December 9, 2020 Reference No. 002012-01-041

Ms. Yodit Sheido
Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, Minnesota 55155-4194

Dear Ms. Sheido:

**Re: Data Report**
**October 2020 Residential Well Sampling Event**
**North Oaks, Minnesota**

On behalf of Whirlpool Corporation and Reynolds Metals Company, GHD Services Inc. (GHD) has prepared this letter to report the analytical results from the October 2020 Residential Well Sampling Event conducted in North Oaks, Minnesota, as part of the long-term monitoring program (LTMP) for Operable Unit 4 (OU4) of the Highway 96 Site (Site).

GHD conducted the October 2020 Residential Well Sampling Event in accordance with the Minnesota Decision Document (MDD) for the Site signed by the Minnesota Pollution Control Agency (MPCA) on October 7, 1993, and subsequent amendments signed on August 26, 2008 (MDD Amendment 1) and December 30, 2019 (MDD Amendment 2).

A summary of the field sampling program and a discussion of the sampling results are presented in the sections below.

## 1. Field Sampling Program

The scope of the October 2020 residential well sampling event included Sampling Group A (28 homes), as defined in MDD Amendment 2. During the period from October 14-15, 2020, GHD was able to collect samples from 22 locations where expressed permission was obtained from the resident and a water source was available. GHD was unable to collect samples from six of the planned sampling locations because the resident either declined sampling, did not respond, their spigots were winterized, or the house had been razed and the well was abandoned (see Section 2.1). A sampling summary is presented in Table 1.

Where possible, GHD collected samples from an untreated water source (i.e., not softened or filtered) utilizing an outside tap. Prior to sampling, water was allowed to run (purge) for approximately 20 minutes to remove stagnant water from the pressure tank and piping. During the purging process, water was directed away from the tap/exterior wall of the home using a hose. Prior to sample collection, GHD measured and recorded the following field parameters: purge rate, pH, conductivity, temperature, dissolved oxygen, and oxidation-reduction potential (ORP).

**GHD**
1801 Old Highway 8 Northwest Suite 114 St Paul Minnesota 55112 USA
**T** 651 639 0913 **F** 651 639 0923 **W** www.ghd.com

GHD collected samples directly from the tap after disconnecting any hose used for purging (unless otherwise noted in Table 1). At each location, GHD collected samples for laboratory analysis of volatile organic compounds (VOCs) (Method 524.2) and chloride (Method 300.0A). GHD placed the samples on ice immediately following sample collection and submitted samples to the MPCA-approved laboratory (Pace Analytical Services in Minneapolis, Minnesota) using standard chain-of-custody procedures. For quality assurance/quality control (QA/QC), GHD collected three duplicate samples, three field blank samples, and two sets of matrix spike/matrix spike duplicate (MS/MSD) samples (see Table 1). GHD also included a trip blank in each shipping cooler containing samples for laboratory analysis of VOCs.

# 2. Sampling Results

Laboratory analytical reports and GHD's Data Quality Assessment and Validation memorandum associated with the October 2020 Residential Well Sampling Event are provided as Attachments A and B, respectively. GHD's assessment concluded that the analytical results exhibit acceptable levels of accuracy and precision and may be used with specific qualifications (as noted in Attachment B). A validated summary of analytical results associated with the October 2020 Residential Well Sampling Event is presented in Table 2. The Minnesota Department of Health (MDH) Health-Based Guidance (HBG) values for any detected analytes are also identified in Table 2.

## 2.1 VOCs

Table 1 of MDD Amendment 1 lists seven VOCs of potential concern (MPCA-Listed VOCs) associated with the LTMP for OU4: vinyl chloride (VC), 1,1-dichloroethane (11DCA), trans-1,2-dichloroethene (T12DCE), benzene, methyl ethyl ketone (MEK), toluene, and 1,1,2-trichloroethene (TCE). Sampling results for VC, other MPCA-Listed VOCs, and other VOCs are discussed separately in the paragraphs below.

### *Vinyl Chloride (VC)*

As presented in Table 2 and depicted on Figure 1, VC was not detected in any of the residential well samples collected in October 2020. The method detection limit (MDL) and laboratory reporting limit (RL) associated with the October 2020 laboratory results for VC are 0.086 µg/L and 0.20 µg/L, respectively. VC concentrations between the MDL and the RL would have been reported by the laboratory and flagged as estimated (J). The MDH Health Risk Limit (HRL) for VC (promulgated in 2018) is 0.20 µg/L.

Since October 2004, the number of residential well locations where detectable levels of VC have been reported is limited to 10 locations:

- 50 East Oaks Road (detected concentrations were below the HRL; last detected in April 2014.)
- 2 Heron Lane (well advisory issued by MDH in November 2012; well abandoned/replaced with a new/deeper well by the RPs.)

- 3 Heron Lane (detected concentration was below the HRL; not part of the long term groundwater monitoring program for OU4; at the direction of the MPCA, supplemental sampling was initiated in 2012 following the detection of vinyl chloride at 2 Heron Lane and discontinued in 2018 following six subsequent sampling events with no detections.)
- 1 Hummingbird Hill (detected concentrations were below the HRL; last detected in May 2013.)
- 2 Hummingbird Hill (detected concentrations were at or below the HRL; last detected in September 2009; well voluntarily abandoned and replaced with a new/deeper well by the RPs.)
- 10 West Shore Road (detected concentrations were below the HRL; last detected in April 2014.)
- 11 West Shore Road (detected concentrations were below the HRL; last detected in April 2014; home razed and well abandoned in February 2020.)
- 12 West Shore Road (well advisory issued by MDH in December 2008; well abandoned and replaced with a new/deeper well by the RPs.)
- 13 West Shore Road (well advisory issued by the MDH in August 2007; well abandoned and replaced with a new/deeper well by the RPs.)
- 15 West Shore Road (detected concentrations were at or below the HRL; last detected in April 2014.)

No new locations with detectable levels of VC have been identified in the last eight years (since May 2012) and there have been no detections of VC for the last 12 consecutive sampling events (since April 2014). Graphs of historical VC results for the above-referenced residential wells are provided as Attachment C.

### *Other MPCA-Listed VOCs*

As presented in Table 2, 11DCA was detected in one residential well sample collected in October 2020: 1 Buffalo Road (0.22 J µg/L). The October 2020 detection of 11DCA at this location is consistent with previous sampling results. There is no promulgated MDH HRL for 11DCA. The current MDH Risk Assessment Advice (RAA) for 11DCA (developed in 2016) is 80 µg/L. To date, 11DCA has not been detected above the MDH RAA at any residential well location in OU4.

No other MPCA-Listed VOCs were detected in samples collected during the October 2020 Residential Well Sampling Event.

### *Non-Listed VOCs*

No other VOCs were detected in samples collected during the October 2020 Residential Well Sampling Event.

### 2.2 Chloride

As presented in Table 2, Chloride concentrations in residential well samples collected in October 2020 ranged from 5.2 mg/L (8 West Shore Road) to 118 mg/L (4 Thompson Lane). Historically, chloride has been detected in residential wells in OU4 at similar concentrations. There is no MDH HBG established for chloride.

## 3. Future Sampling

The next residential well sampling event is scheduled for October 2021. The scope of sampling will include Sampling Group A (28 homes), as defined in MDD Amendment 2.

If you have any questions or require additional information, please contact us at (651) 639-0913.

Sincerely,

GHD

Sarah Illi, P.E. Brian Sandberg, P.G.

