBSERVED IN PREV. SAMPLING ACTIVITIES ~~PARTICLES NOT VISIBLE AFTER 20 MIN. OF PURGING~~ DK STILL VISIBLE

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: D/CAMATH

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-26 PROJ #: MI001454.0004.00001

DATE : 5/15/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
0845	11.56	1.877	1.395	7.3	0.79	7.67	77.5	220	39.0	4.68
0850	11.31	1.611	1.190	3.0	0.32	7.40	56.8	↓	15.7	"
0855	11.41	1.558	1.153	2.6	0.29	7.37	43.8		12.1	"
0900	11.46	1.547	1.147	1.8	0.20	7.31	30.4		9.85	"
0905	11.46	1.536	1.139	1.7	0.18	7.30	20.1		9.33	"
0910	11.32	1.534	1.133	1.5	0.16	7.26	14.2	↓	7.92	"
0915	COLLECT SAMPLE									

Total Depth of Well:	13.90
Depth To Water Before Purging:	5.24
Depth To Water After Purging:	~~4.68~~ 4.68

DW

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00002 | Page: 1 of 2

Location: Livonia, MI | Date: 5/15/18

Site/Well No.: MW-15-61D | Replicate No.: – | Code No.: –

Weather: OVERCAST, 60S | Sampling Time: Begin 1400 End 1405

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	94.15
Depth to Water (ft bmp)	25.36
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	68.79
Casing Diameter/Type	2" PVC
Gallons in Well	11.0064
Gallons Pumped/Bailed Prior to Sampling	500
Sample Pump Intake Setting (ft bmp)	~22.36
Purge Time	begin 1300 end 1400
Pumping Rate (ml/min)	~500
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	17.23
SpC (mS/cm)	0.943
CND (mS/cm)	0.803
Dissolved Oxygen (%)	0.7
Dissolved Oxygen (mg/L)	0.06
pH (s.u.)	7.39
ORP (mV)	-117.4
Turbidity (NTU)	22.4
Color	NONE
Odor	NONE
Appearance	CLEAR BUT TURBID
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, PCE, TCE, VC	40mL voa	3	HCL

Sampling Personnel: DKAMATH

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

⊗ DTW NOT CONTINUOSLY MONITORED. UNABLE TO MONITOR BECAUSE WLM CAN'T ENTER WITHOUT ENTANGLING

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-15-61D PROJ #: MI001454.0004.00002

DATE : 5/15/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1305	15.43	0.951	0.777	25.6	2.55	7.67	-95.4	~500	17.2	25.36 ⊗
1315	16.60	0.940	0.789	1.7	0.16	7.51	-110.7		17.6	"
1320	16.23	0.941	0.783	1.7	0.17	7.47	-116.0		15.2	"
1325	18.75	0.945	0.833	1.5	0.14	7.48	-116.0		16.0	"
1330	18.40	0.933	0.815	1.2	0.11	7.43	-115.2		19.4	"
1340	17.24	0.939	0.800	1.2	0.11	7.42	-118.6		23.1	"
1345	17.45	0.938	0.802	1.6	0.15	7.43	-119.2		22.8	"
1350	17.38	0.935	0.799	1.7	0.16	7.42	-119.0		20.4	
1355	~~COLLECT QA~~								~~22.4~~	
~~1400~~	~~17.23 0.944~~									
1400	COLLECT SAMPLE									
	17.23	0.943	0.803	0.7	0.06	7.39	-117.4		22.4	25.36
Total Depth of Well:		94.15								
Depth To Water Before Purging:		25.36								
Depth To Water After Purging:		25.36								

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5/11/18

Site/Well No.: MW-15-59D | Replicate No.: — | Code No.: —

Weather: OVERCAST, 40s | Sampling Time: Begin _____ End _____

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	100.01
Depth to Water (ft bmp)	
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	
Casing Diameter/Type	2" PVC
Gallons in Well	
Gallons Pumped/Bailed Prior to Sampling	
Sample Pump Intake Setting (ft bmp)	
Purge Time	begin 1210 end _____
Pumping Rate (ml/min)	440
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	
SpC (mS/cm)	
CND (mS/cm)	
Dissolved Oxygen (%)	NA
Dissolved Oxygen (mg/L)	
pH (s.u.)	
ORP (mV)	
Turbidity (NTU)	
Color	
Odor	
Appearance	
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: DKAMATH

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-15 59D

PROJ #: MI001454.0004.00001

DATE : 5/11/18

LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1220	13.45	0.428	0.333	0.7	0.07	8.25	-197.2	440	23.7	
1225	13.39	0.426	0.332	0.4	0.04	8.23	-197.4		21.4	
1235	STOPPED PURGING BC SUBMERSIBLE PUMP STOPPED FUNCTIONING									
1245										
Total Depth of Well:										
Depth To Water Before Purging:										
Depth To Water After Purging:										

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00002 | Page: 1 of 2

Location: Livonia, MI | Date: 5/15/18

Site/Well No.: MW-15-59D | Replicate No.: — | Code No.: —

Weather: SUNNY, 70s | Sampling Time: Begin 1645 End 1650

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	100.01
Depth to Water (ft bmp)	23.48
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	76.53
Casing Diameter/Type	2" PVC
Gallons in Well	12.2448
Gallons Pumped/Bailed Prior to Sampling	~10
Sample Pump Intake Setting (ft bmp)	96.01
Purge Time	begin 1540 end 1645
Pumping Rate (ml/min)	500
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	15.96
SpC (mS/cm)	0.423
CND (mS/cm)	0.350
Dissolved Oxygen (%)	0.3
Dissolved Oxygen (mg/L)	0.03
pH (s.u.)	8.11
ORP (mV)	-145.7
Turbidity (NTU)	70.7
Color	NONE
Odor	NONE
Appearance	CLEAR
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, PCE, TCE, VC	40mL voa	3	HCL

Sampling Personnel: DKAMATH

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-1S(91) PROJ #: MI001454.0004.00002

DATE : 5/15/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1545	15.31	0.434	0.354	3.7	0.37	7.66	-32.1	~500	140	23.48
1550	15.99	0.434	0.359	1.4	0.14	7.98	-70.0	↓	160	↓
1555	17.34	0.434	0.370	4.8	0.46	8.17	-91.7		152	
1600	15.39	0.434	0.354	1.2	0.12	8.05	-90.9		125	
1605	15.37	0.428	0.349	1.0	0.10	8.12	-114.8		115	
1610	15.19	0.427	0.347	0.8	0.08	8.09	-122.3		105	
1615	14.76	0.426	0.343	0.6	0.06	8.10	-131.0		120	
1620	14.64	0.425	0.341	0.6	0.06	7.96	-127.2		105	
1635	14.90	0.425	0.343	0.4	0.04	8.06	-137.3		77.0	
1640	15.96	0.423	0.350	0.3	0.03	8.11	-145.7	↓	70.7	↓
1645	COLLECT	SAMPLE								

Total Depth of Well:	100.01	
Depth To Water Before Purging:	23.48	
Depth To Water After Purging:	23.48	

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-8-18

Site/Well No.: MW-32 | Replicate No.: — | Code No.: —

Weather: 72°F CLEAR | Sampling Time: Begin 1126 End 1226

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	22.83
Depth to Water (ft bmp)	9.04
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	13.79
Casing Diameter/Type	2" PVC
Gallons in Well	2.21
Gallons Pumped/Bailed Prior to Sampling	2.38
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1126 end 1226
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	12.19
SpC (mS/cm)	5.013
CND (mS/cm)	—
Dissolved Oxygen (%)	2.4
Dissolved Oxygen (mg/L)	0.27
pH (s.u.)	10.62
ORP (mV)	-56.6
Turbidity (NTU)	9.7
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KAIAN 3216GS

Well Casing Volumes

Gal./Ft.					
0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	
1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47	

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-32 PROJ #: MI001454.0004.00001

DATE : 5-8-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1126	11.91	5.135	-	14.0	1.46	8.73	88.8	150	189	9.04
1131	11.88	5.136	-	8.6	0.92	8.71	89.0	150	90.9	9.36
1136	12.06	5.178	-	5.2	0.56	9.34	54.6	150	54.4	9.36
1141	12.08	5.202	-	4.7	0.50	9.77	25.8	150	46.0	9.36
1146	12.08	5.193	-	3.9	0.40	10.04	2.1	150	37.1	9.36
1151	12.23	5.163	-	3.3	0.36	10.13	-8.2	150	34.2	9.36
1156	12.02	5.133	-	3.0	0.32	10.29	-23.9	150	28.1	9.36
1201	12.00	5.110	-	2.8	0.31	10.40	-35.4	150	23.7	9.36
1206	12.07	5.080	-	2.6	0.28	10.45	-42.6	150	19.8	9.36
1211	12.13	5.072	-	2.8	0.30	10.48	-48.3	150	16.1	9.36
1216	12.25	5.035	-	2.7	0.29	10.54	-51.2	150	13.0	9.36
1221	12.26	5.013	-	2.9	0.31	10.59	-54.1	150	11.8	9.36
1226	12.19	5.013	-	2.4	0.27	10.62	-56.6	150	9.7	9.36
Total Depth of Well:		22.83								
Depth To Water Before Purging:				9.04						
Depth To Water After Purging:				9.36						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page: 1 of 2

Location: Livonia, MI | Date: 5-8-18

Site/Well No.: MW-38 | Replicate No.: — | Code No.: —

Weather: 45°F CLEAR | Sampling Time: Begin 740 End 840

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	19.5
Depth to Water (ft bmp)	~~7.86~~ 5-8-17 7.28
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	12.22
Casing Diameter/Type	2" PVC
Gallons in Well	1.96
Gallons Pumped/Bailed Prior to Sampling	2.38
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 740 end 840
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	11.16
SpC (mS/cm)	2.682
CND (mS/cm)	—
Dissolved Oxygen (%)	3.2
Dissolved Oxygen (mg/L)	0.34
pH (s.u.)	10.98
ORP (mV)	-73.7
Turbidity (NTU)	23.1
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-38 PROJ #: MI001454.0004.00001

DATE : 5-8-17 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
740	10.55	2.790	-	11.6	1.31	12.08	-8.7	150	342	7.28
745	10.57	2.781	-	8.8	0.98	11.83	-70.6	~~+36~~ 150	136	7.86
750	10.66	2.779	-	6.6	0.74	11.93	-44.0	150	80.9	7.86
755	10.68	2.783	-	6.4	0.71	11.81	-54.2	150	64.9	7.86
800	10.67	2.742	-	6.2	0.69	11.67	-60.6	150	50.7	7.86
805	10.64	2.768	-	5.3	0.59	11.57	-66.2	150	47.1	7.86
810	10.65	2.734	-	4.5	0.48	11.42	-68.6	150	42.7	7.86
815	10.66	2.717	-	4.2	0.46	11.32	-69.7	150	36.3	7.86
820	10.70	2.714	-	3.9	0.43	11.22	-71.0	150	30.4	7.86
825	10.72	2.703	-	3.6	0.40	11.15	-71.9	150	26.8	7.86
830	10.86	2.688	-	3.5	0.38	11.09	-73.3	150	25.3	7.86
835	11.15	2.683	-	3.2	0.35	10.99	-72.9	150	24.9	7.86
840	11.16	2.682	-	3.2	0.34	10.98	-73.7	150	23.1	7.86
Total Depth of Well:		19.5								
Depth To Water Before Purging:				7.28						
Depth To Water After Purging:				7.86						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-9-18

Site/Well No.: MW-56 | Replicate No.: — | Code No.: —

Weather: 80°F CLOUDY/RAIN | Sampling Time: Begin 1606 End 1640

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	26.44
Depth to Water (ft bmp)	6.62
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	19.82
Casing Diameter/Type	2" PVC
Gallons in Well	3.17
Gallons Pumped/Bailed Prior to Sampling	1.59
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1600 end 1640
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	12.69
SpC (mS/cm)	8.918
CND (mS/cm)	—
Dissolved Oxygen (%)	1.3
Dissolved Oxygen (mg/L)	0.13
pH (s.u.)	10.86
ORP (mV)	-80.1
Turbidity (NTU)	29.5
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-56 PROJ #: MI001454.0004.00001

DATE : 5-9-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1600	16.24	3.455	–	122.1	12.38	8.91	70.7	150	55.3	6.62
1605	12.79	9.182	–	6.8	0.68	8.94	59.3	150	33.2	6.92
1610	12.76	9.247	–	3.6	0.37	9.40	34.5	150	34.5	6.95
1615	12.74	9.248	–	3.1	0.32	10.87	-46.1	150	29.5	6.95
1620	12.74	9.086	–	2.3	0.23	10.99	-67.0	150	32.3	6.95
1625	12.68	9.049	–	1.8	0.19	10.92	-72.9	150	30.2	6.95
1630	12.74	8.987	–	2.0	0.21	10.91	-75.4	150	32.3	6.95
1635	12.71	8.950	–	1.5	0.15	10.88	-78.5	150	29.5	6.95
1640	12.69	8.918	–	1.3	0.13	10.86	-80.1	150	29.5	6.95
Total Depth of Well:		26.44								
Depth To Water Before Purging:				6.62						
Depth To Water After Purging:				6.95						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-9-18

Site/Well No.: MW-57 | Replicate No.: — | Code No.: —

Weather: 74°F OVERCAST/CLOUDY | Sampling Time: Begin 1455 End 1545

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	21.73
Depth to Water (ft bmp)	5.80
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	~~16.53~~ 16.53
Casing Diameter/Type	(KB) 5-9-18 2" PVC
Gallons in Well	2.65
Gallons Pumped/Bailed Prior to Sampling	1.98
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1455 end 1545
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	13.06
SpC (mS/cm)	3.232
CND (mS/cm)	—
Dissolved Oxygen (%)	1.7
Dissolved Oxygen (mg/L)	0.18
pH (s.u.)	9.60
ORP (mV)	32.0
Turbidity (NTU)	6.54
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BB1665

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-57 PROJ #: MI001454.0004.00001

DATE : 5-9-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1455	13.80	2.716	–	29.5	2.92	10.23	11.4	150	58.0	5.80
1500	13.46	2.673	–	10.7	1.09	10.12	17.7	150	48.5	6.54
1505	13.51	2.657	–	4.2	0.42	9.97	26.4	150	46.8	6.59
1510	13.31	2.784	–	2.8	0.29	9.88	31.6	150	24.9	6.59
1515	13.37	2.893	–	2.6	0.27	9.76	37.0	150	23.1	6.59
1520	13.29	3.019	–	1.9	0.19	9.65	40.5	150	20.4	6.59
1525	13.20	3.073	–	1.7	0.17	9.60	41.0	150	18.1	6.59
1530	13.19	3.097	–	1.8	0.19	9.61	38.9	150	15.2	6.59
1535	13.12	3.189	–	1.4	0.15	9.58	37.0	150	12.4	6.59
1540	13.07	3.218	–	1.2	0.13	9.60	33.3	150	7.27	6.59
1545	13.06	3.232	–	1.7	0.18	9.60	32.0	150	6.54	6.59
Total Depth of Well:		21.73								
Depth To Water Before Purging:				5.80						
Depth To Water After Purging:				6.59						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page: 1 of 2

Location: Livonia, MI | Date: 5-9-18

Site/Well No.: MW-54 | Replicate No.: — | Code No.: —

Weather: 79°F OVERCAST | Sampling Time: Begin 1407 End 1442

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	20.82
Depth to Water (ft bmp)	6.09
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	14.73
Casing Diameter/Type	2" PVC
Gallons in Well	2.36
Gallons Pumped/Bailed Prior to Sampling	1.39
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1407 end 1442
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	10.98
SpC (mS/cm)	5.697
CND (mS/cm)	—
Dissolved Oxygen (%)	2.0
Dissolved Oxygen (mg/L)	0.22
pH (s.u.)	10.99
ORP (mV)	-52.3
Turbidity (NTU)	1.03
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-54 PROJ #: MI001454.0004.00001

DATE : 5-9-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1407	10.73	0.430	~~87.4~~ (KB 5-9-18)	86.0	9.51	10.09	54.8	150	36.8	6.09
1412	10.45	0.412	—	77.7	8.64	10.00	58.7	150	27.9	6.46
1417	10.62	1.322	-	70.0	~~8.64~~ (KB 5-9-18) 7.62	8.72	95.8	150	18.0	6.49
1422	10.99	5.564	-	8.0	0.83	11.08	-31.8	150	2.66	6.99
1427	11.14	5.610	-	3.8	0.42	11.19	-48.9	150	1.85	6.49
1432	11.03	5.639	-	2.8	0.30	11.13	-52.5	150	1.49	6.49
1437	10.97	5.666	-	2.4	0.26	11.06	-53.8	150	1.22	6.49
1442	10.98	5.697	-	2.0	0.22	10.99	-52.3	150	1.03	6.49
Total Depth of Well:		20.82								
Depth To Water Before Purging:				6.09						
Depth To Water After Purging:				6.49						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-9-18

Site/Well No.: MW-53 | Replicate No.: — | Code No.: —

Weather: 70°F OVERCAST | Sampling Time: Begin 1312 End 1352

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	20.81
Depth to Water (ft bmp)	6.08
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	14.73
Casing Diameter/Type	2" PVC
Gallons in Well	2.36
Gallons Pumped/Bailed Prior to Sampling	1.59
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1312 end 1352
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	12.15
SpC (mS/cm)	3.716
CND (mS/cm)	—
Dissolved Oxygen (%)	3.6
Dissolved Oxygen (mg/L)	0.38
pH (s.u.)	9.51
ORP (mV)	47.9
Turbidity (NTU)	8.4
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : mw-53 PROJ #: MI001454.0004.00001

DATE : 5-9-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1312	12.50	3.694	–	23.6	2.41	10.32	42.9	150	35.1	6.08
1317	12.21	3.663	–	11.7	1.22	10.32	39.0	150	30.6	6.56
1322	12.19	3.635	–	7.0	0.72	10.24	36.3	150	24.8	6.57
1327	12.30	3.605	–	5.3	0.56	10.27	28.0	150	26.6	6.58
1332	12.26	3.583	–	4.8	0.51	9.89	39.0	150	19.8	6.58
1337	12.17	3.609	–	4.6	0.48	9.70	44.0	150	16.4	6.58
1342	12.06	3.648	–	4.3	0.46	9.65	43.8	150	12.4	6.58
1347	12.13	3.678	–	3.5	0.36	9.53	47.6	150	10.9	6.58
1352	12.15	3.716	–	3.6	0.38	9.51	47.9	150	8.4	6.58
Total Depth of Well:		20.81								
Depth To Water Before Purging:				6.08						
Depth To Water After Purging:				6.58						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-9-18

Site/Well No.: MW-52 | Replicate No.: — | Code No.: —

Weather: 70°F OVERCAST | Sampling Time: Begin 1025 End 1100

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	19.76
Depth to Water (ft bmp)	6.57
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	13.19
Casing Diameter/Type	2" PVC
Gallons in Well	2.11
Gallons Pumped/Bailed Prior to Sampling	
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1025 end 1100
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

(KB) 5-9-18

Temperature (°C)	~~12.67~~ 12.74
SpC (mS/cm)	5.168
CND (mS/cm)	—
Dissolved Oxygen (%)	2.7
Dissolved Oxygen (mg/L)	0.28
pH (s.u.)	10.95
ORP (mV)	−80.7
Turbidity (NTU)	9.8
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-52 PROJ #: MI001454.0004.00001

DATE : 5-9-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1025	12.67	5.286	-	15.0	1.43	11.36	-67.9	150	70.4	6.57
1030	12.67	5.288	-	6.8	0.71	11.28	-69.7	150	40.6	6.70
1035	12.71	5.275	-	4.5	0.46	11.14	-74.0	150	29.9	6.70
1040	12.56	5.254	-	3.7	0.38	11.12	-75.2	150	21.3	6.70
1045	12.67	5.212	-	3.1	0.33	11.06	-78.0	150	16.1	6.70
1050	12.56	5.186	-	2.9	0.30	11.03	-79.6	150	13.4	6.70
1055	12.69	5.167	-	2.7	0.28	10.99	-80.6	150	13.2	6.70
1100	12.74	5.160	-	2.7	0.28	10.95	-80.7	150	9.8	6.70
Total Depth of Well:		19.76								
Depth To Water Before Purging:				6.57						
Depth To Water After Purging:				6.70						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-9-18