SI/md/4

Encl.

cc: Dan Peña, Minnesota Department of Health
Mayor, City of North Oaks
City Administrator, City of North Oaks
Michelle Hosfield, Wenck Associates
Highway 96 PRP Group

# Figures

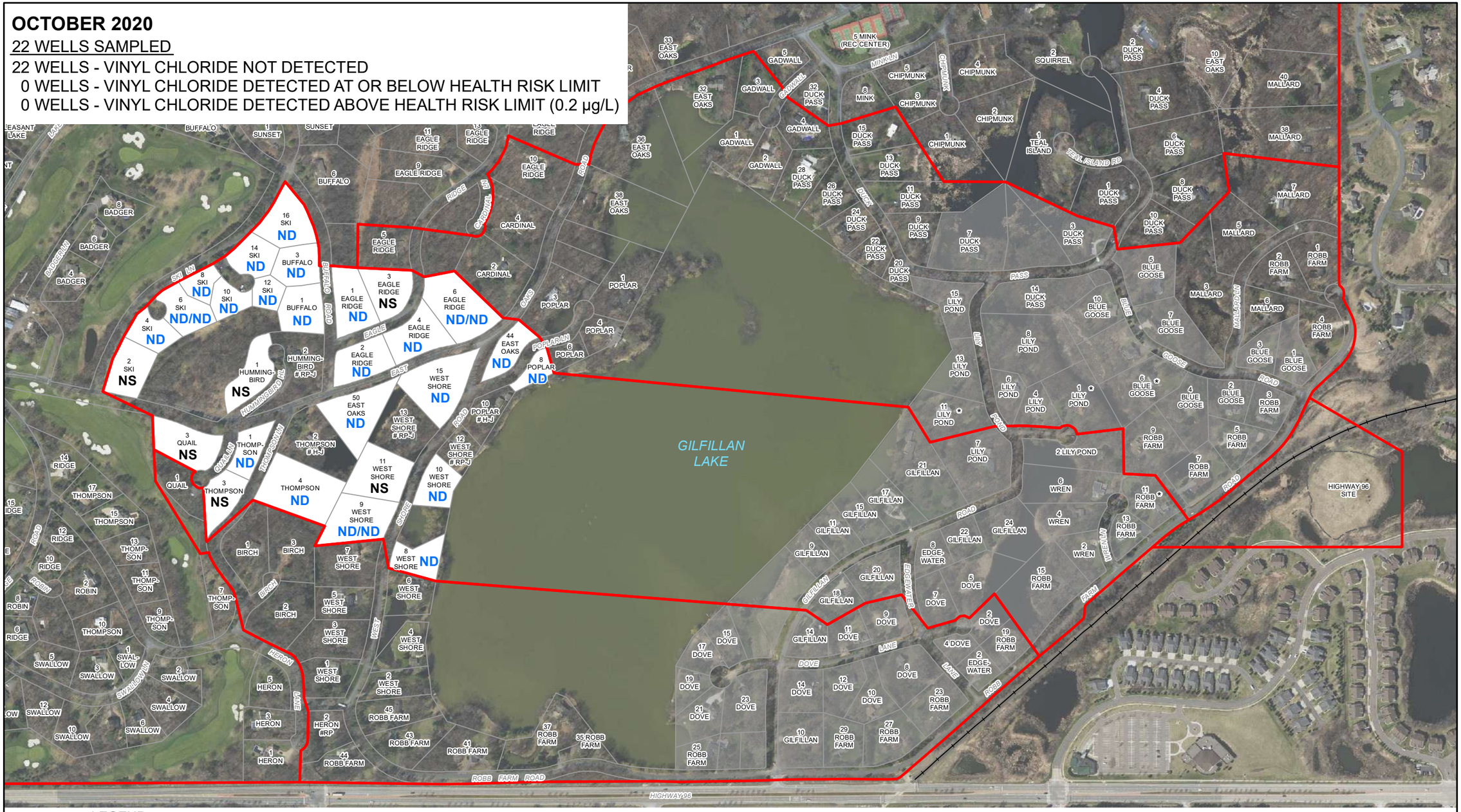
**OCTOBER 2020**

22 WELLS SAMPLED

22 WELLS - VINYL CHLORIDE NOT DETECTED

0 WELLS - VINYL CHLORIDE DETECTED AT OR BELOW HEALTH RISK LIMIT

0 WELLS - VINYL CHLORIDE DETECTED ABOVE HEALTH RISK LIMIT (0.2 µg/L)




LEGEND

| | | | |
|---|---|---|---|
| ND | VINYL CHLORIDE NOT DETECTED (DETECTION LIMIT = 0.086 µg/L) | # RP | REPLACEMENT WELL INSTALLED BY RPs (PRAIRIE DU CHIEN AQUIFER) [OLD WELL ABANDONED] |
| ND/ND | DUPLICATE SAMPLE RESULT | # RP-J | REPLACEMENT WELL INSTALLED BY RPs (EXTENDED INTO JORDAN AQUIFER AT HOMEOWNERS REQUEST/EXPENSE) [OLD WELL ABANDONED] |
| NS | NOT SAMPLED (NO RESPONSE/DECLINED/WATER OFF) | # H-J | NEW WELL INSTALLED BY HOMEOWNER (JORDAN AQUIFER) [OLD WELL ABANDONED] |
| | CONNECTED TO MUNICIPAL WATER SUPPLY | * | CONVERTED RESIDENTIAL MONITORING WELL LOCATION |
| | GEOGRAPHIC AREAS | | |

N

0 250 500 ft

figure 1

VINYL CHLORIDE CONCENTRATIONS (OCTOBER 2020)

*North Oaks, Minnesota*

002012-01(SHEI004)GIS-SP001 OCT 30/2020

# Tables

**Table 1**

**Sampling Summary**
**October 2020 Residential Well Sampling Event**
**North Oaks, Minnesota**

| Location ID | Well Address | Sample ID | Date | Sample Time | Purge Time (min) | Flow Rate (gpm) | Temp (°C) | pH (--) | ORP (mV) | Cond (µS/cm) | DO (mg/L) | Turb (NTU) | Clarity | QA/QC | QA/QC Sample ID | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BUF-01 | 1 Buffalo Road | W-201014-KJ-11 | 10/14/2020 | 12:58 | 20 | 9 | 10.54 | 7.46 | -177 | 688 | 0.00 | 0.0 | clear | -- | -- | -- |
| BUF-03 | 3 Buffalo Road | W-201014-KJ-10 | 10/14/2020 | 12:28 | 20 | 8 | 10.08 | 7.44 | -157 | 678 | 0.00 | 0.0 | clear | -- | -- | Treated Sample (post water softener) |
| EAG-01 | 1 Eagle Ridge Road | W-201014-KJ-12 | 10/14/2020 | 13:30 | 20 | 7 | 13.47 | 7.68 | -211 | 656 | 0.00 | 3.2 | clear | -- | -- | Treated Sample (post iron filter) |
| EAG-02 | 2 Eagle Ridge Road | W-201014-KJ-17 | 10/14/2020 | 15:00 | 20 | 10 | 10.71 | 7.44 | -179 | 700 | 0.00 | 0.0 | clear | -- | -- | -- |
| EAG-03 | 3 Eagle Ridge Road | NS | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Not Sampled (no reponse from resident) |
| EAG-04 | 4 Eagle Ridge Road | W-201014-KJ-16 | 10/14/2020 | 14:32 | 20 | 6 | 10.59 | 7.34 | -192 | 701 | 0.00 | 0.0 | clear | FB | W-201014-KJ-15 | -- |
| EAG-06 | 6 Eagle Ridge Road | W-201014-KJ-13 | 10/14/2020 | 14:05 | 20 | 12 | 11.00 | 7.45 | -182 | 744 | 0.00 | 0.0 | clear | FD | W-201014-KJ-14 | -- |
| EAS-44 | 44 East Oaks Road | W-201015-KJ-21 | 10/15/2020 | 08:43 | 20 | 7 | 10.88 | 7.29 | -155 | 595 | 0.00 | 0.5 | clear | -- | -- | -- |
| EAS-50 | 50 East Oaks Road | W-201015-KJ-29 | 10/15/2020 | 13:24 | 20 | 7 | 11.62 | 7.34 | -179 | 729 | 0.00 | 17.5 | clear | -- | -- | -- |
| HUM-01 | 1 Hummingbird Hill | NS | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Not Sampled (resident declined) |
| POP-08 | 8 Poplar Lane | W-201015-KJ-20 | 10/15/2020 | 12:47 | 20 | 8 | 11.07 | 7.29 | -162 | 642 | 0.00 | 23.0 | clear | MS/MSD | -- | Effervescence observed during sample collection |
| QUA-03 | 3 Quail Lane | NS | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Not Sampled (resident declined) |
| SKI-02 | 2 Ski Lane | NS | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Not Sampled (resident declined) |