Site/Well No.: MW-43 | Replicate No.: — | Code No.: —

Weather: 58°F OVERCAST | Sampling Time: Begin 908 End 943

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	21.76
Depth to Water (ft bmp)	6.78
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	14.98
Casing Diameter/Type	2" PVC
Gallons in Well	2.40
Gallons Pumped/Bailed Prior to Sampling	1.39
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 908 end 943
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	12.62
SpC (mS/cm)	4.687
CND (mS/cm)	—
Dissolved Oxygen (%)	1.5
Dissolved Oxygen (mg/L)	0.17
pH (s.u.)	11.44
ORP (mV)	-111.1
Turbidity (NTU)	16.5
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.				
0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-43 PROJ #: MI001454.0004.00001

DATE : 5-9-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
908	12.68	4.678	–	35.2	3.54	11.27	-91.9	150	64.9	6.78
913	12.59	4.722	–	11.0	1.09	11.34	-96.0	150	27.4	6.95
918	12.67	4.715	–	4.1	0.43	11.38	-100.5	150	16.2	6.96
923	12.46	4.696	–	3.2	0.33	11.42	-102.6	150	15.2	6.99
928	12.65	4.686	–	2.6	0.27	11.47	-107.5	150	19.8	6.99
933	12.67	4.676	–	2.5	0.26	11.44	-108.2	150	16.3	6.99
938	12.52	4.691	–	2.3	0.25	11.45	-109.7	150	16.7	6.99
943	12.62	4.687	–	1.5	0.17	11.44	-111.1	150	16.5	6.99
Total Depth of Well:		21.76								
Depth To Water Before Purging:				6.78						
Depth To Water After Purging:				6.99						

ARCADIS

Water Sampling Log

Project	Ford LTP	Project No.	MI001454.0004.00001	Page	1 of 2
Location	Livonia, MI			Date	5-9-18
Site/Well No.	MW-35	Replicate No.	—	Code No.	—
Weather	50 °F OVERCAST	Sampling Time:	Begin 748	End	848

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	24.40
Depth to Water (ft bmp)	7.03
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	17.37
Casing Diameter/Type	2" PVC
Gallons in Well	2.78
Gallons Pumped/Bailed Prior to Sampling	2.38
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 748 end 848
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	12.97
SpC (mS/cm)	2.794
CND (mS/cm)	—
Dissolved Oxygen (%)	2.0
Dissolved Oxygen (mg/L)	0.21
pH (s.u.)	11.68
ORP (mV)	-115.1
Turbidity (NTU)	41.9
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-35 PROJ #: MI001454.0004.00001

DATE : 5-9-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW (KB) 5-9-18
748	11.98	2.790	–	11.2	1.18	10.63	-61.3	150	38.2	~~7~~ 7.03
753	12.06	2.777	–	7.2	0.77	10.77	-71.3	150	60.5	7.91
758	12.16	2.764	–	4.5	0.48	11.04	-90.3	150	166	7.97
803	12.18	2.759	–	3.4	0.36	11.12	-96.1	150	99.9	7.99
808	12.34	2.751	–	2.7	0.29	11.23	-102.7	150	81.2	8.02
813	12.36	2.770	–	2.5	0.26	11.28	-104.0	150	75.6	8.05
818	12.65	2.749	–	2.7	0.28	11.43	-111.6	150	70.2	8.09
823	12.58	2.769	–	2.5	0.27	11.49	-112.2	150	68.6	8.10
828	12.73	2.744	–	2.3	0.24	11.55	-114.0	150	64.5	8.12
833	12.78	2.748	–	2.2	0.23	11.57	-113.3	150	58.1	8.14
838	12.83	2.742	–	2.0	0.21	11.59	-112.9	150	52.6	8.15
843	12.87	2.751	–	2.0	0.21	11.67	-115.5	150	47.2	8.17
848	12.97	2.744	–	2.0	0.21	11.68	-115.1	150	41.9	8.19
Total Depth of Well:		24.40								
Depth To Water Before Purging:				7.03						
Depth To Water After Purging:				8.19						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-9-18

Site/Well No.: MW-92 | Replicate No.: – | Code No.: –

Weather: 50°F CLEAR | Sampling Time: Begin 631 End 731

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	20.43
Depth to Water (ft bmp)	7.83
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	12.6
Casing Diameter/Type	2" PVC
Gallons in Well	2.016
Gallons Pumped/Bailed Prior to Sampling	2.38
Sample Pump Intake Setting (ft bmp)	–
Purge Time	begin 631 end 731
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	11.81
SpC (mS/cm)	3.383
CND (mS/cm)	–
Dissolved Oxygen (%)	3.0
Dissolved Oxygen (mg/L)	0.33
pH (s.u.)	10.69
ORP (mV)	-92.8
Turbidity (NTU)	22.4
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	–

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.				
0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-42 PROJ #: MI001454.0004.00001

DATE : 5-9-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
631	11.61	3.394	-	12.0	1.29	12.24	-67.8	150	79.9	7.83
636	11.61	3.392	-	10.2	1.08	12.09	-67.0	150	72.1	8.02
641	11.60	3.382	-	8.2	0.87	11.57	-71.1	150	65.7	8.02
646	11.65	3.377	-	6.6	0.71	11.36	-73.5	150	63.2	8.02
651	11.64	3.378	-	5.5	0.59	11.21	-77.3	150	60.0	8.02
656	11.67	3.378	-	4.5	0.47	11.07	-81.2	150	57.2	8.02
701	11.67	3.380	-	3.9	0.42	10.99	-85.2	150	53.5	8.02
706	11.73	3.380	-	3.6	0.39	10.84	-87.1	150	41.1	8.02
711	11.77	3.381	-	3.4	0.37	10.85	-90.9	150	33.3	8.02
716	11.79	3.384	-	3.0	0.32	10.80	-91.8	150	25.9	8.02
721	11.80	3.383	-	3.3	0.34	10.76	-92.4	150	24.5	8.02
726	11.77	3.386	-	2.6	0.27	10.72	-92.8	150	23.6	8.02
731	11.81	3.383	-	3.6	0.33	10.69	-92.8	150	22.4	8.02
Total Depth of Well:		20.43								
Depth To Water Before Purging:					7.83					
Depth To Water After Purging:					8.02					

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-10-18

Site/Well No.: MW-37 | Replicate No.: ~ | Code No.: ~

Weather: 60°F CLOUDY | Sampling Time: Begin 634 End 734

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	22.76
Depth to Water (ft bmp)	7.02
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	15.74
Casing Diameter/Type	2" PVC
Gallons in Well	2.52
Gallons Pumped/Bailed Prior to Sampling	2.38
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 634 end 5-10-18 734
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	11.67
SpC (mS/cm)	2.085
CND (mS/cm)	—
Dissolved Oxygen (%)	2.8
Dissolved Oxygen (mg/L)	0.31
pH (s.u.)	12.04
ORP (mV)	-41.3
Turbidity (NTU)	6.01
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-37 PROJ #: MI001454.0004.00001

DATE : 5-10-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
634	11.24	2.482	-	15.4	1.66	8.21	181.5	150	57.3	7.02
639	11.31	2.464	-	11.3	1.21	8.40	175.6	150	46.0	7.27
644	11.32	2.452	-	7.4	0.81	8.79	162.1	150	40.6	7.27
649	11.39	2.424	-	6.2	0.68	9.59	130.0	150	29.0	7.27
654	11.47	2.377	-	5.4	0.58	10.83	75.1	150	19.9	7.27
659	11.52	2.310	-	4.9	0.53	11.72	30.0	150	16.2	7.27
704	11.52	2.254	-	4.4	0.48	11.95	8.6	150	14.7	7.27
709	11.53	2.214	-	3.9	0.43	11.82	3.4	150	13.6	7.27
714	11.61	2.196	-	3.7	0.40	11.76	-3.9	150	13.1	7.27
719	11.73	2.143	-	3.2	0.34	11.96	-24.8	150	8.19	7.27
724	11.66	2.130	-	3.0	0.30	12.05	-32.5	150	7.67	7.27
729	11.64	2.103	-	2.9	0.31	12.09	-39.7	150	6.98	7.27
734	11.67	2.085	-	2.8	0.31	12.04	-41.3	150	6.01	7.27
Total Depth of Well:		22.76								
Depth To Water Before Purging:				7.02						
Depth To Water After Purging:				7.27						

ARCADIS

Water Sampling Log

KB 5-10-18

Project	Ford LTP	Project No.	MI001454.0004.00002	Page	1 of 2
Location	Livonia, MI			Date	5-10-18
Site/Well No.	MW-4	Replicate No.	—	Code No.	—
Weather	INSIDE	Sampling Time:	Begin 1451	End	1521

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	20.12
Depth to Water (ft bmp)	7.60
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	12.52
Casing Diameter/Type	2" PVC
Gallons in Well	1.96
Gallons Pumped/Bailed Prior to Sampling	1.19
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1451 end 1521
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	21.52
SpC (mS/cm)	9.616
CND (mS/cm)	—
Dissolved Oxygen (%)	2.9
Dissolved Oxygen (mg/L)	0.27
pH (s.u.)	10.08
ORP (mV)	-87.1
Turbidity (NTU)	2.03
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
~~1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, PCE, TCE, VC~~ VOCs KB 5-10-18	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

(KB) 5-10-18 PAGE 2 OF 2

WELL : MW-4 PROJ #: MI001454.0004.00002

DATE : 5-10-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1451	21.68	9.672	–	16.1	1.36	9.30	7.6	150	3.00	7.60
1456	21.63	9.635	–	10.7	0.91	9.21	0.2	150	3.10	7.65
1501	21.56	9.598	–	6.5	0.57	9.26	-16.4	150	2.58	7.72
1506	21.52	9.662	–	5.2	0.44	9.88	-61.1	150	2.29	7.72
1511	21.51	9.674	–	4.0	0.34	10.29	-88.6	150	2.21	7.72
1516	21.52	9.662	–	3.5	0.30	10.14	-88.6	150	2.11	7.72
1521	21.52	9.616	–	2.9	0.27	10.08	-87.1	150	2.03	7.72
Total Depth of Well:		20.12								
Depth To Water Before Purging:				7.60						
Depth To Water After Purging:				7.72						

ARCADIS

Water Sampling Log

(KB) 5-10-18

Project: Ford LTP | Project No.: MI001454.0004.00002 | Page 1 of 2

Location: Livonia, MI | Date: 5-10-18

Site/Well No.: MW-5 | Replicate No.: — | Code No.: —

Weather: INSIDE | Sampling Time: Begin 1355 End 1420

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	19.63
Depth to Water (ft bmp)	7.26
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	12.37
Casing Diameter/Type	2" PVC
Gallons in Well	1.98
Gallons Pumped/Bailed Prior to Sampling	0.99
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1355 end 1420
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	21.63
SpC (mS/cm)	13.42
CND (mS/cm)	—
Dissolved Oxygen (%)	3.2
Dissolved Oxygen (mg/L)	0.27
pH (s.u.)	10.46
ORP (mV)	105.6
Turbidity (NTU)	2.79
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
~~1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, PCE, TCE, VC~~ VOCs (KB) 5-10-18	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

(KB) 5-10-18 PAGE 2 OF 2

WELL : MW-5 PROJ #: MI001454.0004.00002

DATE : 5-10-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1355	21.73	13.16	—	21.9	1.80	11.14	-79.5	150	3.06	7.24
1400	21.65	13.25	—	9.5	0.80	11.06	-92.2	150	2.32	7.29
1405	21.64	13.34	—	6.4	0.54	11.11	-105.9	150	3.78	7.29
1410	21.64	13.40	—	3.7	0.31	10.98	-105.4	150	2.62	7.29
1415	21.64	13.41	—	3.4	0.26	10.73	-96.1	150	2.85	7.29
1420	21.63	13.42	—	3.2	0.27	10.96	105.6	150	2.79	7.29
Total Depth of Well:		19.63								
Depth To Water Before Purging:				7.26						
Depth To Water After Purging:				7.29						

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Water Sampling Log

(KB) 5-10-18

Project: Ford LTP | Project No.: MI001454.0004.00002 | Page: 1 of 2

Location: Livonia, MI | Date: 5-10-18

Site/Well No.: MW-2 | Replicate No.: — | Code No.: —

Weather: INSIDE | Sampling Time: Begin 1312 End 1337

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	19.47
Depth to Water (ft bmp)	6.93
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	12.54
Casing Diameter/Type	2" PVC
Gallons in Well	2.01
Gallons Pumped/Bailed Prior to Sampling	0.99
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1312 end 1337
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	21.06
SpC (mS/cm)	13.19
CND (mS/cm)	—
Dissolved Oxygen (%)	3.9
Dissolved Oxygen (mg/L)	0.39
pH (s.u.)	10.49
ORP (mV)	-93.5
Turbidity (NTU)	5.84
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
~~1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, PCE, TCE, VC~~ VOCs (KB) 5-10-18	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-2 PROJ #: MI001454.0004.00002 (KG) 5-10-18

DATE : 5-10-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1312	21.13	12.87	+	40.0	3.25	11.25	-80.2	150	6.97	6.93
1317	21.10	12.93	-	9.0	0.77	10.87	-84.8	150	9.09	7.37
1322	21.08	13.05	-	5.8	0.49	10.56	-84.3	150	14.0	7.40
1327	21.07	13.13	-	6.7	0.57	10.52	-88.2	150	8.74	7.40
1332	21.06	13.19	-	4.5	0.42	10.51	-93.7	150	6.72	7.40
1337	21.06	13.19	-	3.9	0.39	10.49	-93.5	150	5.84	7.40
Total Depth of Well:		19.47	1'							
Depth To Water Before Purging:				6.93						
Depth To Water After Purging:				7.40						

ARCADIS

Water Sampling Log

5-10-18

Project: Ford LTP | Project No.: MI001454.0004.00002 | Page: 1 of 2

Location: Livonia, MI | Date: 5-10-18

Site/Well No.: MW-3 | Replicate No.: — | Code No.: —

Weather: INSIDE | Sampling Time: Begin 1219 End 1254

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	18.74
Depth to Water (ft bmp)	7.28
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	11.46
Casing Diameter/Type	2" PVC
Gallons in Well	1.83
Gallons Pumped/Bailed Prior to Sampling	1.39
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1219 end 1254
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	20.72
SpC (mS/cm)	13.15
CND (mS/cm)	—
Dissolved Oxygen (%)	3.7
Dissolved Oxygen (mg/L)	0.27
pH (s.u.)	11.03
ORP (mV)	-83.7
Turbidity (NTU)	1.55
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
~~1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, PCE, TCE, VC~~ VOCs	40mL voa	3	HCL

KB 5-10-18

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-3 PROJ #: MI001454.0004.00002 (CB) 5-10-18

DATE : 5-10-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1219	20.96	12.67	–	43.7	3.68	8.86	135.4	150	4.81	7.28
1224	20.91	12.71	–	30.6	2.59	8.74	138.4	150	1.75	7.39
1229	20.83	12.80	–	13.0	1.08	8.49	145.3	150	1.62	7.40
1234	20.79	12.91	–	5.8	0.49	8.33	149.5	150	1.61	7.40
1239	20.77	13.07	–	4.9	0.43	9.67	67.1	150	1.58	7.40
1244	20.73	13.12	–	4.5	0.39	11.41	-76.7	150	2.1	7.40
1249	20.72	13.14	–	3.9	0.33	11.26	-86.2	150	1.72	7.40
1254	20.72	13.15	–	3.2	0.27	11.03	-83.7	150	1.55	7.40
Total Depth of Well:		18.74								
Depth To Water Before Purging:				7.28						
Depth To Water After Purging:				7.40						

ARCADIS

Water Sampling Log

(KB) 5-10-18

Project	Ford LTP	Project No.	MI001454.0004.00002	Page	1 of 2
Location	Livonia, MI			Date	5-10-18
Site/Well No.	mw-64	Replicate No.	—	Code No.	—
Weather	66°F CLOUDY	Sampling Time: Begin	1014	End	1039

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	20.05
Depth to Water (ft bmp)	8.48
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	11.57
Casing Diameter/Type	2" PVC
Gallons in Well	1.85
Gallons Pumped/Bailed Prior to Sampling	0.99
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1014 end 1039
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	13.32
SpC (mS/cm)	8.434
CND (mS/cm)	—
Dissolved Oxygen (%)	3.9
Dissolved Oxygen (mg/L)	0.39
pH (s.u.)	8.39
ORP (mV)	106.8
Turbidity (NTU)	3.21
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
~~1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, PCE, TCE, VC~~ VOCs (KB) 5-10-18	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-64

PROJ #: MI001454.0004.00002 KB 5-16-18

DATE : 5-10-18

LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1014	13.41	8.418	–	21.3	2.10	8.66	76.8	150	72.1	8.48
1019	13.35	8.494	–	8.2	0.82	8.53	85.5	150	21.4	8.53
1024	13.29	8.526	–	5.4	0.55	8.44	96.5	150	8.77	8.54
1029	13.18	8.496	–	4.0	0.42	8.42	102.3	150	8.02	8.54
1034	13.32	8.441	–	4.2	0.42	8.40	105.5	150	5.43	8.54
1039	13.32	8.434	–	3.9	0.39	8.39	106.8	150	3.21	8.54
Total Depth of Well:		20.05								
Depth To Water Before Purging:				8.48						
Depth To Water After Purging:				8.54						

ARCADIS

Water Sampling Log

(KB) 5-10-18

Project: Ford LTP | Project No.: MI001454.0004.00002 | Page 1 of 2

Location: Livonia, MI | Date: 5-10-18

Site/Well No.: MW-10 | Replicate No.: — | Code No.: —

Weather: INSIDE | Sampling Time: Begin 1538 End 1638

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	20.74
Depth to Water (ft bmp)	8.68
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	12.06
Casing Diameter/Type	2" PVC
Gallons in Well	1.93
Gallons Pumped/Bailed Prior to Sampling	2.38
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1538 end 1638
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	21.24
SpC (mS/cm)	8.655
CND (mS/cm)	—
Dissolved Oxygen (%)	1.9
Dissolved Oxygen (mg/L)	0.17
pH (s.u.)	9.46
ORP (mV)	-46.3
Turbidity (NTU)	3.12
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
~~1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, PCE, TCE, VC~~ VOCs (KB) 5-10-18	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-10 PROJ #: MI001454.0004.00002 KB 5-10-18

DATE : 5-10-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1538	21.37	8.191	—	15.8	1.33	8.24	55.6	150	34.7	8.68
1543	21.33	8.165	—	9.4	0.80	8.18	59.2	150	37.3	8.75
1548	21.29	8.111	—	6.5	0.55	8.14	63.5	150	33.1	8.76
1553	21.26	8.099	—	4.0	0.35	8.24	58.3	150	31.8	8.76
1558	21.28	8.099	—	3.3	0.29	8.32	51.7	150	36.6	8.76
1603	21.26	8.173	—	2.9	0.25	8.15	63.1	150	24.0	8.76
1608	21.26	8.286	—	2.6	0.22	8.56	39.3	150	18.6	8.76
1613	21.25	8.417	—	2.5	0.21	9.16	-7.6	150	12.4	8.76
1618	21.25	8.487	—	2.4	0.21	9.26	-22.9	150	9.20	8.76
1623	21.25	8.520	—	2.3	0.19	9.30	-29.3	150	11.4	8.76
1628	21.24	8.611	—	2.1	0.18	9.39	-39.6	150	6.28	8.76
1633	21.24	8.633	—	2.1	0.18	9.44	-44.0	150	4.93	8.76
1638	21.24	8.655	—	1.9	0.17	9.46	-46.3	150	3.12	8.76
Total Depth of Well:		20.74								
Depth To Water Before Purging:				8.68						
Depth To Water After Purging:				8.76						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00002 (KB 5-10-18) | Page 1 of 2

Location: Livonia, MI | Date: 5-10-18

Site/Well No.: MW-69 | Replicate No.: — | Code No.: —

Weather: 60°F CLOUDY | Sampling Time: Begin 800 End 840

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	19.91
Depth to Water (ft bmp)	8.73
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	11.18
Casing Diameter/Type	2" PVC
Gallons in Well	1.79
Gallons Pumped/Bailed Prior to Sampling	1.59
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 800 end 840
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	13.36
SpC (mS/cm)	6.716
CND (mS/cm)	—
Dissolved Oxygen (%)	1.9
Dissolved Oxygen (mg/L)	0.19
pH (s.u.)	12.28
ORP (mV)	-85.9
Turbidity (NTU)	8.78
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	DUP-02_051018 COLLECTED

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
~~1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, PCE, TCE, VC~~ (KB 5-10-18)	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-69 PROJ #: MI001454.0004.00002 (KB) 5-10-18

DATE : 5-10-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
800	13.44	5.487	–	97.2	9.54	12.56	-69.4	150	54.4	8.73
805	12.78	7.145	–	10.6	1.07	12.71	-79.3	150	65.3	8.88
810	12.94	7.156	–	4.5	0.46	12.53	-83.1	150	50.3	8.88
815	12.86	7.131	–	3.9	0.39	12.43	-84.6	150	30.6	8.88
820	13.16	7.058	–	3.2	0.33	12.22	-81.5	150	26.2	8.88
825	13.28	6.986	–	2.8	0.28	12.22	-83.3	150	15.9	8.88
830	13.25	6.877	–	2.5	0.26	12.26	-84.6	150	14.0	8.88
835	13.37	6.793	–	2.0	0.21	12.28	-85.5	150	10.2	8.88
840	13.36	6.716	–	1.9	0.19	12.28	-85.9	150	8.78	8.88
Total Depth of Well:		19.91								
Depth To Water Before Purging:				8.73						
Depth To Water After Purging:				8.88						

ARCADIS

Water Sampling Log

(KB) 5-10-18

Project: Ford LTP | Project No.: MI001454.0004.00002 | Page: 1 of 2

Location: Livonia, MI | Date: 5-10-18

Site/Well No.: MW-55 | Replicate No.: — | Code No.: —

Weather: 63°F CLOUDY | Sampling Time: Begin 915 End 945

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	19.74
Depth to Water (ft bmp)	7.05
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	12.69
Casing Diameter/Type	2" PVC
Gallons in Well	2.03
Gallons Pumped/Bailed Prior to Sampling	1.19
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 915 end 945
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	12.38
SpC (mS/cm)	4.675
CND (mS/cm)	—
Dissolved Oxygen (%)	2.4
Dissolved Oxygen (mg/L)	0.27
pH (s.u.)	11.72
ORP (mV)	-60.7
Turbidity (NTU)	7.54
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	MS/MSD TAKEN *

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
~~1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, PCE, TCE, VC~~ VOCs	40mL voa	3	HCL

(KB) 5-10-18

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW - 55 PROJ #: MI001454.0004.00002

DATE : 5-10-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
915	12.52	4.168	-	19.0	1.96	12.31	-53.5	150	51.9	7.05
920	12.46	4.141	-	10.4	1.08	12.32	-56.1	150	37.8	7.18
925	12.37	4.248	-	4.8	0.50	12.08	-57.1	150	22.2	7.18
930	12.31	4.395	-	3.6	0.37	11.92	-56.9	150	15.4	7.18
935	12.38	4.551	-	2.5	0.26	11.82	-59.8	150	10.4	7.18
940	12.41	4.636	-	2.6	0.28	11.77	-61.5	150	8.92	7.18
945	12.38	4.675	-	2.4	0.27	11.72	-60.7	150	7.54	7.18
Total Depth of Well:		19.74								
Depth To Water Before Purging:				7.05						
Depth To Water After Purging:				7.18						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-11-18

Site/Well No.: MW-7 | Replicate No.: — | Code No.: —

Weather: 40°F cloudy/RAIN | Sampling Time: Begin 1517 End 1552

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	22.35
Depth to Water (ft bmp)	4.55
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	17.8
Casing Diameter/Type	2" PVC
Gallons in Well	2.85
Gallons Pumped/Bailed Prior to Sampling	1.39
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1517 end 1552
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	12.01
SpC (mS/cm)	5.718
CND (mS/cm)	—
Dissolved Oxygen (%)	3.5
Dissolved Oxygen (mg/L)	0.38
pH (s.u.)	10.05
ORP (mV)	-109.2
Turbidity (NTU)	5.31
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-7 PROJ #: MI001454.0004.00001

DATE : 5-11-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1517	12.03	5.314	-	23.5	2.31	9.64	-42.3	150	46.3	4.55
1522	12.02	5.331	-	11.8	1.15	9.82	-57.5	150	23.6	4.74
1527	11.99	5.117	-	9.1	0.97	9.98	-79.8	150	12.3	4.74
1532	12.00	5.268	-	7.9	0.83	10.05	-94.1	150	9.50	4.74
1537	11.96	5.416	-	6.4	0.67	10.05	-98.7	150	8.46	4.74
1542	11.99	5.582	-	4.7	0.50	10.07	-105.1	150	7.13	4.74
1547	11.96	5.666	-	3.9	0.40	10.07	-108.7	150	6.27	4.74
1552	12.01	5.718	-	3.5	0.38	10.05	-109.2	150	5.31	4.74
Total Depth of Well:		22.35								
Depth To Water Before Purging:				4.55						
Depth To Water After Purging:				4.74						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-11-18

Site/Well No.: MW-20 | Replicate No.: — | Code No.: —

Weather: 44°F cloudy/RAIN | Sampling Time: Begin 1411 End 1451

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	16.48
Depth to Water (ft bmp)	5.95
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	10.53
Casing Diameter/Type	2" PVC
Gallons in Well	1.69
Gallons Pumped/Bailed Prior to Sampling	1.59
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1411 end 1451
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	11.35
SpC (mS/cm)	0.201
CND (mS/cm)	—
Dissolved Oxygen (%)	3.8
Dissolved Oxygen (mg/L)	0.42
pH (s.u.)	9.81
ORP (mV)	-31.0
Turbidity (NTU)	13.4
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-20 PROJ #: MI001454.0004.00001

DATE : 5-11-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1411	11.71	0.291	-	42.0	4.38	10.06	-12.2	150	47.8	5.55
1416	11.66	0.291	-	17.2	1.86	10.22	-26.9	150	39.5	5.95
1421	11.48	0.272	-	9.9	1.08	10.24	-39.7	150	27.9	5.95
1426	11.36	0.248	-	8.0	0.87	10.11	-39.2	150	23.0	5.95
1431	11.41	0.230	-	6.1	0.67	9.99	-40.1	150	18.6	5.95
1436	11.44	0.222	-	5.4	0.59	9.91	-37.7	150	14.8	5.95
1441	11.45	0.207	-	4.5	0.48	9.80	-31.2	150	13.3	5.95
1446	11.39	0.204	-	4.1	0.44	9.84	-33.5	150	12.9	5.95
1451	11.35	0.201	-	3.8	0.42	9.81	-31.0	150	13.4	5.95
Total Depth of Well:		16.48								
Depth To Water Before Purging:				5.55						
Depth To Water After Purging:				5.95						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-11-18

Site/Well No.: MW-49 | Replicate No.: — | Code No.: —

Weather: 41°F CLOUDY/RAIN | Sampling Time: Begin 1107 End 1207

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	17.28
Depth to Water (ft bmp)	6.95
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	10.33
Casing Diameter/Type	2" PVC
Gallons in Well	1.65
Gallons Pumped/Bailed Prior to Sampling	2.38
Sample Pump Intake Setting (ft bmp)	~1
Purge Time	begin 1107 end 1207
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	11.78
SpC (mS/cm)	2.413
CND (mS/cm)	—
Dissolved Oxygen (%)	2.5
Dissolved Oxygen (mg/L)	0.26
pH (s.u.)	9.52
ORP (mV)	-94.8
Turbidity (NTU)	10.2
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KAGAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-49 PROJ #: MI001454.0004.00001

DATE : 5-11-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1107	12.31	4.263	—	12.4	1.29	9.94	-82.9	150	223	6.95
1112	12.16	3.730	—	6.1	0.63	9.89	-92.3	150	159	7.05
1117	12.13	3.766	—	5.3	0.56	9.80	-92.6	150	106	7.06
1122	12.09	3.493	—	4.2	0.46	9.79	-93.9	150	69.1	7.06
1127	12.06	3.182	—	3.9	0.42	9.67	-95.1	150	49.0	7.06
1132	12.00	3.084	—	3.9	0.43	9.64	-96.0	150	34.0	7.06
1137	11.84	2.924	—	3.0	0.32	9.61	-96.0	150	30.1	7.06
1142	11.76	2.830	—	3.2	0.35	9.59	-96.7	150	27.7	7.06
1147	11.76	2.687	—	2.4	0.26	9.56	-95.1	150	25.3	7.06
1152	11.71	2.588	—	2.4	0.26	9.55	-95.5	150	24.1	7.06
1157	11.81	2.498	—	2.3	0.25	9.52	-94.6	150	19.3	7.06
1202	11.80	2.432	—	2.5	0.28	9.51	-94.5	150	14.8	7.06
1207	11.78	2.413	—	2.5	0.26	9.52	-94.8	150	10.2	7.06
Total Depth of Well:		17.28								
Depth To Water Before Purging:				6.95						
Depth To Water After Purging:				7.06						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-11-18

Site/Well No.: MW-14 | Replicate No.: — | Code No.: —

Weather: 44°F cloudy | Sampling Time: Begin 1002 End 1042

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	19.65
Depth to Water (ft bmp)	4.19
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	13.46
Casing Diameter/Type	2" PVC
Gallons in Well	2.15
Gallons Pumped/Bailed Prior to Sampling	1.59
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1002 end 1042
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	11.67
SpC (mS/cm)	2.776
CND (mS/cm)	—
Dissolved Oxygen (%)	4.7
Dissolved Oxygen (mg/L)	0.50
pH (s.u.)	9.46
ORP (mV)	-43.3
Turbidity (NTU)	3.90
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.				
0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-14 PROJ #: MI001454.0004.00001

DATE : 5-16-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1002	12.66	8.212	—	17.0	1.70	10.84	-93.9	150	115	6.19
1007	12.35	6.339	—	16.1	1.63	10.43	-101.0	150	69.8	6.34
1012	12.04	2.772	—	8.3	0.89	10.65	-86.3	150	33.9	6.35
1017	11.82	1.647	—	6.4	0.70	10.40	-73.9	150	23.7	6.37
1022	11.67	1.565	—	6.8	0.74	10.17	-63.7	150	13.7	6.37
1027	11.66	2.102	—	5.9	0.62	9.88	-55.1	150	9.24	6.37
1032	11.66	2.455	—	4.5	0.48	9.66	-51.0	150	5.96	6.37
1037	11.68	2.633	—	3.9	0.42	9.51	-45.4	150	4.62	6.37
1042	11.67	2.726	—	4.7	0.50	9.46	-43.3	150	3.90	6.37
Total Depth of Well:		19.65								
Depth To Water Before Purging:				6.19						
Depth To Water After Purging:				6.37						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page: 1 of 2

Location: Livonia, MI | Date: 5-11-18

Site/Well No.: MW-9 | Replicate No.: — | Code No.: —

Weather: 42°F CLOUDY | Sampling Time: Begin 829 End 909

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	24.20
Depth to Water (ft bmp)	5.65
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	18.55
Casing Diameter/Type	2" PVC
Gallons in Well	2.97
Gallons Pumped/Bailed Prior to Sampling	1.59
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 829 end 909
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	12.70
SpC (mS/cm)	3.691
CND (mS/cm)	—
Dissolved Oxygen (%)	2.8
Dissolved Oxygen (mg/L)	0.29
pH (s.u.)	9.36
ORP (mV)	-46.4
Turbidity (NTU)	2.80
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-9 PROJ #: MI001454.0004.00001

DATE : 5-11-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
829	12.09	1.553	–	13.2	1.41	9.52	-35.8	150	20.4	5.65
834	12.12	1.273	–	7.6	0.82	9.21	-20.2	150	15.0	6.48
839	12.22	0.914	–	6.1	0.64	8.80	1.5	150	10.4	6.59
844	12.24	0.839	–	4.9	0.52	8.69	8.6	150	8.79	6.59
849	12.75	3.519	–	3.2	0.34	8.54	18.8	150	6.43	6.59
854	12.77	3.598	–	2.9	0.31	8.98	-9.3	150	5.28	6.59
859	12.77	3.638	–	2.8	0.29	9.26	-32.7	150	4.72	6.59
904	12.78	3.670	–	2.6	0.26	9.34	-42.3	150	4.31	6.59
909	12.70	3.691	–	2.8	0.29	9.36	-46.4	150	2.80	6.59
Total Depth of Well:		24.20								
Depth To Water Before Purging:				5.65						
Depth To Water After Purging:				6.59						

ARCADIS

Water Sampling Log

1 KB 5-11-18

Project: Ford LTP | Project No.: MI001454.0004.00002 | Page: 1 of 2

Location: Livonia, MI | Date: 5-11-18

Site/Well No.: MW-1 | Replicate No.: - | Code No.: -

Weather: 41°F PARTLY CLOUDY | Sampling Time: Begin 709 End 809

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	18.60
Depth to Water (ft bmp)	3.78
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	14.82
Casing Diameter/Type	2" PVC
Gallons in Well	2.37
Gallons Pumped/Bailed Prior to Sampling	2.38
Sample Pump Intake Setting (ft bmp)	-
Purge Time	begin 709 end 809
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	11.47
SpC (mS/cm)	44.00
CND (mS/cm)	-
Dissolved Oxygen (%)	2.3
Dissolved Oxygen (mg/L)	0.21
pH (s.u.)	10.26
ORP (mV)	-116.1
Turbidity (NTU)	15.2
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	-

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
~~1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, PCE, TCE, VC~~ VOCs	40mL voa	3	HCL

KB 5-11-18

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-1

PROJ #: MI001454.0004.00002 (KB) 5-11-18

DATE : 5-11-18

LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
709	12.06	43.00	-	10.1	0.91	11.38	-100.7	150	83.1	3.78
714	12.05	43.09	-	8.1	0.73	11.13	-96.7	150	58.9	4.41
719	11.74	43.05	-	5.9	0.53	10.82	-94.6	150	48.1	4.41
724	11.74	43.17	-	4.5	0.41	10.65	-95.5	150	40.6	4.41
729	11.82	43.55	-	3.9	0.35	10.53	-99.3	150	33.9	4.41
734	11.77	43.98	-	3.2	0.30	10.47	-104.0	150	33.6	4.41
739	11.70	44.07	-	3.0	0.27	10.43	-106.1	150	34.1	4.41
744	11.64	43.78	-	2.8	0.26	10.36	-105.2	150	26.2	4.41
749	11.49	43.80	-	2.6	0.23	10.27	-106.2	150	24.4	4.41
754	11.51	43.84	-	2.6	0.24	10.26	-107.8	150	21.3	4.41
759	11.47	43.89	-	2.8	0.27	10.26	-111.1	150	18.1	4.41
804	11.46	44.00	-	2.5	0.23	10.25	-114.0	150	20.4	4.41
809	11.47	44.00	-	2.3	0.21	10.26	-116.1	150	15.2	4.41
Total Depth of Well:		18.60								
Depth To Water Before Purging:				3.78						
Depth To Water After Purging:				4.41						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-14-18

Site/Well No.: MW-51 | Replicate No.: – | Code No.: –

Weather: 56°F OVERCAST | Sampling Time: Begin 1546 End 1621

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	18.85
Depth to Water (ft bmp)	5.33
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	13.52
Casing Diameter/Type	2" PVC
Gallons in Well	2.16
Gallons Pumped/Bailed Prior to Sampling	1.39
Sample Pump Intake Setting (ft bmp)	–
Purge Time	begin 1546 end 1621
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	10.15
SpC (mS/cm)	1.504
CND (mS/cm)	–
Dissolved Oxygen (%)	2.0
Dissolved Oxygen (mg/L)	0.22
pH (s.u.)	9.40
ORP (mV)	40.0
Turbidity (NTU)	1.72
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	–

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-51 PROJ #: MI001454.0004.00001

DATE : 5-14-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU (5-14-18)	DTW
1546	10.20	2.247	-	12.5	1.36	9.00	49.4	150	11.72	5.33
1551	10.19	2.239	-	3.6	0.94	8.98	51.4	150	8.08	5.43
1556	10.29	2.039	-	4.9	0.54	8.96	56.2	150	3.01	5.43
1601	10.20	1.778	-	3.7	0.41	9.08	53.1	150	2.62	5.43
1606	10.57	1.641	-	2.9	0.33	9.27	44.9	150	2.51	5.43
1611	10.28	1.589	-	2.2	0.24	9.32	43.5	150	2.04	5.43
1616	10.20	1.529	-	2.0	0.23	9.37	41.2	150	1.90	5.43
1621	10.15	1.504	-	2.6	0.22	9.40	40.0	150	1.72	5.43
Total Depth of Well:		18.85								
Depth To Water Before Purging:				5.33						
Depth To Water After Purging:				5.43						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-14-18

Site/Well No.: MW-70 | Replicate No.: — | Code No.: —

Weather: 55°F OVERCAST | Sampling Time: Begin 1454 End 1524

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	20.13
Depth to Water (ft bmp)	9.29
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	10.84
Casing Diameter/Type	2" PVC
Gallons in Well	1.73
Gallons Pumped/Bailed Prior to Sampling	1.19
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1454 end 1524
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	14.41
SpC (mS/cm)	4.164
CND (mS/cm)	—
Dissolved Oxygen (%)	2.9
Dissolved Oxygen (mg/L)	0.30
pH (s.u.)	10.26
ORP (mV)	-51.1
Turbidity (NTU)	14.6
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-70 PROJ #: MI001454.0004.00001

DATE : 5-14-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1454	14.20	3.987	-	53.2	5.11	10.39	-20.2	150	4.27	9.29
1459	14.56	3.970	-	14.4	1.41	10.63	-32.7	150	2.91	9.37
1504	14.47	3.957	-	7.0	0.70	10.64	-41.0	150	14.5	9.37
1509	14.51	4.003	-	4.9	0.49	10.57	-48.9	150	15.8	9.37
1514	14.18	4.071	-	3.9	0.40	10.46	-49.9	150	15.3	9.37
1519	14.11	4.096	-	3.4	0.34	10.36	-49.4	150	14.2	9.37
1524	14.41	4.164	-	2.9	0.30	10.26	-51.1	150	14.6	9.37

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-14-18

Site/Well No.: MW-58 | Replicate No.: — | Code No.: —

Weather: 55°F OVERCAST | Sampling Time: Begin 1349 End 1419

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	19.68
Depth to Water (ft bmp)	3.20
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	16.48
Casing Diameter/Type	2" PVC
Gallons in Well	2.64
Gallons Pumped/Bailed Prior to Sampling	1.19
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1349 end 1419
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	13.44
SpC (mS/cm)	9.004
CND (mS/cm)	—
Dissolved Oxygen (%)	3.6
Dissolved Oxygen (mg/L)	0.36
pH (s.u.)	10.69
ORP (mV)	-60.4
Turbidity (NTU)	1.78
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	* MS/MSD TAKEN *

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-58 PROJ #: MI001454.0004.00001