**Table 1**

**Sampling Summary**
**October 2020 Residential Well Sampling Event**
**North Oaks, Minnesota**

| Location ID | Well Address | Sample ID | Date | Sample Time | Purge Time (min) | Flow Rate (gpm) | Temp (°C) | pH (--) | ORP (mV) | Cond (µS/cm) | DO (mg/L) | Turb (NTU) | Clarity | QA/QC | QA/QC Sample ID | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SKI-04 | 4 Ski Lane | W-201014-KJ-01 | 10/14/2020 | 09:05 | 20 | 5 | 10.71 | 7.46 | -88 | 720 | 0.00 | MM | clear | MS/MSD | MS/MSD | -- |
| SKI-06 | 6 Ski Lane | W-201014-KJ-02 | 10/14/2020 | 09:41 | 20 | 4 | 10.41 | 7.42 | -130 | 659 | 0.00 | 12.5 | clear | FD | W-201014-KJ-03 | -- |
| SKI-08 | 8 Ski Lane | W-201014-KJ-04 | 10/14/2020 | 10:06 | 20 | 9 | 10.60 | 7.76 | -195 | 697 | 0.00 | 0.0 | clear | -- | -- | -- |
| SKI-10 | 10 Ski Lane | W-201014-KJ-06 | 10/14/2020 | 10:35 | 20 | 9 | 11.38 | 7.64 | -165 | 667 | 0.00 | 0.0 | clear | FB | W-201014-KJ-05 | -- |
| SKI-12 | 12 Ski Lane | W-201014-KJ-07 | 11/14/2020 | 11:01 | 20 | 8 | 10.59 | 7.58 | -177 | 677 | 0.00 | 0.9 | clear | -- | -- | -- |
| SKI-14 | 14 Ski Lane | W-201014-KJ-08 | 11/14/2020 | 11:26 | 20 | 6 | 10.98 | 7.73 | -203 | 733 | 0.00 | 2.2 | clear | -- | -- | -- |
| SKI-16 | 16 Ski Lane | W-201014-KJ-09 | 11/14/2020 | 11:57 | 20 | 9 | 10.41 | 7.68 | -182 | 610 | 0.00 | 0.0 | clear | -- | -- | -- |
| THO-01 | 1 Thompson Lane | W-201015-KJ-24 | 10/15/2020 | 10:36 | 40 | 3 | 11.13 | 7.51 | -159 | 666 | 0.00 | 1.9 | clear | -- | -- | Purge Time Extended (max purge rate 3 gpm) |
| THO-03 | 3 Thompson Lane | NS | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Not Sampled (no response from resident) |
| THO-04 | 4 Thompson Lane | W-201015-KJ-30 | 10/15/2020 | 13:53 | 20 | 6 | 11.11 | 7.35 | -163 | 1,030 | 0.00 | 1.7 | clear | -- | -- | -- |
| WES-08 | 8 West Shore Road | W-201015-KJ-28 | 10/15/2020 | 12:17 | 20 | 7 | 11.64 | 7.46 | -182 | 603 | 0.00 | 2.9 | clear | FB | W-201015-KJ-27 | -- |
| WES-09 | 9 West Shore Road | W-201015-KJ-25 | 10/15/2020 | 11:46 | 20 | 10 | 11.25 | 7.39 | -177 | 688 | 0.00 | 17.2 | clear | FD | W-201015-KJ-26 | -- |
| WES-10 | 10 West Shore Road | W-201015-KJ-23 | 10/15/2020 | 09:43 | 20 | 5 | 11.42 | 7.21 | -110 | 671 | 4.27 | 0.5 | clear | -- | -- | -- |

**Table 1**

**Sampling Summary**
**October 2020 Residential Well Sampling Event**
**North Oaks, Minnesota**

| Location ID | Well Address | Sample ID | Date | Sample Time | Purge Time (min) | Flow Rate (gpm) | Temp (°C) | pH (--) | ORP (mV) | Cond (µS/cm) | DO (mg/L) | Turb (NTU) | Clarity | QA/QC | QA/QC Sample ID | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WES-11 | 11 West Shore Road | NS | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Not Sampled (house razed and well abandoned) |
| WES-15 | 15 West Shore Road | W-201015-KJ-22 | 10/15/2020 | 09:12 | 20 | 8 | 11.07 | 7.27 | -172 | 742 | 0.00 | 0.8 | clear | -- | -- | -- |

Notes:

°C - Degrees Celsius
Cond - Conductivity
DO - Dissolved Oxygen
FB - Field Blank
FD - Field Duplicate
gpm - Gallons per minute
mg/L - Milligrams per liter
min - Minutes
MS/MSD - Matrix Spike/Matrix Spike Duplicate
MM - Meter Malfunction Suspected
mV - Millivolts
NS - Not Sampled
NTU - Nephelometric Turbidity Units
ORP - Oxidation Reduction Potential
QA/QC - Quality Assurance/Quality Control sample type
Temp - Temperature
µS/cm - Micro-Siemens per centimeter

**Table 2**

**Summary of Analytcal Results**
**October 2020 Residential Well Sampling Event**
**North Oaks, Minnesota**

| Location ID | Well Address | Sample ID | Date | HBG Basis<br>HBG Value<br>Units<br>QA/QC | Chloride<br>--<br>--<br>mg/L | 1,1-Dichloroethane<br>RAA16<br>80<br>µg/L |
|---|---|---|---|---|---|---|
| BUF-01 | 1 Buffalo Road | W-201014-KJ-11 | 10/14/2020 | | 30.7 | 0.22 J |
| BUF-03 | 3 Buffalo Road | W-201014-KJ-10 | 10/14/2020 | | 29.6 | < 0.50 |
| EAG-01 | 1 Eagle Ridge Road | W-201014-KJ-12 | 10/14/2020 | | 24.6 | < 0.50 |
| EAG-02 | 2 Eagle Ridge Road | W-201014-KJ-17 | 10/14/2020 | | 30.9 | < 0.50 |
| EAG-04 | 4 Eagle Ridge Road | W-201014-KJ-16 | 10/14/2020 | | 27.2 | < 0.50 |
| EAG-06 | 6 Eagle Ridge Road | W-201014-KJ-13 | 10/14/2020 | | 41.8 | < 0.50 |
| EAG-06 | 6 Eagle Ridge Road | W-201014-KJ-14 | 10/14/2020 | FD | 41.9 | < 0.50 |
| EAS-44 | 44 East Oaks Road | W-201015-KJ-21 | 10/15/2020 | | 13.6 | < 0.50 |
| EAS-50 | 50 East Oaks Road | W-201015-KJ-29 | 10/15/2020 | | 34.6 | < 0.50 |
| POP-08 | 8 Poplar Lane | W-201015-KJ-20 | 10/15/2020 | | 36.4 | < 0.50 |
| SKI-04 | 4 Ski Lane | W-201014-KJ-01 | 10/14/2020 | | 37.5 | < 0.50 |
| SKI-06 | 6 Ski Lane | W-201014-KJ-02 | 10/14/2020 | | 28.1 | < 0.50 |
| SKI-06 | 6 Ski Lane | W-201014-KJ-03 | 10/14/2020 | FD | 28.1 | < 0.50 |
| SKI-08 | 8 Ski Lane | W-201014-KJ-04 | 10/14/2020 | | 28.8 | < 0.50 |
| SKI-10 | 10 Ski Lane | W-201014-KJ-06 | 10/14/2020 | | 25.0 | < 0.50 |
| SKI-12 | 12 Ski Lane | W-201014-KJ-07 | 10/14/2020 | | 26.0 | < 0.50 |
| SKI-14 | 14 Ski Lane | W-201014-KJ-08 | 10/14/2020 | | 36.8 | < 0.50 |
| SKI-16 | 16 Ski Lane | W-201014-KJ-09 | 10/14/2020 | | 27.5 | < 0.50 |
| THO-01 | 1 Thompson Lane | W-201015-KJ-24 | 10/15/2020 | | 27.7 | < 0.50 |
| THO-04 | 4 Thompson Lane | W-201015-KJ-30 | 10/15/2020 | | 118.0 | < 0.50 |
| WES-08 | 8 West Shore Road | W-201015-KJ-28 | 10/15/2020 | | 5.2 | < 0.50 |
| WES-09 | 9 West Shore Road | W-201015-KJ-25 | 10/15/2020 | | 25.0 | < 0.50 |
| WES-09 | 9 West Shore Road | W-201015-KJ-26 | 10/15/2020 | FD | 25.0 | < 0.50 |
| WES-10 | 10 West Shore Road | W-201015-KJ-23 | 10/15/2020 | | 28.6 | < 0.50 |
| WES-15 | 15 West Shore Road | W-201015-KJ-22 | 10/15/2020 | | 38.3 | < 0.50 |

Notes:

HBG - Health-Based Guidance (HBG) established by the Minnesota Department of Health (MDH)
(if multiple HBG values are available, the lowest value is shown and used for initial screening)
-- - Not established/no data
< - Not detected above the noted reporting limit.
FD - Field Duplicate
J - Estimated result
mg/L - Milligrams per liter
QA/QC - Quality Assurance/Quality Control sample type
RAA - Risk Assessment Advice (year developed)
µg/L - Micrograms per liter

# Attachments

# Attachment A
# Laboratory Reports

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

October 30, 2020

Mr. Grant Anderson
GHD
1801 Old Highway 8 NW
Suite 114
St. Paul, MN 55112

RE: Project: 002012-Revised Report
Pace Project No.: 10535595

Dear Mr. Anderson:

Enclosed are the analytical results for sample(s) received by the laboratory on October 14, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Minneapolis

This report was revised on October 30, 2020 to update the reporting format.

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

Sincerely,

Tina Soltani
tina.soltani@pacelabs.com
(612) 607-6384
Project Manager

Enclosures

cc: Sarah Illi, GHD

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

# CERTIFICATIONS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Pace Analytical Services - Minneapolis MN**

1700 Elm Street SE, Minneapolis, MN 55414
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
A2LA Certification #: 2926.01*
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Massachusetts DWP Certification #: via MN 027-053-137
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Certifcation #: via MN 027-053-137
Minnesota Petrofund Certification #: 1240*
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081*
New Jersey Certification #: MN002
New York Certification #: 11647*
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563*
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## SAMPLE SUMMARY

Project: 002012-Revised Report
Pace Project No.: 10535595

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| **10535595001** | **W-201014-KJ-01** | Drinking Water | 10/14/20 09:05 | 10/14/20 19:00 |
| **10535595002** | **W-201014-KJ-02** | Drinking Water | 10/14/20 09:41 | 10/14/20 19:00 |
| **10535595003** | **W-201014-KJ-03** | Drinking Water | 10/14/20 09:42 | 10/14/20 19:00 |
| **10535595004** | **W-201014-KJ-04** | Drinking Water | 10/14/20 10:06 | 10/14/20 19:00 |
| **10535595005** | **W-201014-KJ-05** | Drinking Water | 10/14/20 10:20 | 10/14/20 19:00 |
| **10535595006** | **W-201014-KJ-06** | Drinking Water | 10/14/20 10:35 | 10/14/20 19:00 |
| **10535595007** | **W-201014-KJ-07** | Drinking Water | 10/14/20 11:01 | 10/14/20 19:00 |
| **10535595008** | **W-201014-KJ-08** | Drinking Water | 10/14/20 11:26 | 10/14/20 19:00 |
| **10535595009** | **W-201014-KJ-09** | Drinking Water | 10/14/20 11:57 | 10/14/20 19:00 |
| **10535595010** | **W-201014-KJ-10** | Drinking Water | 10/14/20 12:28 | 10/14/20 19:00 |
| **10535595011** | **Trip Blank** | Drinking Water | 10/14/20 00:00 | 10/14/20 19:00 |
| **10535595012** | **W-201014-KJ-11** | Drinking Water | 10/14/20 12:58 | 10/14/20 19:00 |
| **10535595013** | **W-201014-KJ-12** | Drinking Water | 10/14/20 13:30 | 10/14/20 19:00 |
| **10535595014** | **W-201014-KJ-13** | Drinking Water | 10/14/20 14:05 | 10/14/20 19:00 |
| **10535595015** | **W-201014-KJ-14** | Drinking Water | 10/14/20 14:06 | 10/14/20 19:00 |
| **10535595016** | **W-201014-KJ-15** | Drinking Water | 10/14/20 14:20 | 10/14/20 19:00 |
| **10535595017** | **W-201014-KJ-16** | Drinking Water | 10/14/20 14:32 | 10/14/20 19:00 |

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## SAMPLE ANALYTE COUNT

Project: 002012-Revised Report
Pace Project No.: 10535595

| Lab ID | Sample ID | Method | Analysts | Analytes Reported | Laboratory |
|---|---|---|---|---|---|
| 10535595001 | W-201014-KJ-01 | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| 10535595002 | W-201014-KJ-02 | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| 10535595003 | W-201014-KJ-03 | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| 10535595004 | W-201014-KJ-04 | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| 10535595005 | W-201014-KJ-05 | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| 10535595006 | W-201014-KJ-06 | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| 10535595007 | W-201014-KJ-07 | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| 10535595008 | W-201014-KJ-08 | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| 10535595009 | W-201014-KJ-09 | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| 10535595010 | W-201014-KJ-10 | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| 10535595011 | Trip Blank | EPA 524.2 | AEZ | 72 | PASI-M |
| 10535595012 | W-201014-KJ-11 | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| 10535595013 | W-201014-KJ-12 | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| 10535595014 | W-201014-KJ-13 | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| 10535595015 | W-201014-KJ-14 | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| 10535595016 | W-201014-KJ-15 | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| 10535595017 | W-201014-KJ-16 | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |

PASI-M = Pace Analytical Services - Minneapolis

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## SUMMARY OF DETECTION

Project: 002012-Revised Report
Pace Project No.: 10535595

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **10535595001** | **W-201014-KJ-01** | | | | | |
| EPA 300.0 | Chloride | 37.5 | mg/L | 1.2 | 10/19/20 11:45 | |
| **10535595002** | **W-201014-KJ-02** | | | | | |
| EPA 300.0 | Chloride | 28.1 | mg/L | 1.2 | 10/19/20 12:31 | |
| **10535595003** | **W-201014-KJ-03** | | | | | |
| EPA 300.0 | Chloride | 28.1 | mg/L | 1.2 | 10/19/20 14:32 | |
| **10535595004** | **W-201014-KJ-04** | | | | | |
| EPA 300.0 | Chloride | 28.8 | mg/L | 1.2 | 10/19/20 15:40 | |
| **10535595006** | **W-201014-KJ-06** | | | | | |
| EPA 300.0 | Chloride | 25.0 | mg/L | 1.2 | 10/19/20 16:11 | |
| **10535595007** | **W-201014-KJ-07** | | | | | |
| EPA 300.0 | Chloride | 26.0 | mg/L | 1.2 | 10/19/20 16:26 | |
| **10535595008** | **W-201014-KJ-08** | | | | | |
| EPA 300.0 | Chloride | 36.8 | mg/L | 1.2 | 10/20/20 01:36 | |
| **10535595009** | **W-201014-KJ-09** | | | | | |
| EPA 300.0 | Chloride | 27.5 | mg/L | 1.2 | 10/19/20 18:30 | |
| **10535595010** | **W-201014-KJ-10** | | | | | |
| EPA 300.0 | Chloride | 29.6 | mg/L | 1.2 | 10/19/20 18:45 | |
| **10535595012** | **W-201014-KJ-11** | | | | | |
| EPA 524.2 | 1,1-Dichloroethane | 0.22J | ug/L | 0.50 | 10/22/20 03:49 | |
| EPA 300.0 | Chloride | 30.7 | mg/L | 1.2 | 10/19/20 19:00 | |
| **10535595013** | **W-201014-KJ-12** | | | | | |
| EPA 300.0 | Chloride | 24.6 | mg/L | 1.2 | 10/19/20 19:30 | |
| **10535595014** | **W-201014-KJ-13** | | | | | |
| EPA 300.0 | Chloride | 41.8 | mg/L | 1.2 | 10/19/20 19:46 | |
| **10535595015** | **W-201014-KJ-14** | | | | | |
| EPA 300.0 | Chloride | 41.9 | mg/L | 1.2 | 10/20/20 01:51 | |
| **10535595016** | **W-201014-KJ-15** | | | | | |
| EPA 300.0 | Chloride | 2.1 | mg/L | 1.2 | 10/20/20 04:23 | |
| **10535595017** | **W-201014-KJ-16** | | | | | |
| EPA 300.0 | Chloride | 27.2 | mg/L | 1.2 | 10/20/20 04:38 | |

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# PROJECT NARRATIVE

Project: 002012-Revised Report
Pace Project No.: 10535595

**Date:** October 30, 2020

Case Narrative

Volatile Organics Analysis
524.2

The following analytes were evaluated to the method detection limit (MDL) for all samples:

1,1-Dichloroethane (MDL = 0.16 ug/L)
cis-1,2-Dichloroethene (MDL = 0.14 ug/L)
Vinyl chloride (MDL = 0.086 ug/L)

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# PROJECT NARRATIVE

Project: 002012-Revised Report
Pace Project No.: 10535595

**Method:** **EPA 524.2**
**Description:** 524.2 MSV
**Client:** GHD
**Date:** October 30, 2020

**General Information:**
17 samples were analyzed for EPA 524.2 by Pace Analytical Services Minneapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**
The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**
All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**
All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**
All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**
All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**
All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 705926

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10535595001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3771251)
  - Acetone
- MSD (Lab ID: 3771252)
  - Acetone

**Additional Comments:**

Analyte Comments:

QC Batch: 705926

1M: Analyte not detected when evaluated to the MDL.

- Trip Blank (Lab ID: 10535595011)
  - 1,1-Dichloroethane

## REPORT OF LABORATORY ANALYSIS

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# PROJECT NARRATIVE

Project: 002012-Revised Report
Pace Project No.: 10535595

**Method:** **EPA 524.2**
**Description:** 524.2 MSV
**Client:** GHD
**Date:** October 30, 2020

Analyte Comments:

QC Batch: 705926

1M: Analyte not detected when evaluated to the MDL.

- Trip Blank (Lab ID: 10535595011)
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201014-KJ-01 (Lab ID: 10535595001)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201014-KJ-02 (Lab ID: 10535595002)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201014-KJ-03 (Lab ID: 10535595003)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201014-KJ-04 (Lab ID: 10535595004)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201014-KJ-05 (Lab ID: 10535595005)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201014-KJ-06 (Lab ID: 10535595006)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201014-KJ-07 (Lab ID: 10535595007)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201014-KJ-08 (Lab ID: 10535595008)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201014-KJ-09 (Lab ID: 10535595009)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201014-KJ-10 (Lab ID: 10535595010)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride

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# PROJECT NARRATIVE

Project: 002012-Revised Report
Pace Project No.: 10535595

**Method:** **EPA 524.2**
**Description:** 524.2 MSV
**Client:** GHD
**Date:** October 30, 2020

Analyte Comments:

QC Batch: 705926

1M: Analyte not detected when evaluated to the MDL.

- W-201014-KJ-11 (Lab ID: 10535595012)
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201014-KJ-12 (Lab ID: 10535595013)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201014-KJ-13 (Lab ID: 10535595014)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201014-KJ-14 (Lab ID: 10535595015)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201014-KJ-15 (Lab ID: 10535595016)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201014-KJ-16 (Lab ID: 10535595017)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- BLANK (Lab ID: 3771249)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane

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# PROJECT NARRATIVE

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Pace Project No.: 10535595

**Method:** **EPA 524.2**
**Description:** 524.2 MSV
**Client:** GHD
**Date:** October 30, 2020

Analyte Comments:

QC Batch: 705926

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- LCS (Lab ID: 3771250)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- MS (Lab ID: 3771251)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- MSD (Lab ID: 3771252)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone

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# PROJECT NARRATIVE

Project: 002012-Revised Report
Pace Project No.: 10535595

**Method:** **EPA 524.2**
**Description:** 524.2 MSV
**Client:** GHD
**Date:** October 30, 2020

Analyte Comments:

QC Batch: 705926

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- MSD (Lab ID: 3771252)
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- Trip Blank (Lab ID: 10535595011)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201014-KJ-01 (Lab ID: 10535595001)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene

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# PROJECT NARRATIVE

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**Method:** **EPA 524.2**
**Description:** 524.2 MSV
**Client:** GHD
**Date:** October 30, 2020

Analyte Comments:

QC Batch: 705926

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- W-201014-KJ-01 (Lab ID: 10535595001)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201014-KJ-02 (Lab ID: 10535595002)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201014-KJ-03 (Lab ID: 10535595003)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201014-KJ-04 (Lab ID: 10535595004)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene

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# PROJECT NARRATIVE

Project: 002012-Revised Report
Pace Project No.: 10535595

**Method:** **EPA 524.2**
**Description:** 524.2 MSV
**Client:** GHD
**Date:** October 30, 2020

Analyte Comments:

QC Batch: 705926

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- W-201014-KJ-04 (Lab ID: 10535595004)
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201014-KJ-05 (Lab ID: 10535595005)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201014-KJ-06 (Lab ID: 10535595006)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)

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# PROJECT NARRATIVE

Project: 002012-Revised Report
Pace Project No.: 10535595

**Method:** **EPA 524.2**
**Description:** 524.2 MSV
**Client:** GHD
**Date:** October 30, 2020

Analyte Comments:

QC Batch: 705926

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- W-201014-KJ-06 (Lab ID: 10535595006)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201014-KJ-07 (Lab ID: 10535595007)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201014-KJ-08 (Lab ID: 10535595008)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201014-KJ-09 (Lab ID: 10535595009)
  - 1,2-Dibromo-3-chloropropane

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# PROJECT NARRATIVE

Project: 002012-Revised Report
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**Method:** **EPA 524.2**
**Description:** 524.2 MSV
**Client:** GHD
**Date:** October 30, 2020

Analyte Comments:

QC Batch: 705926

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- W-201014-KJ-09 (Lab ID: 10535595009)
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201014-KJ-10 (Lab ID: 10535595010)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201014-KJ-11 (Lab ID: 10535595012)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane

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# PROJECT NARRATIVE

Project: 002012-Revised Report
Pace Project No.: 10535595

**Method:** **EPA 524.2**
**Description:** 524.2 MSV
**Client:** GHD
**Date:** October 30, 2020

Analyte Comments:

QC Batch: 705926

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- W-201014-KJ-11 (Lab ID: 10535595012)
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201014-KJ-12 (Lab ID: 10535595013)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201014-KJ-13 (Lab ID: 10535595014)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran

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# PROJECT NARRATIVE

Project: 002012-Revised Report
Pace Project No.: 10535595

**Method:** **EPA 524.2**
**Description:** 524.2 MSV
**Client:** GHD
**Date:** October 30, 2020

Analyte Comments:

QC Batch: 705926

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- W-201014-KJ-13 (Lab ID: 10535595014)
  - 1,1,2-Trichlorotrifluoroethane
- W-201014-KJ-14 (Lab ID: 10535595015)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201014-KJ-15 (Lab ID: 10535595016)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201014-KJ-16 (Lab ID: 10535595017)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)

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# PROJECT NARRATIVE

Project: 002012-Revised Report
Pace Project No.: 10535595

**Method:** **EPA 524.2**
**Description:** 524.2 MSV
**Client:** GHD
**Date:** October 30, 2020

Analyte Comments:

QC Batch: 705926

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- W-201014-KJ-16 (Lab ID: 10535595017)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- BLANK (Lab ID: 3771249)
  - Dichlorofluoromethane
- LCS (Lab ID: 3771250)
  - Dichlorofluoromethane
- MS (Lab ID: 3771251)
  - Dichlorofluoromethane
- MSD (Lab ID: 3771252)
  - Dichlorofluoromethane
- Trip Blank (Lab ID: 10535595011)
  - Dichlorofluoromethane
- W-201014-KJ-01 (Lab ID: 10535595001)
  - Dichlorofluoromethane
- W-201014-KJ-02 (Lab ID: 10535595002)
  - Dichlorofluoromethane
- W-201014-KJ-03 (Lab ID: 10535595003)
  - Dichlorofluoromethane
- W-201014-KJ-04 (Lab ID: 10535595004)
  - Dichlorofluoromethane
- W-201014-KJ-05 (Lab ID: 10535595005)
  - Dichlorofluoromethane
- W-201014-KJ-06 (Lab ID: 10535595006)
  - Dichlorofluoromethane
- W-201014-KJ-07 (Lab ID: 10535595007)
  - Dichlorofluoromethane
- W-201014-KJ-08 (Lab ID: 10535595008)
  - Dichlorofluoromethane
- W-201014-KJ-09 (Lab ID: 10535595009)
  - Dichlorofluoromethane

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# PROJECT NARRATIVE

Project: 002012-Revised Report
Pace Project No.: 10535595

**Method:** **EPA 524.2**
**Description:** 524.2 MSV
**Client:** GHD
**Date:** October 30, 2020

Analyte Comments:

QC Batch: 705926

- W-201014-KJ-10 (Lab ID: 10535595010)
  - Dichlorofluoromethane
- W-201014-KJ-11 (Lab ID: 10535595012)
  - Dichlorofluoromethane
- W-201014-KJ-12 (Lab ID: 10535595013)
  - Dichlorofluoromethane
- W-201014-KJ-13 (Lab ID: 10535595014)
  - Dichlorofluoromethane
- W-201014-KJ-14 (Lab ID: 10535595015)
  - Dichlorofluoromethane
- W-201014-KJ-15 (Lab ID: 10535595016)
  - Dichlorofluoromethane
- W-201014-KJ-16 (Lab ID: 10535595017)
  - Dichlorofluoromethane

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# PROJECT NARRATIVE

Project: 002012-Revised Report
Pace Project No.: 10535595

**Method:** **EPA 300.0**
**Description:** 300.0 IC Anions
**Client:** GHD
**Date:** October 30, 2020

**General Information:**
16 samples were analyzed for EPA 300.0 by Pace Analytical Services Minneapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**
The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**
All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-01** **Lab ID: 10535595001** Collected: 10/14/20 09:05 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/21/20 23:51 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/21/20 23:51 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/21/20 23:51 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 1.0 | 1 | | 10/21/20 23:51 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/21/20 23:51 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/21/20 23:51 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/21/20 23:51 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/21/20 23:51 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/21/20 23:51 | 67-64-1 | M1,N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/21/20 23:51 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/21/20 23:51 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/21/20 23:51 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/21/20 23:51 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/21/20 23:51 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/21/20 23:51 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/21/20 23:51 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/21/20 23:51 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/21/20 23:51 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/21/20 23:51 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/21/20 23:51 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/21/20 23:51 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/21/20 23:51 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/21/20 23:51 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