DATE : 5-14-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1349	13.53	5.354	–	150.5	11.09	9.85	48.0	150	29.2	3.20
1354	13.59	8.407	–	12.3	1.23	11.29	-28.3	150	17.9	3.44
1359	13.46	8.688	–	6.9	0.71	11.36	-50.5	150	4.42	3.45
1404	13.42	8.829	–	5.7	0.58	11.09	-57.3	150	3.76	3.45
1409	13.56	8.902	–	4.7	0.47	10.87	-59.4	150	2.91	3.45
1414	13.40	8.950	–	4.3	0.43	10.83	-61.9	150	2.54	3.45
1419	13.44	9.004	–	3.6	0.36	10.69	-60.4	150	1.78	3.45
Total Depth of Well:		19.68								
Depth To Water Before Purging:				3.20						
Depth To Water After Purging:				3.45						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-14-18

Site/Well No.: MW-96 | Replicate No.: — | Code No.: —

Weather: 56°F RAIN | Sampling Time: Begin 1006 End 1042

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	19.94
Depth to Water (ft bmp)	9.23
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	10.71
Casing Diameter/Type	2" PVC
Gallons in Well	1.71
Gallons Pumped/Bailed Prior to Sampling	1.43
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1006 end 1042
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	12.46
SpC (mS/cm)	5.598
CND (mS/cm)	—
Dissolved Oxygen (%)	2.5
Dissolved Oxygen (mg/L)	0.26
pH (s.u.)	7.96
ORP (mV)	88.2
Turbidity (NTU)	2.51
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-46 PROJ #: MI001454.0004.00001

DATE : 5-14-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1006	12.57	3.615	–	109.8	11.40	8.77	36.6	150	35.2	9.23
1012	11.91	3.774	–	16.4	1.72	8.62	45.4	150	17.8	9.72
1017	11.87	3.835	–	7.2	0.76	8.47	55.4	150	6.60	9.75
1022	11.96	4.274	–	5.0	0.53	8.26	67.3	150	5.17	9.75
1027	12.30	5.082	–	3.6	0.38	8.13	74.0	150	4.23	9.75
1032	12.37	5.226	–	3.1	0.32	8.07	78.9	150	3.89	9.75
1037	12.40	5.406	–	2.9	0.30	7.99	84.6	150	3.42	9.75
1042	12.46	5.598	–	2.5	0.26	7.96	88.2	150	2.51	9.75
Total Depth of Well:		19.94								
Depth To Water Before Purging:				9.23						
Depth To Water After Purging:				9.75						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-14-18

Site/Well No.: MW-24 | Replicate No.: — | Code No.: —

Weather: 53°F RAIN | Sampling Time: Begin 845 End 945

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	23.70
Depth to Water (ft bmp)	9.38
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	14.32
Casing Diameter/Type	2" PVC
Gallons in Well	2.29
Gallons Pumped/Bailed Prior to Sampling	2.38
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 845 end 945
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	11.18
SpC (mS/cm)	2.673
CND (mS/cm)	—
Dissolved Oxygen (%)	2.4
Dissolved Oxygen (mg/L)	0.28
pH (s.u.)	9.87
ORP (mV)	-38.2
Turbidity (NTU)	32.1
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	DUP-03-051418 COLLECTED

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-24 PROJ #: MI001454.0004.00001

DATE : 5-14-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
845	11.32	2.897	-	22.6	2.39	8.76	48.1	150	372	9.38
850	11.15	2.781	-	13.3	1.43	8.73	48.5	150	248	9.38
855	11.06	2.718	-	7.2	0.79	9.05	31.0	150	162	9.54
900	11.05	2.695	-	5.0	0.55	9.52	4.3	150	*	*
905	11.06	2.687	-	4.3	0.46	9.68	-7.0	150	*	*
910	11.04	2.683	-	4.4	0.48	9.78	-15.6	150	*	*
915	11.02	2.681	-	3.4	0.38	9.79	-19.9	150	*	*
920	11.08	2.678	-	2.7	0.29	9.86	-27.6	150	*	*
925	11.16	2.672	-	2.6	0.28	9.93	-34.6	150	*	*
930	11.08	2.672	-	2.6	0.28	9.95	-37.3	150	*	*
935	11.11	2.677	-	2.5	0.27	9.93	-39.0	150	40.4	9.68
940	11.21	2.672	-	2.6	0.28	9.89	-38.6	150	37.2	9.68
945	11.18	2.673	-	2.6	0.28	9.87	-38.2	150	32.1	9.68
	*	STUCK	IN VEHICLE DUE	TO	LIGHTNING					
Total Depth of Well:		23.70								
Depth To Water Before Purging:				9.38						
Depth To Water After Purging:				9.68						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-14-18

Site/Well No.: MW-36 | Replicate No.: – | Code No.: –

Weather: 51°F cloudy | Sampling Time: Begin 723 End 823

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	24.72
Depth to Water (ft bmp)	8.89
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	15.83
Casing Diameter/Type	2" PVC
Gallons in Well	2.53
Gallons Pumped/Bailed Prior to Sampling	2.38
Sample Pump Intake Setting (ft bmp)	–
Purge Time	begin 723 end 823
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	11.91
SpC (mS/cm)	8.325
CND (mS/cm)	–
Dissolved Oxygen (%)	2.5
Dissolved Oxygen (mg/L)	0.28
pH (s.u.)	10.85
ORP (mV)	-61.7
Turbidity (NTU)	8.43
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	–

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-36 PROJ #: MI001454.0004.00001

DATE : 5-14-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
723	11.42	8.813	-	23.4	2.44	8.74	141.6	150	104	8.89
728	11.28	8.834	-	16.1	1.70	8.32	153.0	150	73.8	9.21
733	11.19	8.767	-	8.2	0.87	8.47	138.4	150	46.4	9.48
738	11.16	8.661	-	5.3	0.56	9.79	71.4	150	29.5	9.48
743	11.15	8.605	-	5.0	0.55	10.60	26.3	150	24.5	9.48
748	11.23	8.514	-	4.0	0.43	11.05	-13.0	150	21.3	9.48
753	11.28	8.488	-	4.6	0.48	11.02	-20.2	150	18.0	9.48
758	11.32	8.440	-	4.6	0.49	11.06	-35.1	150	13.5	9.48
803	11.32	8.422	-	3.4	0.37	11.07	-45.2	150	17.5	9.48
808	11.40	8.361	-	3.4	0.37	11.00	-51.5	150	12.5	9.48
813	11.46	8.329	-	3.1	0.33	10.95	-60.2	150	11.1	9.48
818	11.40	8.328	-	3.2	0.33	10.94	-60.4	150	9.77	9.48
823	11.41	8.325	-	2.5	0.28	10.85	-61.7	150	8.43	9.48
Total Depth of Well:		24.72								
Depth To Water Before Purging:				8.89						
Depth To Water After Purging:				9.48						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page: 1 of 2

Location: Livonia, MI | Date: 5-15-18

Site/Well No.: MW-48 | Replicate No.: — | Code No.: —

Weather: 71°F PARTLY CLOUDY | Sampling Time: Begin 1533 End 1613

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	20.60
Depth to Water (ft bmp)	8.58
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	12.02
Casing Diameter/Type	2" PVC
Gallons in Well	1.92
Gallons Pumped/Bailed Prior to Sampling	1.59
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1533 end 1613
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	12.86
SpC (mS/cm)	2.854
CND (mS/cm)	—
Dissolved Oxygen (%)	1.9
Dissolved Oxygen (mg/L)	0.20
pH (s.u.)	9.37
ORP (mV)	-46.3
Turbidity (NTU)	3.02
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-48 PROJ #: MI001454.0004.00001

DATE : 5-15-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU (KB 5-15-18)	DTW
1533	14.64	1.709	-	147.1	14.04	8.33	87.1	150	81.0	8.58
1538	13.13	1.606	-	11.7	1.21	8.36	55.9	150	9.78	9.21
1543	13.08	1.814	-	6.1	0.63	9.04	37.8	150	9.15	9.21
1548	12.94	2.089	-	4.3	0.44	9.38	8.0	150	8.35	9.21
1553	12.96	2.318	-	3.1	0.32	9.56	-14.9	150	6.70	9.21
1558	13.03	2.483	-	3.2	0.32	9.57	-30.5	150	5.42	9.21
1603	12.93	2.689	-	2.4	0.25	9.48	-41.3	150	4.48	9.21
1608	12.91	2.781	-	2.0	0.21	9.42	-45.2	150	3.96	9.21
1613	12.86	2.854	-	1.9	0.20	9.37	-46.3	150	3.02	9.21
Total Depth of Well:		20.60								
Depth To Water Before Purging:				8.58						
Depth To Water After Purging:				9.21						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-15-18

Site/Well No.: MW-28 | Replicate No.: — | Code No.: —

Weather: 71°F PARTLY CLOUDY | Sampling Time: Begin 1426 End 1501

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	11.63
Depth to Water (ft bmp)	3.01
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	8.66
Casing Diameter/Type	2" PVC
Gallons in Well	1.39
Gallons Pumped/Bailed Prior to Sampling	1.39
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1426 end 1501
Pumping Rate (ml/min)	156
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	13.36
SpC (mS/cm)	5.449
CND (mS/cm)	—
Dissolved Oxygen (%)	2.7
Dissolved Oxygen (mg/L)	0.27
pH (s.u.)	6.93
ORP (mV)	154.7
Turbidity (NTU)	4.72
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-28 PROJ #: MI001454.0004.00001

DATE : 5-15-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1426	15.17	4.518	-	171.6	16.99	7.09	141.6	150	5.71	3.01
1431	14.41	8.195	-	9.6	0.93	7.07	144.4	150	3.02	3.06
1436	13.91	6.606	-	4.8	0.48	7.07	144.8	150	11.2	3.06
1441	13.74	5.780	-	3.8	0.39	7.03	147.5	150	9.71	3.06
1446	13.61	5.623	-	3.5	0.35	7.00	149.9	150	7.28	3.06
1451	13.40	5.464	-	3.1	0.32	6.97	153.5	150	6.72	3.06
1456	13.46	5.447	-	2.7	0.28	6.93	154.8	150	5.48	3.06
1501	13.36	5.449	-	2.7	0.27	6.93	154.7	150	4.72	3.06
Total Depth of Well:		11.63								
Depth To Water Before Purging:				3.01						
Depth To Water After Purging:				3.06						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page: 1 of 2

Location: Livonia, MI | Date: 5-15-18

Site/Well No.: MW-68 | Replicate No.: — | Code No.: —

Weather: 61°F Cloudy / RAIN | Sampling Time: Begin 1045 End 1130

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	19.82
Depth to Water (ft bmp)	8.68
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	11.14
Casing Diameter/Type	2" PVC
Gallons in Well	1.78
Gallons Pumped/Bailed Prior to Sampling	1.78
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1045 end 1130
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	12.00
SpC (mS/cm)	15.02
CND (mS/cm)	—
Dissolved Oxygen (%)	3.2
Dissolved Oxygen (mg/L)	0.33
pH (s.u.)	6.54
ORP (mV)	142.5
Turbidity (NTU)	1.46
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-68 PROJ #: MI001454.0004.00001

DATE : 5-15-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU 5-15-18	DTW
1045	11.86	3.547	-	96.1	10.22	7.87	62.5	150	10.2 (DS)	8.68
1050	11.82	3.538	-	89.6	9.56	7.80	66.4	150	3.61	8.78
1055	11.99	12.35	-	48.5	4.75	6.75	110.0	150	2.20	8.79
1100	12.10	14.67	-	5.9	0.60	6.60	122.0	150	2.12	8.79
1105	12.07	14.76	-	6.3	0.64	6.60	125.6	150	2.01	8.79
1110	12.07	14.80	-	5.8	0.51	6.60	130.2	150	1.71	8.79
1115	12.00	14.85	-	4.4	0.45	6.60	134.2	150	1.61	8.79
1120	11.94	14.92	-	3.5	0.35	6.60	136.7	150	1.42	8.79
1125	11.98	15.00	-	3.5	0.36	6.60	141.1	150	1.53	8.79
1130	12.00	15.02	-	3.2	0.33	6.54	142.5	150	1.46	8.79
Total Depth of Well:										
Depth To Water Before Purging:				8.68						
Depth To Water After Purging:				8.79						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-15-18

Site/Well No.: MW-21 | Replicate No.: — | Code No.: —

Weather: 64°F cloudy | Sampling Time: Begin 1235 End 1335

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	17.60
Depth to Water (ft bmp)	6.90
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	10.70
Casing Diameter/Type	2" PVC
Gallons in Well	1.712
Gallons Pumped/Bailed Prior to Sampling	2.38
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1235 end 1335
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	13.09
SpC (mS/cm)	3.091
CND (mS/cm)	—
Dissolved Oxygen (%)	5.0
Dissolved Oxygen (mg/L)	0.52
pH (s.u.)	7.46
ORP (mV)	116.7
Turbidity (NTU)	3.14
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-21 PROJ #: MI001454.0004.00001

DATE : 5-15-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1235	14.57	0.539	–	160.3	15.70	8.11	106.5	150	35.6	6.90
1240	13.79	0.519	–	71.0	7.30	8.04	109.5	150	31.4	7.08
1245	13.18	0.332	–	51.7	5.40	7.82	118.0	150	24.0	7.08
1250	13.11	0.743	–	38.6	4.03	7.41	133.5	150	15.7	7.08
1255	13.02	1.274	–	27.4	2.86	7.28	139.0	150	13.8	7.08
1300	13.05	1.569	–	23.0	2.41	7.23	140.9	150	10.2	7.08
1305	13.00	1.905	–	17.8	1.86	7.25	138.8	150	8.13	7.08
1310	12.96	2.258	–	13.1	1.37	7.31	133.9	150	5.76	7.08
1315	12.95	2.454	–	10.4	1.09	7.33	130.7	150	4.69	7.08
1320	13.07	2.591	–	8.6	0.89	7.38	128.0	150	3.94	7.08
1325	13.07	2.859	–	6.2	0.65	7.40	121.9	150	2.82	7.08
1330	13.07	2.972	–	5.7	0.59	7.43	119.0	150	3.02	7.08
1335	13.09	3.091	–	5.6	0.52	7.46	116.7	150	3.14	7.08
Total Depth of Well:		17.60								
Depth To Water Before Purging:				6.90						
Depth To Water After Purging:				7.08						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-15-18

Site/Well No.: PW-16-01 | Replicate No.: — | Code No.: —

Weather: 62°F CLOUDY | Sampling Time: Begin 923 End 1023

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	21.44
Depth to Water (ft bmp)	7.34
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	14.1
Casing Diameter/Type	2" PVC
Gallons in Well	2.256
Gallons Pumped/Bailed Prior to Sampling	2.38
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 923 end 1023
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	12.22
SpC (mS/cm)	3.577
CND (mS/cm)	—
Dissolved Oxygen (%)	6.7
Dissolved Oxygen (mg/L)	0.71
pH (s.u.)	9.09
ORP (mV)	-51.9
Turbidity (NTU)	~~1.42~~ KB 5-15-18 1.35
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks *	MS/MSD COLLECTED

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KACAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : PW-16-01 PROJ #: MI001454.0004.00001

DATE : 5-15-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW 5-15-18 (KB)
923	12.74	0.882	-	104.5	10.93	10.63	-58.5	150	32.1	7.34
928	12.20	0.860	-	89.9	9.62	10.72	-45.3	150	23.9	7.39
933	12.14	0.840	-	83.5	8.93	10.76	-24.2	150	10.4	7.40
938	12.04	0.828	-	83.3	8.94	10.78	-13.7	150	10.1	7.40
943	12.11	1.341	-	86.5	9.26	10.16	15.3	150	10.7	7.40
948	12.28	3.307	-	30.3	3.17	10.13	-50.8	150	5.92	7.40
953	12.25	3.581	-	13.4	1.42	9.75	-54.3	150	2.64	7.40
958	12.11	3.565	-	9.4	1.00	9.50	-51.1	150	2.53	7.40
1003	12.16	3.661	-	7.9	0.83	9.28	-44.9	150	2.17	7.40
1008	12.14	2.851	-	35.0	3.71	10.16	-97.6	150	1.82	7.40
1013	12.12	3.954	-	15.3	1.61	9.46	-66.3	150	1.62	7.40
1018	12.23	3.560	-	8.2	0.86	9.15	-54.5	150	1.31	7.40
1023	12.22	3.577	-	6.7	0.71	9.09	-51.9	150	1.35	7.40
~~1028~~								~~150~~	~~1.48~~	~~7.40~~
		(KB) 5-15-18								
Total Depth of Well:		21.44								
Depth To Water Before Purging:				7.34						
Depth To Water After Purging:				7.40						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-15-18

Site/Well No.: TW-16-01 | Replicate No.: — | Code No.: —

Weather: 64°F cloudy | Sampling Time: Begin 810 End 910

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	16.64
Depth to Water (ft bmp)	6.44
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	10.2
Casing Diameter/Type	2" PVC
Gallons in Well	1.63
Gallons Pumped/Bailed Prior to Sampling	2.38
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 810 end 910
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	13.08
SpC (mS/cm)	2.693
CND (mS/cm)	—
Dissolved Oxygen (%)	6.3
Dissolved Oxygen (mg/L)	0.66
pH (s.u.)	9.14
ORP (mV)	-37.5
Turbidity (NTU)	23.9
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	* DUP-04_051518 COLLECTED

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALA N BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : TW-16-01 PROJ #: MI001454.0004.00001

DATE : 5-15-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
810	18.47	0.029	-	102.6	9.61	11.32	35.0	150	212	6.44
815	12.56	2.898	-	23.5	2.45	11.99	-91.1	150	160	6.53
820	12.28	2.853	-	18.1	1.93	11.63	-78.1	150	161	6.54
825	12.34	2.709	-	16.5	1.75	11.08	-67.9	150	123	6.54
830	12.26	2.649	-	15.3	1.61	10.43	-54.8	150	70.5	6.54
835	12.24	2.636	-	8.9	0.95	9.96	-49.6	150	54.1	6.54
840	12.06	2.643	-	8.0	0.85	9.77	-45.6	158	43.7	6.54
845	12.24	2.651	-	7.5	0.76	9.62	-44.0	150	38.6	6.54
850	12.53	2.648	-	7.2	0.72	9.49	-43.6	150	31.8	6.54
855	12.55	2.663	-	6.5	0.67	9.34	-41.3	150	32.9	6.54
900	12.54	2.657	-	5.4	0.58	9.28	-39.8	150	28.7	6.54
905	12.89	2.666	-	5.3	0.55	9.18	-37.4	150	26.3	6.54
910	13.08	2.693	-	6.3	0.66	9.14	-37.5	150	23.9	6.54
Total Depth of Well:		16.64								
Depth To Water Before Purging:				6.44						
Depth To Water After Purging:				6.54						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-8-18

Site/Well No.: MW-34 | Replicate No.: — | Code No.: —

Weather: 74°F CLEAR | Sampling Time: Begin 1642 End 1732

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	21.26
Depth to Water (ft bmp)	8.31
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	12.95
Casing Diameter/Type	2" PVC
Gallons in Well	2.072
Gallons Pumped/Bailed Prior to Sampling	1.98
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1642 end 1732
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	12.97
SpC (mS/cm)	4.879
CND (mS/cm)	—
Dissolved Oxygen (%)	5.4
Dissolved Oxygen (mg/L)	0.57
pH (s.u.)	9.23
ORP (mV)	39.5
Turbidity (NTU)	3.88
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : mw-34 PROJ #: MI001454.0004.00001

DATE : 5-8-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1642	13.08	3.660	–	47.5	4.85	9.81	4.5	150	14.4	8.31
1647	12.87	3.600	–	31.2	3.25	9.49	23.5	150	9.09	9.51
1652	12.87	3.647	–	25.7	2.67	9.31	33.5	150	7.52	9.53
1657	12.60	4.101	–	18.3	1.92	9.11	45.6	150	5.69	9.69
1702	12.80	4.143	–	16.1	1.67	9.07	48.2	150	5.51	9.69
1707	12.75	4.351	–	13.1	1.36	9.01	51.9	150	5.21	9.69
1712	13.00	4.517	–	10.2	1.06	8.99	53.6	150	4.72	9.69
1717	12.79	4.699	–	8.1	0.84	9.04	51.3	150	4.61	9.69
1722	12.85	4.792	–	6.4	0.66	9.08	48.9	150	3.99	9.69
1727	12.87	4.852	–	5.9	0.61	9.13	45.7	150	3.89	9.69
1732	12.97	4.879	–	5.4	0.57	9.23	39.5	150	3.88	9.69
Total Depth of Well:		21.26								
Depth To Water Before Purging:				8.31						
Depth To Water After Purging:				9.69						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-8-18