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# ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-01** **Lab ID: 10535595001** Collected: 10/14/20 09:05 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 1.0 | 1 | | 10/21/20 23:51 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/21/20 23:51 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/21/20 23:51 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/21/20 23:51 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/21/20 23:51 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/21/20 23:51 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/21/20 23:51 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/21/20 23:51 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:51 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 117 | %. | 75-125 | 1 | | 10/21/20 23:51 | 460-00-4 | |
| Toluene-d8 (S) | 103 | %. | 75-125 | 1 | | 10/21/20 23:51 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 125 | %. | 75-125 | 1 | | 10/21/20 23:51 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **37.5** | mg/L | 1.2 | 1 | | 10/19/20 11:45 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-02** **Lab ID: 10535595002** Collected: 10/14/20 09:41 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 00:15 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 00:15 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 00:15 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 00:15 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 00:15 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/22/20 00:15 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/22/20 00:15 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/22/20 00:15 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/22/20 00:15 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 00:15 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 00:15 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 00:15 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/22/20 00:15 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/22/20 00:15 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/22/20 00:15 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 00:15 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/22/20 00:15 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/22/20 00:15 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/22/20 00:15 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 00:15 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 00:15 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/22/20 00:15 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/22/20 00:15 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-02** **Lab ID: 10535595002** Collected: 10/14/20 09:41 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 1.0 | 1 | | 10/22/20 00:15 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 00:15 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/22/20 00:15 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/22/20 00:15 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/22/20 00:15 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/22/20 00:15 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/22/20 00:15 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/22/20 00:15 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:15 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 106 | %. | 75-125 | 1 | | 10/22/20 00:15 | 460-00-4 | |
| Toluene-d8 (S) | 107 | %. | 75-125 | 1 | | 10/22/20 00:15 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 118 | %. | 75-125 | 1 | | 10/22/20 00:15 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **28.1** | mg/L | 1.2 | 1 | | 10/19/20 12:31 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-03** **Lab ID: 10535595003** Collected: 10/14/20 09:42 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 00:39 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 00:39 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 00:39 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 00:39 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 00:39 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/22/20 00:39 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/22/20 00:39 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/22/20 00:39 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/22/20 00:39 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 00:39 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 00:39 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 00:39 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/22/20 00:39 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/22/20 00:39 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/22/20 00:39 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 00:39 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/22/20 00:39 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/22/20 00:39 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/22/20 00:39 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 00:39 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 00:39 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/22/20 00:39 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/22/20 00:39 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-03** **Lab ID: 10535595003** Collected: 10/14/20 09:42 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 1.0 | 1 | | 10/22/20 00:39 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 00:39 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/22/20 00:39 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/22/20 00:39 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/22/20 00:39 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/22/20 00:39 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/22/20 00:39 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/22/20 00:39 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 00:39 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 101 | %. | 75-125 | 1 | | 10/22/20 00:39 | 460-00-4 | |
| Toluene-d8 (S) | 106 | %. | 75-125 | 1 | | 10/22/20 00:39 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 122 | %. | 75-125 | 1 | | 10/22/20 00:39 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **28.1** | mg/L | 1.2 | 1 | | 10/19/20 14:32 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-04** **Lab ID: 10535595004** Collected: 10/14/20 10:06 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:03 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 01:03 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 01:03 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:03 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 01:03 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:03 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/22/20 01:03 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/22/20 01:03 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/22/20 01:03 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 01:03 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:03 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:03 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/22/20 01:03 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/22/20 01:03 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/22/20 01:03 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:03 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/22/20 01:03 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/22/20 01:03 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:03 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:03 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:03 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/22/20 01:03 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/22/20 01:03 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-04** **Lab ID: 10535595004** Collected: 10/14/20 10:06 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 1.0 | 1 | | 10/22/20 01:03 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 01:03 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/22/20 01:03 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/22/20 01:03 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/22/20 01:03 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/22/20 01:03 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/22/20 01:03 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/22/20 01:03 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:03 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 103 | %. | 75-125 | 1 | | 10/22/20 01:03 | 460-00-4 | |
| Toluene-d8 (S) | 108 | %. | 75-125 | 1 | | 10/22/20 01:03 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 117 | %. | 75-125 | 1 | | 10/22/20 01:03 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **28.8** | mg/L | 1.2 | 1 | | 10/19/20 15:40 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-05** **Lab ID: 10535595005** Collected: 10/14/20 10:20 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:27 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 01:27 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 01:27 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:27 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 01:27 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:27 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/22/20 01:27 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/22/20 01:27 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/22/20 01:27 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 01:27 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:27 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:27 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/22/20 01:27 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/22/20 01:27 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/22/20 01:27 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:27 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/22/20 01:27 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/22/20 01:27 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:27 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:27 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:27 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/22/20 01:27 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/22/20 01:27 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-05** **Lab ID: 10535595005** Collected: 10/14/20 10:20 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 1.0 | 1 | | 10/22/20 01:27 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 01:27 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/22/20 01:27 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/22/20 01:27 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/22/20 01:27 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/22/20 01:27 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/22/20 01:27 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/22/20 01:27 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:27 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 100 | %. | 75-125 | 1 | | 10/22/20 01:27 | 460-00-4 | |
| Toluene-d8 (S) | 107 | %. | 75-125 | 1 | | 10/22/20 01:27 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 117 | %. | 75-125 | 1 | | 10/22/20 01:27 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | ND | mg/L | 1.2 | 1 | | 10/19/20 15:56 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-06** **Lab ID: 10535595006** Collected: 10/14/20 10:35 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:51 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 01:51 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 01:51 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:51 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 01:51 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:51 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/22/20 01:51 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/22/20 01:51 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/22/20 01:51 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 01:51 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:51 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:51 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/22/20 01:51 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/22/20 01:51 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/22/20 01:51 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:51 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/22/20 01:51 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/22/20 01:51 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:51 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:51 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 01:51 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/22/20 01:51 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/22/20 01:51 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-06** **Lab ID: 10535595006** Collected: 10/14/20 10:35 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 1.0 | 1 | | 10/22/20 01:51 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 01:51 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/22/20 01:51 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/22/20 01:51 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/22/20 01:51 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/22/20 01:51 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/22/20 01:51 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/22/20 01:51 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 01:51 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 104 | %. | 75-125 | 1 | | 10/22/20 01:51 | 460-00-4 | |
| Toluene-d8 (S) | 105 | %. | 75-125 | 1 | | 10/22/20 01:51 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 113 | %. | 75-125 | 1 | | 10/22/20 01:51 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **25.0** | mg/L | 1.2 | 1 | | 10/19/20 16:11 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-07** **Lab ID: 10535595007** Collected: 10/14/20 11:01 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 02:14 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 02:14 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 02:14 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 02:14 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 02:14 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/22/20 02:14 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/22/20 02:14 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/22/20 02:14 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/22/20 02:14 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 02:14 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 02:14 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 02:14 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/22/20 02:14 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/22/20 02:14 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/22/20 02:14 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 02:14 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/22/20 02:14 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/22/20 02:14 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/22/20 02:14 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 02:14 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 02:14 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/22/20 02:14 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/22/20 02:14 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-07** **Lab ID: 10535595007** Collected: 10/14/20 11:01 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 1.0 | 1 | | 10/22/20 02:14 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 02:14 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/22/20 02:14 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/22/20 02:14 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/22/20 02:14 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/22/20 02:14 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/22/20 02:14 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/22/20 02:14 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:14 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 103 | %. | 75-125 | 1 | | 10/22/20 02:14 | 460-00-4 | |