Site/Well No.: MW-41 | Replicate No.: — | Code No.: —

Weather: 74°F CLEAR | Sampling Time: Begin 1556 End 1626

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	19.64
Depth to Water (ft bmp)	8.36
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	11.28
Casing Diameter/Type	2" PVC
Gallons in Well	1.81
Gallons Pumped/Bailed Prior to Sampling	1.19
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1556 end 1626
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	12.32
SpC (mS/cm)	11.41
CND (mS/cm)	—
Dissolved Oxygen (%)	2.6
Dissolved Oxygen (mg/L)	0.26
pH (s.u.)	10.68
ORP (mV)	-77.1
Turbidity (NTU)	5.31
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KAGAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-41 PROJ #: MI001454.0004.00001

DATE : 5-8-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1556	12.57	11.36	-	24.3	2.38	10.99	-76.6	150	41.2	8.36
1601	12.28	11.34	-	7.8	0.78	11.02	-74.8	150	8.70	8.67
1606	12.46	11.37	-	4.7	0.48	10.89	-74.9	150	5.68	8.67
1611	12.28	11.38	-	3.6	0.37	10.82	-75.7	150	5.91	8.67
1616	12.67	11.33	-	2.7	0.27	10.73	-76.9	150	6.49	8.67
1621	12.49	11.39	-	2.8	0.29	10.70	-77.1	150	5.84	8.67
1626	12.32	11.41	-	2.6	0.26	10.68	-77.1	150	5.31	8.67

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-8-18

Site/Well No.: MW-30 | Replicate No.: — | Code No.: —

Weather: 74°F CLEAR | Sampling Time: Begin 1504 End 1539

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	24.70
Depth to Water (ft bmp)	9.03
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	15.67
Casing Diameter/Type	2" PVC
Gallons in Well	(KB 5-8-18) ~~7.507~~ → 2.51
Gallons Pumped/Bailed Prior to Sampling	1.40
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1504 end 1539
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	14.05
SpC (mS/cm)	3.677
CND (mS/cm)	—
Dissolved Oxygen (%)	2.3
Dissolved Oxygen (mg/L)	0.24
pH (s.u.)	11.03
ORP (mV)	-87.7
Turbidity (NTU)	7.64
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.				
0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-30 PROJ #: MI001454.0004.00001

DATE : 5-8-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1504	14.02	3.463	–	21.3	2.12	8.76	65.9	150	29.1	9.03
1509	14.02	3.839	–	8.2	0.84	9.01	54.2	150	21.1	9.36
1514	13.81	3.739	–	3.7	0.38	10.49	-26.8	150	10.4	9.57
1519	13.80	3.730	–	3.5	0.37	10.71	-40.6	150	7.17	9.57
1524	13.73	3.711	–	3.2	0.33	10.90	-60.1	150	7.56	9.57
1529	14.08	3.697	–	2.8	0.27	10.94	-72.3	150	7.91	9.57
1534	13.86	3.680	–	2.5	0.26	10.98	-80.3	150	7.80	9.57
1539	14.05	3.677	–	2.3	0.24	11.03	-87.7	150	7.64	9.57
Total Depth of Well:		24.70								
Depth To Water Before Purging:				9.03						
Depth To Water After Purging:				9.57						

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-8-18

Site/Well No.: MW-31 | Replicate No.: — | Code No.: —

Weather: 74°F CLEAR | Sampling Time: Begin 1354 End 1419

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	21.67
Depth to Water (ft bmp)	9.27
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	12.40
Casing Diameter/Type	2" PVC
Gallons in Well	1.984
Gallons Pumped/Bailed Prior to Sampling	0.99
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1354 end 1419
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	12.81
SpC (mS/cm)	17.34
CND (mS/cm)	—
Dissolved Oxygen (%)	2.7
Dissolved Oxygen (mg/L)	0.26
pH (s.u.)	10.35
ORP (mV)	-64.1
Turbidity (NTU)	4.47
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	—

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-31 PROJ #: MI001454.0004.00001

DATE : 5-8-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1354	13.46	17.46	-	24.8	2.31	10.85	-60.7	150	92.8	9.27
1359	13.18	17.47	-	4.8	0.47	10.68	-58.5	150	22.4	9.36
1404	13.20	17.41	-	3.6	0.34	10.46	-58.4	150	16.5	9.36
1409	13.12	17.48	-	3.0	0.30	10.41	-61.6	150	6.16	9.36
1414	12.98	17.34	-	2.9	0.29	10.36	-63.2	150	5.71	9.36
1419	12.81	17.34	-	2.7	0.26	10.35	-64.1	150	4.47	9.36

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Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-8-18

Site/Well No.: MW-40 | Replicate No.: – | Code No.: –

Weather: 74°F CLEAR | Sampling Time: Begin 1248 End 1323

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	19.64
Depth to Water (ft bmp)	9.15
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	10.49
Casing Diameter/Type	2" PVC
Gallons in Well	1.68
Gallons Pumped/Bailed Prior to Sampling	1.39
Sample Pump Intake Setting (ft bmp)	–
Purge Time	begin 1248 end 1323
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	13.01
SpC (mS/cm)	16.29
CND (mS/cm)	–
Dissolved Oxygen (%)	2.3
Dissolved Oxygen (mg/L)	0.23
pH (s.u.)	10.75
ORP (mV)	-68.5
Turbidity (NTU)	12.7
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	MS/MSD TAKEN

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-40 PROJ #: MI001454.0004.00001

DATE : 5-8-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1248	13.34	15.65	-	16.9	1.61	11.35	-87.5	150	79.4	9.15
1253	13.26	15.65	-	8.5	0.82	11.39	-86.9	150	28.7	9.24
1258	13.04	15.59	-	4.8	0.48	11.25	-81.9	150	25.6	9.24
1303	12.82	15.70	-	4.0	0.39	11.08	-75.8	150	19.0	9.24
1308	13.17	15.98	-	3.1	0.31	10.92	-73.6	150	11.4	9.24
1313	12.92	16.17	-	2.9	0.29	10.89	-72.9	150	12.9	9.24
1318	13.25	16.18	-	2.5	0.25	10.81	-71.9	150	13.8	9.24
1323	13.01	16.29	-	2.3	0.23	10.75	-68.5	150	12.7	9.24
Total Depth of Well:		19.64								
Depth To Water Before Purging:				9.15						
Depth To Water After Purging:				9.24						

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Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-8-18

Site/Well No.: MW-39 | Replicate No.: – | Code No.: –

Weather: 67°F CLEAR | Sampling Time: Begin 1028 End 1053

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	24.16
Depth to Water (ft bmp)	10.25
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	13.91
Casing Diameter/Type	2" PVC
Gallons in Well	2.23
Gallons Pumped/Bailed Prior to Sampling	0.99
Sample Pump Intake Setting (ft bmp)	–
Purge Time	begin 1028 end 1053
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	11.57
SpC (mS/cm)	4.902
CND (mS/cm)	–
Dissolved Oxygen (%)	39
Dissolved Oxygen (mg/L)	0.42
pH (s.u.)	8.94
ORP (mV)	44.8
Turbidity (NTU)	4.39
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	DUP-01-050818 TAKEN

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

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YSI/LOW FLOW SAMPLING LOG

WELL : MW-39 PROJ #: MI001454.0004.00001

DATE : 5-8-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1028	11.62	5.100	-	20.11	2.01	8.82	61.9	150	12.2	10.25
1033	11.64	5.110	-	13.2	1.40	8.81	63.3	150	27.6	10.25
1038	11.62	5.046	-	7.3	0.78	8.91	53.7	150	15.8	10.25
1043	11.64	4.991	-	6.0	0.64	8.92	51.4	150	9.64	10.25
1048	11.61	4.940	-	4.9	0.51	8.96	46.5	150	4.85	10.25
1053	11.57	4.902	-	3.9	0.42	8.94	44.8	150	4.39	10.25

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Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5-8-18

Site/Well No.: MW-33 | Replicate No.: — | Code No.: —

Weather: 60°F CLEAR | Sampling Time: Begin 902 | End ~~1005~~ 1002 (KB) 5-8-18

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	22.76
Depth to Water (ft bmp)	7.38
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	15.38
Casing Diameter/Type	2" PVC
Gallons in Well	2.46
Gallons Pumped/Bailed Prior to Sampling	2.38
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 902 end ~~1005~~ 1002 (KB) 5-8-18
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	11.50
SpC (mS/cm)	3.257
CND (mS/cm)	—
Dissolved Oxygen (%)	2.6
Dissolved Oxygen (mg/L)	0.27
pH (s.u.)	10.87
ORP (mV)	-75.7
Turbidity (NTU)	9.6
Color	CLEAR
Odor	NONE
Appearance	NORMAL
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: KALAN BRIGGS

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-33 PROJ #: MI001454.0004.00001

DATE : 5-8-18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
905	11.32	2.801	-	29.8	3.14	11.29	-70.0	150	24.9	7.38
910	11.27	2.822	-	9.0	0.96	11.38	-73.7	150	73.3	7.49
915	11.26	2.834	-	6.0	0.65	11.47	-76.5	150	52.0	7.49
920	11.21	2.874	-	5.1	0.55	11.50	-77.4	150	45.3	7.49
925	11.29	2.912	-	4.0	0.43	11.42	-77.5	150	30.1	7.49
930	11.38	2.952	-	3.6	0.38	11.36	-77.5	150	30.4	7.49
935	11.44	2.976	-	3.4	0.35	11.26	-75.8	150	32.6	7.49
940	11.43	3.046	-	3.1	0.33	11.07	-75.0	150	20.1	7.49
945	11.45	3.044	-	2.9	0.32	10.99	-76.0	150	15.9	7.49
950	11.42	3.175	-	2.8	0.30	10.96	-76.2	150	14.1	7.49
955	11.50	3.189	-	2.6	0.28	10.93	-76.5	150	12.2	7.49
1000	11.52	3.233	-	2.7	0.28	10.89	-76.6	150	9.8	7.49
1005	11.50	3.257	-	2.6	0.27	10.87	-75.7	150	9.6	7.49
Total Depth of Well:		22.76								
Depth To Water Before Purging:				7.38						
Depth To Water After Purging:				7.49						

APPENDIX B

Off-Site Groundwater Field Sampling Logs

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5/8/18

Site/Well No.: MW-85 | Replicate No.: | Code No.:

Weather: 50 Hazy | Sampling Time: Begin 0842 End 0845

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	12.69
Depth to Water (ft bmp)	4.20
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	8.49
Casing Diameter/Type	2" PVC
Gallons in Well	1.36
Gallons Pumped/Bailed Prior to Sampling	~3.0
Sample Pump Intake Setting (ft bmp)	
Purge Time	begin 755 end 0845
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	9.28
SpC (mS/cm)	3.149
CND (mS/cm)	2.204
Dissolved Oxygen (%)	2.1
Dissolved Oxygen (mg/L)	0.28
pH (s.u.)	7.18
ORP (mV)	299
Turbidity (NTU)	9.22
Color	Clear
Odor	none
Appearance	—
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: ARubel

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-85 PROJ #: MI001454.0004.00001

DATE : 5/8/10 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
0800	8.167	3.675	2.532	53.7	5.70	7.72	81.4	150	39.0	4.26
0805	8.76	3.656	2.521	15.1	1.73	7.55	68.9	150	39.3	4.26
0810	8.76	3.570	2.462	7.9	0.91	7.44	58.0	150	31.0	4.26
0815	8.97	3.463	2.401	5.1	0.58	7.36	49.6	150	20.8	4.26
0820	9.17	3.350	2.336	3.6	0.41	7.31	43.1	150	14.8	4.26
0825	9.25	3.272	2.288	2.6	0.29	7.25	37.3	150	12.9	4.26
0830	9.28	3.149	2.205	2.5	0.29	7.27	30.8	150	10.6	4.26
0835	9.28	3.149	2.204	2.3	0.28	7.21	30.5	150	9.41	4.26
0840	9.28	3.149	2.204	2.1	0.28	7.18	29.9	150	9.22	4.26
	Sampled @ 0842									
Total Depth of Well:		12.69								
Depth To Water Before Purging:			4.20							
Depth To Water After Purging:			4.26							

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Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00002 | Page 1 of 2

Location: Livonia, MI | Date: 5/8/18

Site/Well No.: MW-79S | Replicate No.: | Code No.:

Weather: 50s hazy | Sampling Time: Begin 1002 End 1005

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	~~16.77~~ AR 9.67
Depth to Water (ft bmp)	3.58
Water-Level Elevation (ft)	NA ~~-19~~ AR
Water Column in Well (ft)	~~13.19~~ AR 6.09
Casing Diameter/Type	2" PVC
Gallons in Well	~~2.14~~ AR 0.97
Gallons Pumped/Bailed Prior to Sampling	~2.0
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 925 end 1005
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	9.71
SpC (mS/cm)	1.731
CND (mS/cm)	1.226
Dissolved Oxygen (%)	0.0
Dissolved Oxygen (mg/L)	0.00
pH (s.u.)	7.14
ORP (mV)	92.1
Turbidity (NTU)	1.02
Color	Clear
Odor	none
Appearance	—
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: AReibel

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-79S

PROJ #: MI001454.0004.00001

DATE : 5/8/18

LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
0930	10.11	0.1626	0.448	1.3	0.14	7.81	92.8	150	12.2	3.60
0935	9.81	0.990	0.702	0.5	0.06	7.37	105.7	150	6.12	3.60
0940	9.71	1.349	0.955	0.1	0.01	7.27	103.7	150	5.57	3.60
0945	9.71	1.570	1.111	0.0	0.00	7.21	100.6	150	2.07	3.60
0950	9.71	1.684	1.192	0.0	0.00	7.18	101.3	150	1.45	3.60
0955	9.71	1.725	1.221	0.0	0.00	7.14	93.4	150	1.18	3.60
1000	9.71	1.731	1.226	0.0	0.00	7.14	92.1	150	1.02	3.60
		Sampled @ 1002								

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Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5/8/18

Site/Well No.: MW-79D | Replicate No.: | Code No.:

Weather: 62°F Sunny | Sampling Time: Begin 1042 End 1045

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	16.77
Depth to Water (ft bmp)	3.58
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	13.19
Casing Diameter/Type	2" PVC
Gallons in Well	2.11
Gallons Pumped/Bailed Prior to Sampling	~2.0
Sample Pump Intake Setting (ft bmp)	
Purge Time	begin 1005 end 1045
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	9.73
SpC (mS/cm)	3.452
CND (mS/cm)	2.445
Dissolved Oxygen (%)	-0.2
Dissolved Oxygen (mg/L)	-0.02
pH (s.u.)	7.02
ORP (mV)	71.0
Turbidity (NTU)	2.99
Color	clear
Odor	none
Appearance	—
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel:

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-79D PROJ #: MI001454.0004.00001

DATE : 5/8/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1010	10.00	3.513	2.508	-0.3	-0.03	6.99	98.9	150	13.1	3.65
1015	10.13	3.545	2.539	-0.1	-0.01	7.00	95.3	150	9.20	3.65
1020	9.85	3.498	2.485	-0.1	-0.01	7.01	86.1	150	8.71	3.65
1025	9.76	3.461	2.453	-0.2	-0.02	7.00	79.1	150	4.96	3.65
1030	9.77	3.450	2.445	-0.2	-0.02	7.02	74.4	150	5.50	3.65
1035	9.75	3.451	2.446	-0.2	-0.02	7.02	72.3	150	3.77	3.65
1040	9.73	3.452	2.445	-0.2	-0.02	7.02	71.0	150	2.99	3.65
	Sampled @ 1042									
Total Depth of Well:										
Depth To Water Before Purging:			3.58							
Depth To Water After Purging:										

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date:

Site/Well No.: MW-84 | Replicate No.: | Code No.:

Weather: | Sampling Time: Begin 1307 End 1310

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	12.55
Depth to Water (ft bmp)	2.95
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	9.60
Casing Diameter/Type	2" PVC
Gallons in Well	1.54
Gallons Pumped/Bailed Prior to Sampling	~ 3.0
Sample Pump Intake Setting (ft bmp)	
Purge Time	begin 1220 end 1310
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	10.95
SpC (mS/cm)	4965
CND (mS/cm)	3632
Dissolved Oxygen (%)	0.1
Dissolved Oxygen (mg/L)	0.01
pH (s.u.)	7.12
ORP (mV)	82.5
Turbidity (NTU)	9.6
Color	clear
Odor	none
Appearance	—
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: AReibel

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-84 PROJ #: MI001454.0004.00002

DATE : 5/8/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1230	11.32	5.700	4.210	0.5	0.06	7.27	117.0	150	80.5	2.98
1235	11.26	5.674	4.183	0.4	0.04	7.24	108.7	150	53.1	2.98
1240	11.13	5.227	4.059	0.3	0.03	7.19	100.5	150	36.1	2.98
1245	10.99	5.351	3.916	0.3	0.03	7.16	95.5	150	26.0	2.98
1250	10.99	5.173	3.785	0.2	0.02	7.15	90.3	150	18.9	2.98
1255	11.03	5.031	3.687	0.2	0.02	7.13	85.9	150	15.9	2.98
1300	10.91	4.985	3.656	0.1	0.01	7.12	83.0	150	12.3	2.98
1305	10.95	4.965	3.632	0.1	0.01	7.12	82.5	150	9.6	2.98
		Sampled @ 1307								
Total Depth of Well:										
Depth To Water Before Purging:		2.95								
Depth To Water After Purging:										

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00007 | Page: 1 of 2

Location: Livonia, MI | Date: 5/8/18

Site/Well No.: MW-78 | Replicate No.: | Code No.:

Weather: 70°F Sunny | Sampling Time: Begin 1407 End 1410

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	11.75
Depth to Water (ft bmp)	1.66
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	10.09
Casing Diameter/Type	2" PVC
Gallons in Well	1.61
Gallons Pumped/Bailed Prior to Sampling	~ 3.0
Sample Pump Intake Setting (ft bmp)	-
Purge Time	begin 1330 end 1410
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	8.85
SpC (mS/cm)	4.062
CND (mS/cm)	2.809
Dissolved Oxygen (%)	0.0
Dissolved Oxygen (mg/L)	0.00
pH (s.u.)	7.35
ORP (mV)	169.1
Turbidity (NTU)	1.29
Color	Clear
Odor	none
Appearance	-
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: ARibel

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-78 PROJ #: MI001454.0004.00001

DATE : 5/8/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1335	9.51	5.270	3.716	0.2	0.03	7.44	94.8	150	26.8	1.69
1340	9.16	4.944	3.445	0.1	0.01	7.44	88.3	150	12.7	1.69
1345	9.25	4.551	3.171	0.0	0.00	7.44	83.8	150	4.50	1.69
1350	9.22	4.273	2.983	0.0	0.00	7.41	78.6	150	1.98	1.69
1355	8.87	4.137	2.861	0.0	0.00	7.38	72.6	150	1.79	1.69
1400	8.88	4.041	2.811	0.0	0.00	7.36	69.2	150	1.54	1.69
1405	8.85	4.062	2.809	0.0	0.00	7.35	69.1	150	1.29	1.69

Sampled @ 1407

Total Depth of Well:	11.75	
Depth To Water Before Purging:	1.66	
Depth To Water After Purging:	1.69	

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5/8/18

Site/Well No.: MW-80S | Replicate No.: 1507 | Code No.:

Weather: 70s sunny | Sampling Time: Begin ~~1420~~ | End ~~1417~~ 1510

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	11.55
Depth to Water (ft bmp)	1.45
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	10.1
Casing Diameter/Type	2" PVC
Gallons in Well	1.616
Gallons Pumped/Bailed Prior to Sampling	2.0
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1425 end 1510
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	10.43
SpC (mS/cm)	2.882
CND (mS/cm)	2.078
Dissolved Oxygen (%)	-.03
Dissolved Oxygen (mg/L)	-0.03
pH (s.u.)	7.19
ORP (mV)	31.2
Turbidity (NTU)	3.33
Color	clear
Odor	none
Appearance	—
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-8CS PROJ #: MI001454.0004.00001

DATE : 5/8/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1430	10.58	3.193	2.319	-0.1	0.00	7.43	72.6	150	47.4	1.70
1435	10.57	3.189	2.309	-0.1	0.00	7.36	67.4	150	34.2	1.70
1440	10.30	3.069	2.204	-0.2	-0.03	7.31	55.8	150	9.72	1.70
1445	10.31	3.008	2.163	-0.3	-0.03	7.26	48.3	150	5.24	1.70
1450	10.45	2.948	2.130	-0.2	-0.03	7.22	41.8	150	3.26	1.70
1455	10.43	2.895	2.089	-0.3	-0.03	7.18	34.3	150	3.41	1.70
1500	10.43	2.876	2.079	-0.3	-0.03	7.19	32.5	150	3.46	1.70
1505	10.43	2.882	2.078	-0.3	-0.03	7.19	31.2	150	3.33	1.70
		Sampled @ 1507								

Total Depth of Well:	
Depth To Water Before Purging:	1.45
Depth To Water After Purging:	

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5/9/18

Site/Well No.: MW-72 | Replicate No.: MS/MSD | Code No.:

Weather: Sunny, 71°F | Sampling Time: Begin 1102 End 1112

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	19.63
Depth to Water (ft bmp)	7.80
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	11.83
Casing Diameter/Type	2" PVC
Gallons in Well	1.89
Gallons Pumped/Bailed Prior to Sampling	~40
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 0950 end 1112
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	13.48
SpC (mS/cm)	5.897
CND (mS/cm)	4.571
Dissolved Oxygen (%)	0.0
Dissolved Oxygen (mg/L)	0.00
pH (s.u.)	7.48
ORP (mV)	19.6
Turbidity (NTU)	2.56
Color	Clear
Odor	none
Appearance	—
Sampling Method	Low Flow
Remarks	MS/MSD collected

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: AReibel

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-72 PROJ #: MI001454.0004.00001

DATE : 5/9/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1000	13.39	6.158	4.793	43.3	4.43	7.01	130.2	150	10.3	7.81
1005	13.21	6.176	4.785	3.7	0.38	7.18	91.8	150	7.50	7.81
1010	13.28	5.671	4.792	2.4	0.24	7.20	81.1	150	6.30	7.81
1015	13.32	6.163	4.788	1.6	0.16	7.27	68.2	150	6.15	7.81
1020	13.45	6.119	4.770	1.3	0.13	7.33	56.5	150	4.22	781
1025	13.51	6.094	4.755	1.0	0.10	7.37	49.4	150	3.61	781
1030	13.52	6.045	4.720	0.7	0.08	7.40	41.0	150	3.05	7.81
1035	13.49	6.000	4.682	0.5	0.05	7.42	34.0	150	3.25	7.81
1040	13.46	5.981	4.666	0.4	0.04	7.44	30.8	150	3.01	7.81
1045	13.48	5.948	4.640	0.3	0.03	7.45	27.6	150	2.49	7.81
1050	13.48	5.905	4.701	0.1	0.01	7.48	22.3	150	2.96	7.81
1055	13.48	5.910	4.583	0.0	0.00	7.48	19.9	150	2.82	7.81
1100	13.48	5.897	4.571	0.0	0.00	7.48	19.6	150	2.56	7.81
		Sampled @ 1102								
				MS/MSD collected						
Total Depth of Well:		19.63								
Depth To Water Before Purging:			7.80							
Depth To Water After Purging:			7.81							

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date:

Site/Well No.: MW-73S | Replicate No.: | Code No.:

Weather: | Sampling Time: Begin 1232 End 1234

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	11.55
Depth to Water (ft bmp)	4.71
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	6.81
Casing Diameter/Type	2" PVC
Gallons in Well	1.09
Gallons Pumped/Bailed Prior to Sampling	~2.5
Sample Pump Intake Setting (ft bmp)	-
Purge Time	begin 1150 end 1234
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	12.55
SpC (mS/cm)	5.320
CND (mS/cm)	4.051
Dissolved Oxygen (%)	0.7
Dissolved Oxygen (mg/L)	0.07
pH (s.u.)	6.76
ORP (mV)	76.2
Turbidity (NTU)	1.99
Color	Clear
Odor	none
Appearance	-
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: AReibel

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-73S

PROJ #: MI001454.0004.00001

DATE : 5/9/18

LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1200	12.79	5.291	4.055	1.6	0.16	7.33	88.7	150	11.6	4.76
1205	12.69	5.294	4.050	0.8	0.08	6.98	80.6	150	7.67	4.76
1210	12.55	5.310	4.047	0.7	0.08	6.85	78.4	150	5.03	4.76
1215	12.50	5.310	4.042	0.7	0.07	6.79	77.2	150	4.02	4.76
1220	12.50	5.309	4.051	0.7	0.06	6.77	76.7	150	3.46	4.76
1225	12.55	5.322	4.057	0.7	0.07	6.76	76.4	150	2.82	4.76
1230	12.55	5.320	4.051	0.7	0.07	6.76	76.2	150	1.99	4.76
	Sampled @ 1232									
Total Depth of Well:										
Depth To Water Before Purging:			4.71							
Depth To Water After Purging:										

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date:

Site/Well No.: MW-73D | Replicate No.: | Code No.:

Weather: | Sampling Time: Begin 1332 End 1337

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	17.36
Depth to Water (ft bmp)	4.98
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	12.38
Casing Diameter/Type	2" PVC
Gallons in Well	1.98
Gallons Pumped/Bailed Prior to Sampling	~2.5
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1235 end 1337
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	13.26
SpC (mS/cm)	4.255
CND (mS/cm)	3.301
Dissolved Oxygen (%)	-0.6
Dissolved Oxygen (mg/L)	-0.06
pH (s.u.)	7.27
ORP (mV)	-19.5
Turbidity (NTU)	6.00
Color	Clear
Odor	none
Appearance	—
Sampling Method	Low Flow
Remarks	Dup 01 collected

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel:

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-73D PROJ #: MI001454.0004.00001

DATE : 5/9/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1240	13.47	3.494	2.724	0.3	0.03	7.17	55.0	150	66.1	5.06
1245	13.21	3.562	2.799	0.2	0.02	7.18	59.8	150	62.6	5.06
1250	13.09	3.735	2.887	-0.3	-0.03	7.24	21.3	150	59.8	5.06
1255	13.14	3.785	2.929	-0.3	-0.04	7.25	16.9	150	49.9	5.06
1300	13.33	3.914	3.042	-0.4	-0.04	7.26	7.2	150	37.7	5.06
1305	13.01	4.087	3.115	-0.6	-0.06	7.26	-1.7	150	24.3	5.06
1310	13.13	4.117	3.183	-0.6	-0.06	7.26	-10.4	150	15.7	5.06
1315	13.08	4.186	3.233	-0.6	-0.06	7.26	-16.0	150	10.4	5.06
1320	13.31	4.219	3.282	-0.6	-0.06	7.27	-20.0	150	7.88	5.06
1325	13.31	4.249	3.300	-0.6	-0.06	7.27	-19.7	150	6.23	5.06
1330	13.26	4.255	3.301	-0.6	-0.06	7.27	-19.5	150	6.00	5.06
Sampled @ 1332										
Total Depth of Well:										
Depth To Water Before Purging:			4.98	Dup-01 collected						
Depth To Water After Purging:										

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5/9/18

Site/Well No.: MW-74 | Replicate No.: | Code No.:

Weather: 79°F p.cloudy | Sampling Time: Begin 1502 End 1505

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	18.77
Depth to Water (ft bmp)	5.86
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	12.82
Casing Diameter/Type	2" PVC
Gallons in Well	2.05
Gallons Pumped/Bailed Prior to Sampling	~ 3.0
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1405 end 1505
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	13.40
SpC (mS/cm)	6.914
CND (mS/cm)	5.389
Dissolved Oxygen (%)	-0.2
Dissolved Oxygen (mg/L)	-0.02
pH (s.u.)	7.20
ORP (mV)	-12.2
Turbidity (NTU)	10.0
Color	Clear
Odor	none
Appearance	—
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: AReibel

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-74 PROJ #: MI001454.0004.00001

DATE : 5/9/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1410	13.68	6.497	5.097	1.1	0.11	7.43	68.0	150	221	5.89
1415	13.50	6.669	5.205	0.2	0.07	7.33	36.6	150	109	5.89
1420	13.53	6.749	5.270	0.0	0.00	7.29	23.1	150	94.7	5.89
1425	13.47	6.797	5.303	-0.1	-0.01	7.27	10.1	150	75.8	5.89
1430	13.45	6.842	5.333	-0.1	-0.01	7.24	2.3	150	64.3	5.89
1435	13.38	6.894	5.363	-0.1	-0.01	7.23	2.1	150	42.5	5.89
1440	13.55	6.906	5.397	-0.01	-0.01	7.21	-1.7	150	34.3	5.89
1445	13.54	6.919	5.407	-0.2	-0.02	7.20	-4.8	150	26.8	5.89
1450	13.34	6.924	5.384	-0.2	-0.02	7.20	-10.4	150	22.1	5.89
1455	13.46	6.916	5.392	-0.2	-0.02	7.20	-11.6	150	12.3	5.89
1500	13.46	6.914	5.389	-0.2	-0.02	7.20	-12.2	150	10.0	5.89
1505										
1510										
	Sampled @ 1502									
Total Depth of Well:										
Depth To Water Before Purging:			5.80							
Depth To Water After Purging:										

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page: 1 of 2

Location: Livonia, MI | Date: 5/9/18

Site/Well No.: MW-75S | Replicate No.: – | Code No.:

Weather: 72°F, Rainy | Sampling Time: Begin 1612 End 1615

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	9.67
Depth to Water (ft bmp)	4.98
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	4.69
Casing Diameter/Type	2" PVC
Gallons in Well	0.75
Gallons Pumped/Bailed Prior to Sampling	~2.0
Sample Pump Intake Setting (ft bmp)	–
Purge Time	begin 1535 end 1615
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	11.70
SpC (mS/cm)	2.106
CND (mS/cm)	1.567
Dissolved Oxygen (%)	0.1
Dissolved Oxygen (mg/L)	0.01
pH (s.u.)	7.58
ORP (mV)	572
Turbidity (NTU)	1.30
Color	Clear
Odor	none
Appearance	
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: AReibel

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-75S PROJ #: MI001454.0004.00001

DATE : 5/9/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1540	12.75	1.780	1.354	2.5	0.26	7.95	82.0	150	10.7	5.02
1545	11.83	1.841	1.379	1.2	0.13	7.76	72.7	150	3.98	5.02
1550	11.90	1.807	1.353	0.8	0.08	7.74	66.1	150	2.69	5.02
1555	11.99	2.029	1.525	0.3	0.03	7.61	62.8	150	1.92	5.02
1600	11.70	2.083	1.553	0.1	0.01	7.59	59.0	150	1.31	5.02
1605	11.69	2.104	1.565	0.1	0.01	7.57	58.0	150	1.29	5.02
1610	11.70	2.106	1.567	0.1	0.01	7.58	57.2	150	1.30	5.02
		Sampled @ 1612.								
Total Depth of Well:										
Depth To Water Before Purging:			4.98							
Depth To Water After Purging:										

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page: 1 of 2

Location: Livonia, MI | Date: 5/9/18

Site/Well No.: MW-75D | Replicate No.: | Code No.:

Weather: 72°F cloudy | Sampling Time: Begin 1722 End 1725

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	16.77
Depth to Water (ft bmp)	5.00
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	11.77
Casing Diameter/Type	2" PVC
Gallons in Well	1.88
Gallons Pumped/Bailed Prior to Sampling	~ 35
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1615 end 1725
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	12.38
SpC (mS/cm)	6.962
CND (mS/cm)	5.285
Dissolved Oxygen (%)	-0.2
Dissolved Oxygen (mg/L)	-0.02
pH (s.u.)	7.54
ORP (mV)	-71.2
Turbidity (NTU)	86.1
Color	clear w/ ught silty coloring
Odor	none
Appearance	—
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: AReibel

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-75D PROJ #: MI001454.0004.00001

DATE : 5/9/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1620	12.14	7.228	5.456	0.5	0.05	7.49	12.3	150	485	5.10
1625	12.20	7.157	5.406	-0.4	-0.04	7.55	-18.3	150	398	5.13
1630	12.32	7.108	5.381	-0.1	-0.01	7.57	-43.2	150	302	5.13
1635	12.28	7.053	5.346	-0.3	-0.03	7.58	-61.1	150	240	5.13
1640	12.29	7.002	5.326	-0.3	-0.03	7.57	-63.6	150	212	5.13
1645	12.30	7.012	5.316	-0.3	-0.03	7.57	-65.7	150	198	5.13
1650	12.33	6.996	5.306	-0.3	-0.03	7.56	-75.5	150	158	5.13
1655	12.36	6.978	5.294	-0.3	-0.03	7.55	-72.7	150	146	5.13
1700	12.38	6.962	5.285	-0.2	-0.02	7.54	-77.0	150	121	5.13
1705	12.38	6.962	5.284	-0.2	-0.02	7.54	-71.0	150	111	5.13
1710	12.38	6.962	5.285	-0.2	-0.02	7.54	-71.0	150	101	5.13
1715	12.38	6.962	5.285	-0.2	-0.02	7.54	-71.0	150	91.0	5.13
1720	12.38	6.962	5.285	-0.2	-0.02	7.54	-71.2	150	86.1	5.13
	Sampled @ 1722									
Total Depth of Well:										
Depth To Water Before Purging: 5.00										
Depth To Water After Purging: 5.13										

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5/10/18

Site/Well No.: MW-76 | Replicate No.: | Code No.:

Weather: | Sampling Time: Begin 0917 End 0920

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	19.64
Depth to Water (ft bmp)	8.98
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	10.76
Casing Diameter/Type	2" PVC
Gallons in Well	1.72
Gallons Pumped/Bailed Prior to Sampling	~3.0
Sample Pump Intake Setting (ft bmp)	-
Purge Time	begin 0820 end 0920
Pumping Rate (ml/min)	
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	8.42
SpC (mS/cm)	9718
CND (mS/cm)	6.641
Dissolved Oxygen (%)	11.7
Dissolved Oxygen (mg/L)	1.33
pH (s.u.)	7.15
ORP (mV)	-25.2
Turbidity (NTU)	7.12
Color	clear
Odor	none
Appearance	-
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: AReibel

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-76 PROJ #: MI001454.0004.00001

DATE : 5/10/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
825	8.74	11.53	7.940	315	35.09	7.30	-9.7	150	65.2	9.30
830	8.58	11.06	7.575	136.5	15.29	7.24	-12.3	150	65.0	9.30
835	8.47	10.13	6.931	89.2	9.74	7.20	-12.5	150	59.7	9.30
840	8.37	9.772	6.666	40.7	4.61	7.13	-12.4	150	52.6	9.30
845	8.29	9.668	6.582	21.6	2.32	7.16	-17.1	150	50.1	9.30
850	8.34	9.645	6.576	16.4	1.80	7.16	-19.4	150	48.2	9.30
855	8.26	9.650	6.567	18.0	2.05	7.16	-21.0	150	32.6	9.30
900	8.26	9.644	6.561	15.3	1.70	7.15	-23.4	150	20.0	9.30
905	8.33	9.637	6.568	13.2	1.47	7.15	-24.9	150	8.01	9.30
910	8.40	9.708	6.634	12.0	1.37	7.15	-25.6	150	7.29	9.30
915	8.42	9.718	6.641	11.7	1.33	7.15	-25.2	150	7.12	9.30
	Sampled @ 917									
Total Depth of Well:										
Depth To Water Before Purging: 8.98										
Depth To Water After Purging:										

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 9/10/18

Site/Well No.: MW-81 | Replicate No.: | Code No.:

Weather: p. Cloudy 70s | Sampling Time: Begin 1022 End 1025

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	12.60
Depth to Water (ft bmp)	5.99
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	6.67
Casing Diameter/Type	2" PVC
Gallons in Well	1.04
Gallons Pumped/Bailed Prior to Sampling	~~150~~ AP ~1.0
Sample Pump Intake Setting (ft bmp)	1
Purge Time	begin 0945 end 1025
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	~~17.6~~ AP 5.92
SpC (mS/cm)	1.648
CND (mS/cm)	1.047
Dissolved Oxygen (%)	12.0
Dissolved Oxygen (mg/L)	1.49
pH (s.u.)	7.21
ORP (mV)	80.5
Turbidity (NTU)	6.12
Color	clear
Odor	none
Appearance	—
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: AReibel

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-81 PROJ #: MI001454.0004.00001

DATE : 5/10/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
0950	5.90	1.917	1.215	38.3	4.65	7.66	92.3	150	17.2	6.69
0955	5.69	1.705	1.095	13.2	1.61	7.35	81.2	150	20.8	7.29
1000	5.96	1.669	1.062	12.0	1.49	7.25	61.4	150	7.66	7.29
1005	5.98	1.669	1.063	12.0	1.49	7.25	60.4	150	5.09	7.29
1010	6.12	1.666	1.065	12.3	1.52	7.24	55.8	150	5.78	7.29
1015	5.94	1.657	1.053	12.4	1.53	7.21	51.2	150	6.05	7.29
1020	5.92	1.648	1.047	12.0	1.49	7.21	50.5	150	6.12	7.29
		sampled		1022						
Total Depth of Well:										
Depth To Water Before Purging:			5.99							
Depth To Water After Purging:			7.29							

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page: 1 of 2

Location: Livonia, MI | Date: 5/10/18

Site/Well No.: MW-82s | Replicate No.: | Code No.:

Weather: 70s pcloudy | Sampling Time: Begin 1112 End 1115

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	13.36
Depth to Water (ft bmp)	6.96
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	6.40
Casing Diameter/Type	2" PVC
Gallons in Well	1.024
Gallons Pumped/Bailed Prior to Sampling	~ 2.0
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1035 end 1115
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	5.79
SpC (mS/cm)	1.243
CND (mS/cm)	0.787
Dissolved Oxygen (%)	17.0
Dissolved Oxygen (mg/L)	1.99
pH (s.u.)	7.08
ORP (mV)	503
Turbidity (NTU)	1.76
Color	clear
Odor	none
Appearance	—
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: AMB

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-82S PROJ #: MI001454.0004.00001

DATE : 5/10/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1040	6.08	1.313	0.839	64.8	8.02	7.35	88.4	150	16.5	7.51
1045	6.00	1.215	0.774	38.5	4.75	7.17	76.3	150	5.71	7.71
1050	5.82	1.210	0.767	26.2	3.27	7.14	67.0	150	2.91	7.76
1055	5.72	1.232	0.778	18.4	2.30	7.10	58.9	150	2.47	7.76
1100	5.79	1.233	0.780	18.2	2.15	7.09	57.2	150	2.36	7.76
1105	5.78	1.242	0.786	18.0	2.00	7.09	52.3	150	1.95	7.76
1110	5.79	1.243	0.787	17.0	1.99	7.08	50.3	150	1.76	7.76
		sampled @ 1112								
Total Depth of Well:										
Depth To Water Before Purging:			7.51							
Depth To Water After Purging:			7.76							

ARCADIS

Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5/10/18

Site/Well No.: MW-~~85D~~ AR 82D | Replicate No.: | Code No.:

Weather: | Sampling Time: Begin 1152 End 1155

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	22.74
Depth to Water (ft bmp)	7.34
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	15.4
Casing Diameter/Type	2" PVC
Gallons in Well	2.464
Gallons Pumped/Bailed Prior to Sampling	~ 2.0
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1115 end 1155
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	7.62
SpC (mS/cm)	1.302
CND (mS/cm)	0.864
Dissolved Oxygen (%)	7.2
Dissolved Oxygen (mg/L)	0.82
pH (s.u.)	7.29
ORP (mV)	-72.6
Turbidity (NTU)	2.34
Color	Clear
Odor	none
Appearance	—
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: AReibel

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-~~83D~~ 82D

PROJ #: MI001454.0004.00001

DATE : 6/10/18

LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1120	8.31	1.254	0.854	71.4	8.37	7.22	-12.5	150	7.24	7.36
1125	8.13	1.247	0.845	17.9	2.03	7.26	-61.8	150	6.15	7.36
1130	7.98	1.248	0.842	8.0	0.87	7.28	-72.9	150	4.20	7.36
1135	8.84	1.232	0.853	8.1	0.83	7.28	-74.6	150	4.69	7.36
1140	7.82	1.271	0.854	7.9	0.83	7.29	-75.2	150	3.85	7.36
1145	7.62	1.294	0.866	7.6	0.83	7.29	-73.1	150	2.74	7.36
1150	7.62	1.302	0.866	7.2	0.82	7.29	-72.6	150	2.34	7.36
	Sampled @			1152						

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Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5/10/18

Site/Well No.: MW-86 | Replicate No.: | Code No.:

Weather: | Sampling Time: Begin 1332 End 1335

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	16.60
Depth to Water (ft bmp)	6.01
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	10.59
Casing Diameter/Type	2" PVC
Gallons in Well	1.694
Gallons Pumped/Bailed Prior to Sampling	~2.0
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 1245 ~~1115~~ end 1335
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	8.09
SpC (mS/cm)	2.335
CND (mS/cm)	1.581
Dissolved Oxygen (%)	7.4
Dissolved Oxygen (mg/L)	0.80
pH (s.u.)	7.32
ORP (mV)	-83.6
Turbidity (NTU)	8.4
Color	clear
Odor	none
Appearance	
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel:

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-86 PROJ #: MI001454.0004.00001

DATE : 5/10/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1250	8.49	2.193	1.502	24.2	2.76	7.77	-67.6	150	41.7	6.10
1255	8.28	2.214	1.507	13.4	1.62	7.61	-78.9	150	26.9	6.10
1300	8.20	2.227	1.513	8.8	1.03	7.48	-79.7	150	18.5	6.10
1305	8.13	2.242	1.520	7.0	0.82	7.44	-80.3	150	12.5	6.10
1310	8.23	2.257	1.534	4.8	0.56	7.40	-77.5	150	12.1	6.10
1315	8.49	2.291	1.586	3.2	0.36	7.37	-80.4	150	11.6	6.10
1320	8.27	2.317	1.576	2.6	0.30	7.35	-82.2	150	10.2	6.10
1325	8.09	2.336	1.582	2.5	0.30	7.33	-83.4	150	9.27	6.10
1330	8.09	2.335	1.581	2.4	0.30	7.32	-83.6	150	8.6	6.10
		Sampled @ 1332								
Total Depth of Well:										
Depth To Water Before Purging: 6.01										
Depth To Water After Purging: 6.10										

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Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5/10/18

Site/Well No.: MW-87 | Replicate No.: | Code No.:

Weather: 70s p.cldy | Sampling Time: Begin 1422 End 1425

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	18.80
Depth to Water (ft bmp)	9.41
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	9.39
Casing Diameter/Type	2" PVC
Gallons in Well	1.502
Gallons Pumped/Bailed Prior to Sampling	~2.0
Sample Pump Intake Setting (ft bmp)	-
Purge Time	begin 1347 end 1425
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	8.88
SpC (mS/cm)	1.519
CND (mS/cm)	1.450
Dissolved Oxygen (%)	4.5
Dissolved Oxygen (mg/L)	0.59
pH (s.u.)	9.20
ORP (mV)	-17.2
Turbidity (NTU)	~~15~~ AK 3.96
Color	clear
Odor	none
Appearance	-
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: AReibel

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-87 PROJ #: MI001454.0004.00001

DATE : 5/10/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
1350	8.95	1.235	0.856	33.6	3.88	9.41	-8.8	150	10.0	9.45
1355	8.71	1.222	0.842	17.3	2.01	~~8.96~~ 9.76	-14.3	150	6.12	9.45
1400	8.72	1.327	0.915	9.0	1.04	9.49	-10.0	150	5.79	9.45
1405	9.02	1.389	0.965	6.8	0.78	9.38	-14.2	150	6.36	9.45
1410	8.82	1.451	1.004	5.3	0.61	9.29	-15.1	150	4.51	9.45
1415	8.69	1.514	1.043	4.9	0.59	9.20	-16.2	150	4.24	9.45
1420	8.83	1.519	1.050	~~4.5~~ 4.5	0.59	9.20	-17.2	150	3.96	9.45
	Sampled @ 1422									
Total Depth of Well:										
Depth To Water Before Purging: 9.41										
Depth To Water After Purging:										

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Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page 1 of 2

Location: Livonia, MI | Date: 5/11/18

Site/Well No.: MW-77 | Replicate No.: | Code No.:

Weather: Cloudy 40s | Sampling Time: Begin 0841 End 0850

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	13.70
Depth to Water (ft bmp)	4.46
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	9.24
Casing Diameter/Type	2" PVC
Gallons in Well	1.47
Gallons Pumped/Bailed Prior to Sampling	~2.0
Sample Pump Intake Setting (ft bmp)	—
Purge Time	begin 0805 end 0850
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	6.27
SpC (mS/cm)	0.742
CND (mS/cm)	0.477
Dissolved Oxygen (%)	10.2
Dissolved Oxygen (mg/L)	1.26
pH (s.u.)	7.79
ORP (mV)	-97.0
Turbidity (NTU)	1.14
Color	clear
Odor	none
Appearance	
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel:

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-77 PROJ #: MI001454.0004.00001

DATE : 5/10/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
0810	6.75	1.128	0.734	43.8	5.12	8.25	-76.0	150	13.7	4.49
0815	6.69	1.020	0.663	40.7	4.88	7.99	-111.0	150	4.98	4.49
0820	6.49	0.851	0.549	25.8	3.17	7.91	-106.1	150	2.01	4.49
0825	6.36	0.765	0.493	19.4	2.39	7.87	-104.7	150	1.77	4.49
0830	6.34	0.752	0.484	16.1	1.94	7.85	-103.0	150	1.06	4.49
0835	6.32	0.743	0.478	12.6	1.60	7.83	-98.1	150	0.86	4.49
0840	6.29	0.744	0.478	11.2	1.38	7.79	-95.8	150	1.34	4.49
0845	6.27	0.742	0.477	10.2	1.24	7.79	-97.0	150	1.14	4.49
		Sampled @ 0847								
Total Depth of Well:										
Depth To Water Before Purging:			4.46							
Depth To Water After Purging:										

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Water Sampling Log

Project: Ford LTP | Project No.: MI001454.0004.00001 | Page: 1 of 2

Location: Livonia, MI | Date: 5/11/18

Site/Well No.: MW-83 | Replicate No.: | Code No.:

Weather: 40s cloudy | Sampling Time: Begin 0957 End 1000

Evacuation Data

Measuring Point	TOC
MP Elevation (ft)	NA
Land Surface Elevation (ft)	NA
Sounded Well Depth (ft bmp)	12.43
Depth to Water (ft bmp)	6.39
Water-Level Elevation (ft)	NA
Water Column in Well (ft)	6.04
Casing Diameter/Type	2" PVC
Gallons in Well	0.966
Gallons Pumped/Bailed Prior to Sampling	~2.0
Sample Pump Intake Setting (ft bmp)	+
Purge Time	begin 0920 end 100
Pumping Rate (ml/min)	150
Evacuation Method	Peristaltic Pump

Field Parameters

Temperature (°C)	5.77
SpC (mS/cm)	3.101
CND (mS/cm)	1.965
Dissolved Oxygen (%)	2.4
Dissolved Oxygen (mg/L)	0.30
pH (s.u.)	7.29
ORP (mV)	-36.7
Turbidity (NTU)	6.49
Color	clear
Odor	none
Appearance	—
Sampling Method	Low Flow
Remarks	

Constituents Sampled	Container Description	Number	Preservative
1,4-dioxane	40mL voa	3	HCL
VOCs	40mL voa	3	HCL

Sampling Personnel: AReibel

Well Casing Volumes

Gal./Ft.					
	0.5" = 0.01	1-¼" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65
	1" = 0.04	1-½" = 0.09	2-½" = 0.26	3-½" = 0.50	6" = 1.47

bmp	Below measuring point	mL	Milliliter	NTU	Nephelometric turbidity units
°C	Degrees Celsius	mS/cm	Millisiemens per centimeter	PVC	Polyvinyl chloride
ft	Feet	msl	Mean sea level	s.u.	Standard units
gpm	Gallons per minute	N/A	Not applicable	umhos/cm	Micromhos per centimeter
mg/L	Milligrams per liter	NR	Not recorded	VOC	Volatile organic compounds

ARCADIS

YSI/LOW FLOW SAMPLING LOG

WELL : MW-83 PROJ #: MI001454.0004.00001

DATE : 5/11/18 LOC: Ford LTP, Livonia, MI

Time	Temp Degree C	SpC mS/cm	CND mS/cm	DO%	DO mg/L	pH	ORP mV	Flow Rate mL/min	Turbidity NTU	DTW
0925	5.86	2.923	1.856	43.7	5.31	7.48	44.1	20.16 → 150		4.44
0930	5.79	3.115	1.972	12.1	1.49	7.37	18.3	150	15.7	4.44
0935	5.81	3.150	1.995	4.8	0.58	7.34	-4.3	150	13.5	4.44
0940	5.79	3.123	1.977	3.0	0.37	7.32	-23.1	150	11.3	4.44
0945	5.77	3.113	1.976	2.6	0.34	7.31	-31.1	150	8.76	4.44
0950	5.77	3.112	1.969	2.4	0.31	7.30	-34.1	150	6.99	4.44
0955	5.77	3.101	1.965	2.4	0.30	7.29	-36.7	150	6.49	4.44
		Sampled @ 957								
Total Depth of Well:										
Depth To Water Before Purging:			6.39							
Depth To Water After Purging:										

APPENDIX C

Off-Site Soil Gas Field Sampling Logs

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): **ARCADIS of Michigan, LLC, 28550 Cabot Drive, Suite 500, Novi, MI 48377**	Project Name: **Ford LTP - Residential VI Sampling**
	Project Number: **MI001454.0004.00003**
Project Manager: **Kris Hinskey** Task Manager: **Angela DeGrandis**	Site Address **36200 Plymouth Road** **Livonia, MI**
Phone: **248-994-2240** / Fax: **248-994-2241** Special Instructions	Sampler Name, Phone Number: **Ashley Reibel – (m: 586-792-9639); Kalan Briggs – (m: 248-635-4576).**
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com	
Helium Detector Used Helium Leak Test Method: **Bucket shroud**	Summa Canister Size (1L, 2.7 L, 6L) **1 L with a 20-minute flow controller** Lab **Eurofins**

Sample ID	Sample Location Description	Date	Leak/Tracer Test (completed prior to sample collection)							Canister No.	Time Collected Start	Initial Canister Pressure (in Hg)	Time Collected End	Final Canister Pressure (in Hg)	Flow Controller No.	Notes
			Shut In Test Pass/Fail?	Initial Purge Reading (ppm)	Shroud Helium Concentration (%)	End Purge Reading (ppm)	Helium Test Pass/Fail?	Purge Volume (mL)	Purge Rate (mL/min)							
SVMP-22-3(091817)	1234 Plymouth Road	12/1/17	Pass	0	30	5	Pass	120	120	2595	0835	-30	0841	-5	10002434	Debris noted under steel cap and in annular space around vapor pin. Cleaned out prior to sampling.
SVMP-18-3(053018)	34367 Cap. Dr.	5/30/18	Pass	0	36.6	0	Pass	120	60	2304	0930	-29.5	1000	-5	23436	
SVMP-24-4(053018)	Rosati	5/30/18	Pass	0	38.2	0	Pass	120	60	1681	1035	-29	~~1100~~ 1035	-4	23333	
SVMP-21-2(053018)	Beacon + Brewster	5/30/18	Pass	0	46.7	0	Pass	120	60	2672	1150	-30	1218	-5	23327	

Meteorological Data

Date	Time	Temp. (°F)		% Humidity	Barometric Pressure (in.)
		Indoor	Outdoor		
Example - 12/1/2017	0800	73	22	38	30.10
5/30/18	0930	—	75°F	662	30.0

General Notes or Observations

Air Parameters (completed after sample collection)

Location ID	CO2 %	O2 %
SVMP-22-3(091817)	0.3	15.6
SVMP-18-3	5.5	15.6
SVMP-24-4	3.1	17.5
SVMP-21-2	8.8	14.0

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): **ARCADIS of Michigan, LLC, 28550 Cabot Drive, Suite 500, Novi, MI 48377**	Project Name: **Ford LTP - Residential VI Sampling** Project Number: **MI001454.0004.00003**
Project Manager: **Kris Hinskey** Task Manager: **Angela DeGrandis**	Site Address **36200 Plymouth Road** **Livonia, MI**
Phone: **248-994-2240** Fax: **248-994-2241** Special Instructions	Sampler Name, Phone Number: **Ashley Reibel – (m: 586-792-9639); Kalan Briggs – (m: 248-635-4576).**
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com Helium Detector Used Helium Leak Test Method: **Bucket shroud**	Summa Canister Size (1L, 2.7 L, 6L): **1 L with a 20-minute flow controller** Lab: **Eurofins**

Sample ID	Sample Location Description	Date	Leak/Tracer Test (completed prior to sample collection)							Canister No.	Time Collected Start	Initial Canister Pressure (in Hg)	Time Collected End	Final Canister Pressure (in Hg)	Flow Controller No.	Notes
			Shut In Test Pass/Fail?	Initial Purge Reading (ppm)	Shroud Helium Concentration (%)	End Purge Reading (ppm)	Helium Test Pass/Fail?	Purge Volume (mL)	Purge Rate (mL/min)							
SVMP-22-3(091817)	1234 Plymouth Road	12/1/17	Pass	0	30	5	Pass	120	120	2595	0835	-30	0841	-5	10002434	Debris noted under steel cap and in annular space around vapor pin. Cleaned out prior to sampling.
SVMP-22-3(052918)	ROSATI	5/29/18	——	SATURATED									1240			
SVMP-01D-7	34965 Standish	5/29/18	Pass	47.8 ↔ 0.0		0.0	Pass	120	60	2434	1215	-30	~~1245~~	-5	23130	
SVMP-01S-3.5	34965 Standish	5/29/18	Pass	0.0	42.3	0.0	Pass	120	60	1815	1252	-29	1320	-5	23827	
SVMP-02D-8.5	34901 Standish	5/29/18	Pass	0.0	39.8	0.0	Pass	120	60	2657	1415	-27	1440	-5	23724	
SVMP-02S-3.5	34901 Standish	5/29/18	Pass	0.0	37.6	0.0	Pass	120	60	30603	1452	-30	~~1459~~	-4	23530	
SVMP-03D-7	34851 Standish	5/29/18	Pass	0.0	36.2	0.0	Pass	120	60	26264	1608	-30	16316	-5	23483	
SVMP-03S-3.5	34851 Standish	5/29/18	Pass	0.0	34.7	0.0	Pass	120	60	1788	1642	-30	1705	-5	23574	

Meteorological Data

Date	Time	Temp. (°F)		% Humidity	Barometric Pressure (in.)
		Indoor	Outdoor		
Example - 12/1/2017	0800	73	22	38	30.10
5/29/18	0945	—	81.1	57.8	29.27

General Notes or Observations

Air Parameters (completed after sample collection)

Location ID	CO2 %	O2 %
SVMP-22-3(091817)	0.3	15.6
SVMP-01D-7	1.2	16.2
SVMP-01S-3.5	1.7	17.9
SVMP-02D-8.5	7.2	14.5
SVMP-02S-3.5	6.7	16.1
SVMP-03D-7	0.7	19.6
SVMP-03S-3.5	0.9	17.2

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): **ARCADIS of Michigan, LLC, 28550 Cabot Drive, Suite 500, Novi, MI 48377**	Project Name: **Ford LTP - Residential VI Sampling**
	Project Number: **MI001454.0004.00003**
Project Manager: **Kris Hinskey** Task Manager: **Angela DeGrandis**	Site Address **36200 Plymouth Road** **Livonia, MI**
Phone: **248-994-2240** Fax: **248-994-2241** Special Instructions	Sampler Name, Phone Number: **Ashley Reibel – (m: 586-792-9639); Kalan Briggs – (m: 248-635-4576).**
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com	
Helium Detector Used: MGD-2002 #8195 — Helium Leak Test Method: **Bucket shroud**	Summa Canister Size (1L, 2.7 L, 6L): **1 L with a 20-minute flow controller** — Lab: **Eurofins**

Sample ID	Sample Location Description	Date	Leak/Tracer Test (completed prior to sample collection)							Canister No.	Time Collected Start	Initial Canister Pressure (in Hg)	Time Collected End	Final Canister Pressure (in Hg)	Flow Controller No.	Notes
			Shut In Test Pass/Fail?	Initial Purge Reading (ppm)	Shroud Helium Concentration (%)	End Purge Reading (ppm)	Helium Test Pass/Fail?	Purge Volume (mL)	Purge Rate (mL/min)							
SVMP-22-3(091817)	1234 Plymouth Road	12/1/17	Pass	0	30	5	Pass	120	120	2595	0835	-30	0841	-5	10002434	Debris noted under steel cap and in annular space around vapor pin. Cleaned out prior to sampling.
SVMP-25N-6(052918)	12555 BELDEN CT	5/29/18	PASS	0	30	0	PASS	180	60	1L1693	1046	-28	1113	-5	23311	
SVMP-25S-3(052918)	12555 BELDEN CT	↓	PASS	0	30	0	PASS	180	60	2020	1123	-30+	1150	-5	23428	
SVMP-26-4(052918)	11895 BELDEN CT		PASS	0	30	0	PASS	180	60	1L2861	1252	-29	1315	-5	23521	DUP-01(052918) COLLECTED
DUP-01(052918)	SVMP-26-4(052918)		PASS	0	30	0	PASS	180	60	1L1930	1252	-30+	1319	-5	23725	
SVMP-27-4.5(052918)	11873 BELDEN CT		PASS	0	30	0	PASS	180	60	1L2985	1346	-29	1411	-5	23194	
SVMP-28-3(052918)	11723 BELDEN CT		PASS	0	30	0	PASS	180	60	1L2503	1438	-29	1503	-5	23480	
SVMP-12-3.5(052918)	12100 BOSTON POST ST		PASS	0	30	0	PASS	180	60	1L1530	1529	-30+	1555	-5	23714	
SVMP-08-3.5(052918)	34969 CLARK	↓	PASS	0	30	0	PASS	180	60	1L2992	1617	-30+	1636	-5	23371	

Meteorological Data

Date	Time	Temp. (°F)		% Humidity	Barometric Pressure (in.)
		Indoor	Outdoor		
Example - 12/1/2017	0800	73	22	38	30.10
5-29-18	1053	-	83	51	29.98↑
5-29-18	1530	-	91	36	29.95↓

General Notes or Observations

Air Parameters (completed after sample collection)

Location ID	CO2 %	O2 %
SVMP-22-3(091817)	0.3	15.6
SVMP-25N-6(052918)	2.1	17.6
SVMP-25S-3(052918)	2.9	17.4
SVMP-26-4(052918)	6.1	10.2
SVMP-27-4.5(052918)	1.1	18.4
SVMP-28-3(052918)	2.4	16.6
SVMP-12-3.5(052918)	0.9	16.5
SVMP-08-3.5(052918)	1.7	17.8

ARCADIS

Soil Vapor Collection Log Sheet

Office Name & Address (Reporting Information): **ARCADIS of Michigan, LLC, 28550 Cabot Drive, Suite 500, Novi, MI 48377**	Project Name: **Ford LTP - Residential VI Sampling** Project Number: **MI001454.0004.00003**
Project Manager: **Kris Hinskey** Task Manager: **Angela DeGrandis**	Site Address **36200 Plymouth Road** **Livonia, MI**
Phone: **248-994-2240** / Fax: **248-994-2241** Special Instructions	Sampler Name, Phone Number: **Ashley Reibel – (m: 586-792-9639); Kalan Briggs – (m: 248-635-4576).**
Email Address for Result Reporting: Kristoffer.Hinskey@arcadis.com	
Helium Detector Used: MGD-2002 #8195 Helium Leak Test Method: **Bucket shroud**	Summa Canister Size (1L, 2.7 L, 6L): **1 L with a 20-minute flow controller** Lab: **Eurofins**

Sample ID	Sample Location Description	Date	Leak/Tracer Test (completed prior to sample collection)							Canister No.	Time Collected Start	Initial Canister Pressure (in Hg)	Time Collected End	Final Canister Pressure (in Hg)	Flow Controller No.	Notes
			Shut In Test Pass/Fail?	Initial Purge Reading (ppm)	Shroud Helium Concentration (%)	End Purge Reading (ppm)	Helium Test Pass/Fail?	Purge Volume (mL)	Purge Rate (mL/min)							
SVMP-22-3(091817)	1234 Plymouth Road	12/1/17	Pass	0	30	5	Pass	120	120	2595	0835	-30	0841	-5	10002434	Debris noted under steel cap and in annular space around vapor pin. Cleaned out prior to sampling.
SVMP-09-4 (053018)	34921 BEACON ST.	5-30-18	PASS	0	30	0	PASS	180	60	1L2400	617	-29	643	-5	23542	
SVMP-07-3.5(053018)	34965 WADSWORTH	5-30-18	PASS	0	30	0	PASS	180	60	1L1554	737	-28	803	-5	23196	
SVMP-06-4.5(053018)	34935 WADSWORTH	5-30-18	PASS	0	30	0	PASS	180	60	1L2746	837	-30+	903	-5	23488	DUP-02 (053018) COLLECTED
DUP-02 (053018)	SVMP-06	5-30-18	PASS	0	30	0	PASS	180	60	1L2696	837	-30+	903	-5	23175	
SVMP-05-4.5(053018)	34851 WADSWORTH	5-30-18	PASS	0	30	0	PASS	180	60	1L2767	927	-30	953	-5	23632	
SVMP-04-3.5(053018)	11866 BOSTON POST ST.	5-30-18	PASS	0	30	0	PASS	180	60	1L3014	1115	-30+	1138	-5	23625	
SVMP-17-2.0(053018)	34424 BEACON ST.	5-30-18	PASS	0	30	0	PASS	180	60	1L1752	1354	-30+	1428	-5	23528	

Meteorological Data

Date	Time	Temp. (°F)		% Humidity	Barometric Pressure (in.)
		Indoor	Outdoor		
Example - 12/1/2017	0800	73	22	38	30.10
5-30-18	620	—	68	78	29.86↓
5-30-18	1120	—	79	65	29.83↓

General Notes or Observations

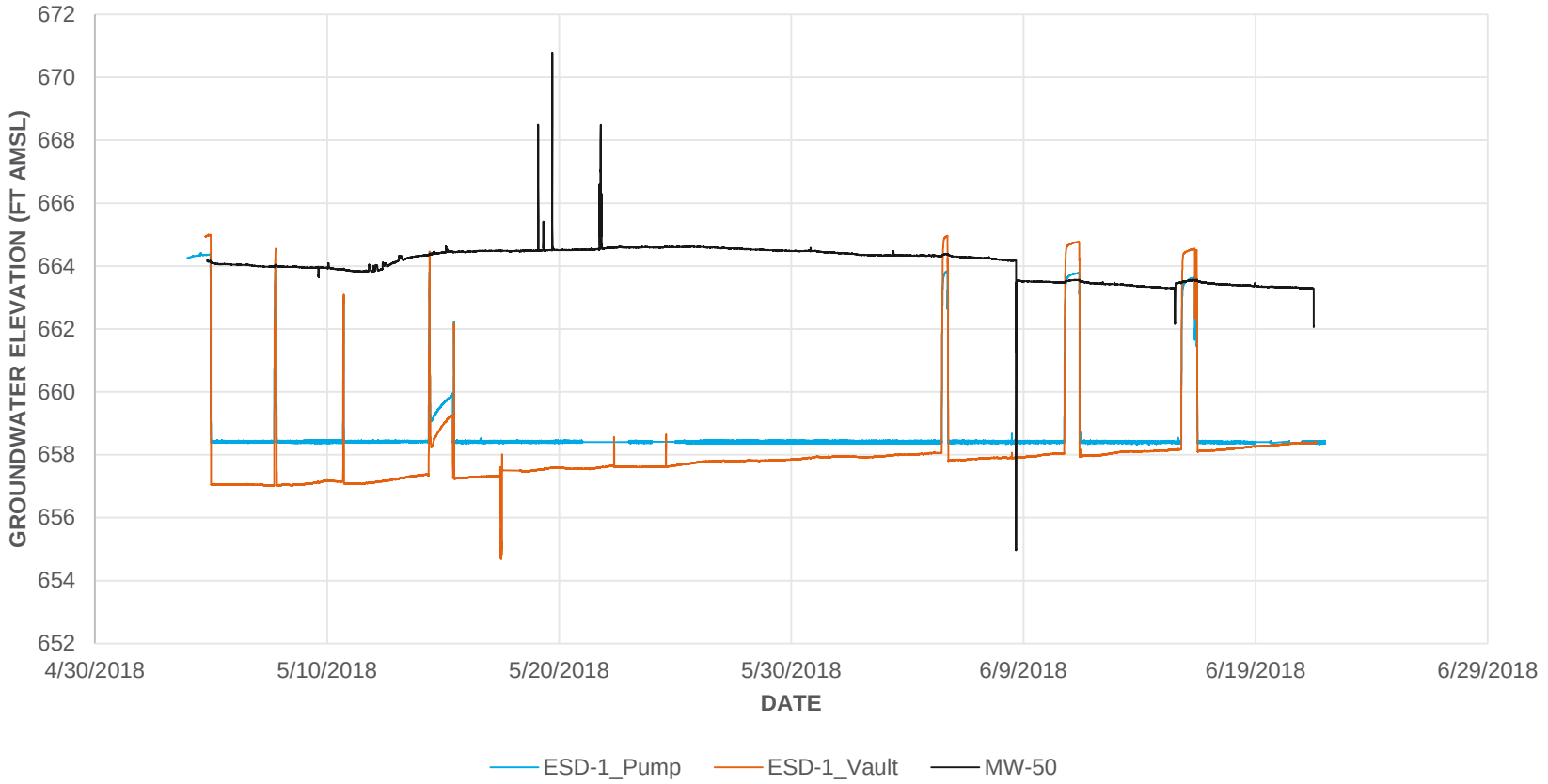
Air Parameters (completed after sample collection)

Location ID	CO2 %	O2 %
SVMP-22-3(091817)	0.3	15.6
SVMP-09-4 (053018)	0.7	20.5
SVMP-07-3.5(053018)	2.2	19.9
SVMP-06-4.5(053018)	1.0	19.8
SVMP-05-4.5(053018)	0.6	20.0
SVMP-04-3.5(053018)	0.8	18.4
SVMP-17-2.0(053018)	2.8	16.9

APPENDIX D

Transducer Response Comparison

ESD-1 Response Comparison



Notes:

1. ESD pump and vault end transducer elevations are approximate
2. FT AMSL – Feet Above Mean Sea Level

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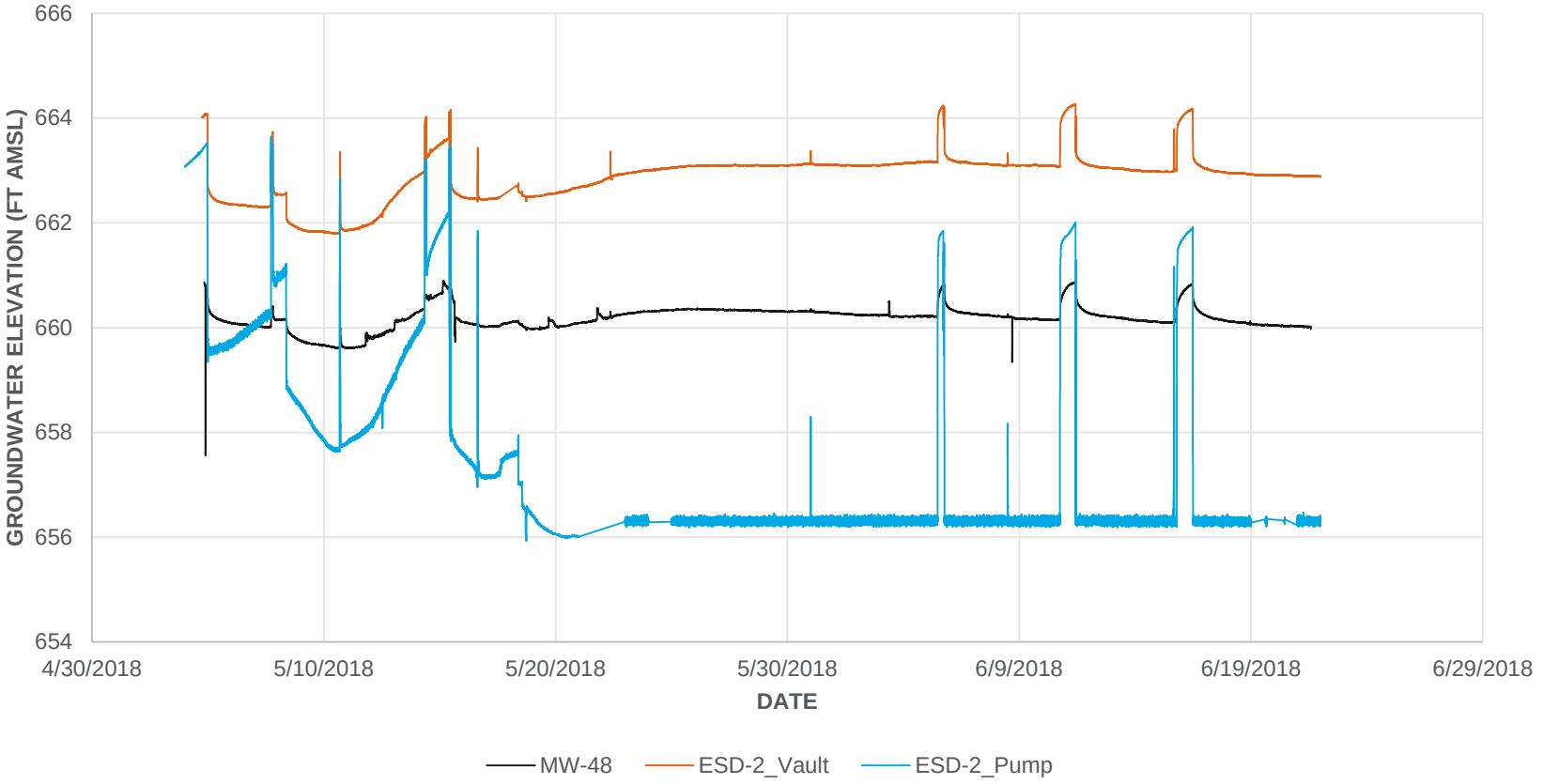
ESD-2 Response Comparison

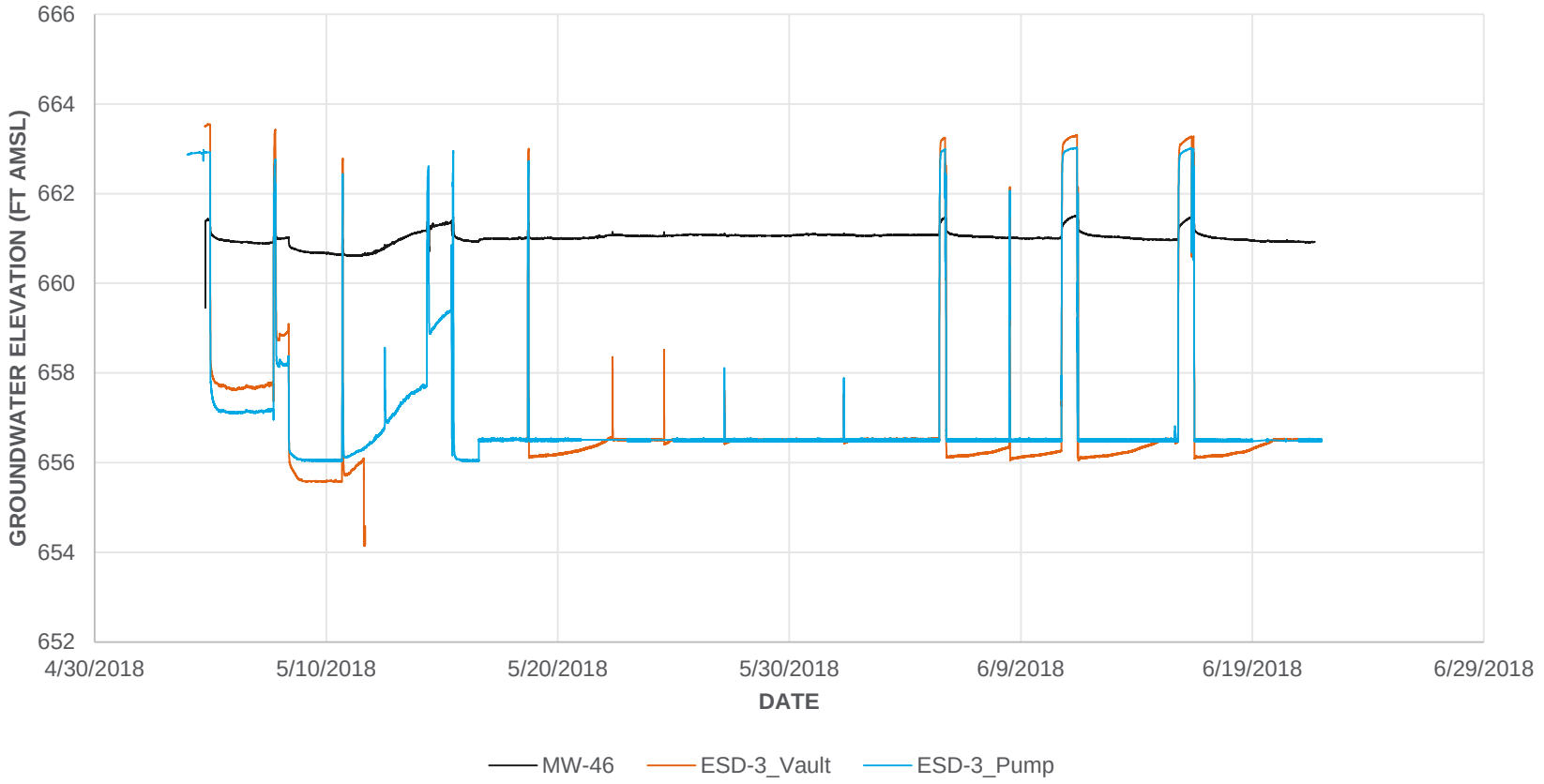


Notes:

1. ESD pump and vault end transducer elevations are approximate
2. FT AMSL – Feet Above Mean Sea Level

© Arcadis 2018

ESD-3 Response Comparison



Notes:

1. ESD pump and vault end transducer elevations are approximate
2. FT AMSL – Feet Above Mean Sea Level

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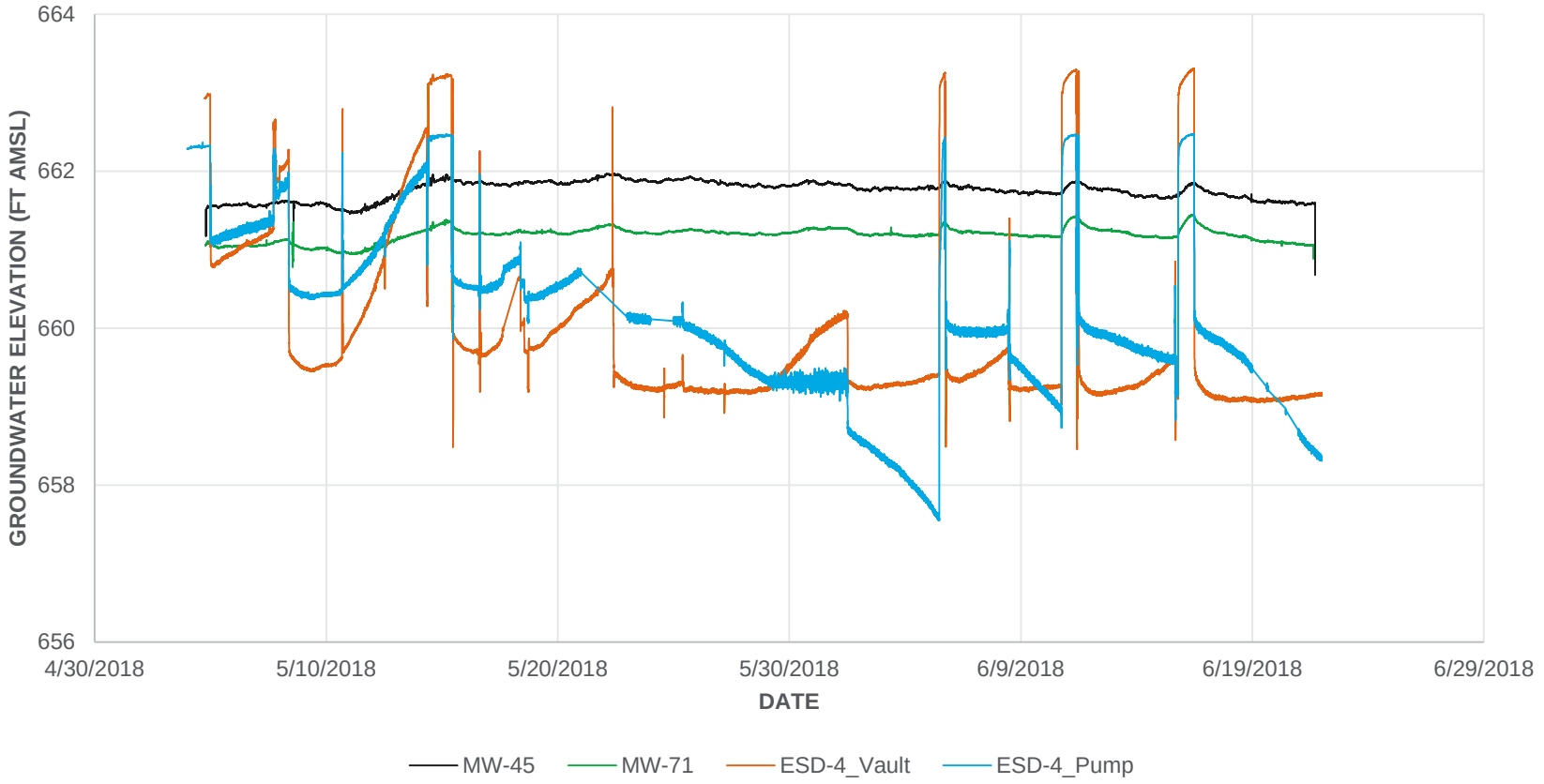
ESD-4 Response Comparison



Notes:

1. ESD pump and vault end transducer elevations are approximate
2. FT AMSL – Feet Above Mean Sea Level

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