| Toluene-d8 (S) | 108 | %. | 75-125 | 1 | | 10/22/20 02:14 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 114 | %. | 75-125 | 1 | | 10/22/20 02:14 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **26.0** | mg/L | 1.2 | 1 | | 10/19/20 16:26 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-08** **Lab ID: 10535595008** Collected: 10/14/20 11:26 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 02:38 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 02:38 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 02:38 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 02:38 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 02:38 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/22/20 02:38 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/22/20 02:38 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/22/20 02:38 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/22/20 02:38 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 02:38 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 02:38 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 02:38 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/22/20 02:38 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/22/20 02:38 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/22/20 02:38 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 02:38 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/22/20 02:38 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/22/20 02:38 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/22/20 02:38 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 02:38 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 02:38 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/22/20 02:38 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/22/20 02:38 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-08** **Lab ID: 10535595008** Collected: 10/14/20 11:26 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 1.0 | 1 | | 10/22/20 02:38 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 02:38 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/22/20 02:38 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/22/20 02:38 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/22/20 02:38 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/22/20 02:38 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/22/20 02:38 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/22/20 02:38 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 02:38 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 101 | %. | 75-125 | 1 | | 10/22/20 02:38 | 460-00-4 | |
| Toluene-d8 (S) | 106 | %. | 75-125 | 1 | | 10/22/20 02:38 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 113 | %. | 75-125 | 1 | | 10/22/20 02:38 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **36.8** | mg/L | 1.2 | 1 | | 10/20/20 01:36 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-09** **Lab ID: 10535595009** Collected: 10/14/20 11:57 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:02 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 03:02 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 03:02 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:02 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 03:02 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:02 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/22/20 03:02 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/22/20 03:02 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/22/20 03:02 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 03:02 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:02 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:02 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/22/20 03:02 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/22/20 03:02 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/22/20 03:02 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:02 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/22/20 03:02 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/22/20 03:02 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:02 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:02 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:02 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/22/20 03:02 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/22/20 03:02 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-09** **Lab ID: 10535595009** Collected: 10/14/20 11:57 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 1.0 | 1 | | 10/22/20 03:02 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 03:02 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/22/20 03:02 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/22/20 03:02 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/22/20 03:02 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/22/20 03:02 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/22/20 03:02 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/22/20 03:02 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:02 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 101 | %. | 75-125 | 1 | | 10/22/20 03:02 | 460-00-4 | |
| Toluene-d8 (S) | 107 | %. | 75-125 | 1 | | 10/22/20 03:02 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 105 | %. | 75-125 | 1 | | 10/22/20 03:02 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **27.5** | mg/L | 1.2 | 1 | | 10/19/20 18:30 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-10** **Lab ID: 10535595010** Collected: 10/14/20 12:28 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:26 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 03:26 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 03:26 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:26 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 03:26 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:26 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/22/20 03:26 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/22/20 03:26 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/22/20 03:26 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 03:26 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:26 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:26 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/22/20 03:26 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/22/20 03:26 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/22/20 03:26 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:26 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/22/20 03:26 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/22/20 03:26 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:26 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:26 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:26 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/22/20 03:26 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/22/20 03:26 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-10** **Lab ID: 10535595010** Collected: 10/14/20 12:28 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 1.0 | 1 | | 10/22/20 03:26 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 03:26 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/22/20 03:26 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/22/20 03:26 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/22/20 03:26 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/22/20 03:26 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/22/20 03:26 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/22/20 03:26 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:26 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 100 | %. | 75-125 | 1 | | 10/22/20 03:26 | 460-00-4 | |
| Toluene-d8 (S) | 107 | %. | 75-125 | 1 | | 10/22/20 03:26 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 116 | %. | 75-125 | 1 | | 10/22/20 03:26 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **29.6** | mg/L | 1.2 | 1 | | 10/19/20 18:45 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: Trip Blank** **Lab ID: 10535595011** Collected: 10/14/20 00:00 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/21/20 23:04 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/21/20 23:04 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/21/20 23:04 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 1.0 | 1 | | 10/21/20 23:04 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/21/20 23:04 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/21/20 23:04 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/21/20 23:04 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/21/20 23:04 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/21/20 23:04 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/21/20 23:04 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/21/20 23:04 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/21/20 23:04 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/21/20 23:04 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/21/20 23:04 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/21/20 23:04 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/21/20 23:04 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/21/20 23:04 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/21/20 23:04 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/21/20 23:04 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/21/20 23:04 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/21/20 23:04 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/21/20 23:04 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/21/20 23:04 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: Trip Blank** **Lab ID: 10535595011** Collected: 10/14/20 00:00 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 1.0 | 1 | | 10/21/20 23:04 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/21/20 23:04 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/21/20 23:04 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/21/20 23:04 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/21/20 23:04 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/21/20 23:04 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/21/20 23:04 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/21/20 23:04 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/21/20 23:04 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 103 | %. | 75-125 | 1 | | 10/21/20 23:04 | 460-00-4 | |
| Toluene-d8 (S) | 109 | %. | 75-125 | 1 | | 10/21/20 23:04 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 115 | %. | 75-125 | 1 | | 10/21/20 23:04 | 17060-07-0 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-11** **Lab ID: 10535595012** Collected: 10/14/20 12:58 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:49 | 76-13-1 | N2 |
| 1,1-Dichloroethane | **0.22J** | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 75-34-3 | |
| 1,1-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 03:49 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 03:49 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:49 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 03:49 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:49 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/22/20 03:49 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/22/20 03:49 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/22/20 03:49 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 03:49 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:49 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:49 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/22/20 03:49 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/22/20 03:49 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/22/20 03:49 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:49 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/22/20 03:49 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/22/20 03:49 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:49 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:49 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 03:49 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/22/20 03:49 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/22/20 03:49 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-11** **Lab ID: 10535595012** Collected: 10/14/20 12:58 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 1.0 | 1 | | 10/22/20 03:49 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 03:49 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/22/20 03:49 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/22/20 03:49 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/22/20 03:49 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/22/20 03:49 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/22/20 03:49 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/22/20 03:49 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 03:49 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 101 | %. | 75-125 | 1 | | 10/22/20 03:49 | 460-00-4 | |
| Toluene-d8 (S) | 106 | %. | 75-125 | 1 | | 10/22/20 03:49 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 114 | %. | 75-125 | 1 | | 10/22/20 03:49 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **30.7** | mg/L | 1.2 | 1 | | 10/19/20 19:00 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-12** **Lab ID: 10535595013** Collected: 10/14/20 13:30 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 04:13 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 04:13 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 04:13 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 04:13 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 04:13 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/22/20 04:13 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/22/20 04:13 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/22/20 04:13 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/22/20 04:13 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 04:13 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 04:13 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 04:13 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/22/20 04:13 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/22/20 04:13 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/22/20 04:13 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 04:13 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/22/20 04:13 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/22/20 04:13 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/22/20 04:13 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 04:13 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 04:13 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/22/20 04:13 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/22/20 04:13 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-12** **Lab ID: 10535595013** Collected: 10/14/20 13:30 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 1.0 | 1 | | 10/22/20 04:13 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 04:13 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/22/20 04:13 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/22/20 04:13 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/22/20 04:13 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/22/20 04:13 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/22/20 04:13 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/22/20 04:13 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:13 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 103 | %. | 75-125 | 1 | | 10/22/20 04:13 | 460-00-4 | |
| Toluene-d8 (S) | 106 | %. | 75-125 | 1 | | 10/22/20 04:13 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 111 | %. | 75-125 | 1 | | 10/22/20 04:13 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **24.6** | mg/L | 1.2 | 1 | | 10/19/20 19:30 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-13** **Lab ID: 10535595014** Collected: 10/14/20 14:05 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 04:37 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 04:37 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 04:37 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 04:37 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 04:37 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/22/20 04:37 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/22/20 04:37 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/22/20 04:37 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/22/20 04:37 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 04:37 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 04:37 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 04:37 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/22/20 04:37 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/22/20 04:37 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/22/20 04:37 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 04:37 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/22/20 04:37 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/22/20 04:37 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/22/20 04:37 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 04:37 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 04:37 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/22/20 04:37 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/22/20 04:37 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-13** **Lab ID: 10535595014** Collected: 10/14/20 14:05 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 1.0 | 1 | | 10/22/20 04:37 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 04:37 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/22/20 04:37 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/22/20 04:37 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/22/20 04:37 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/22/20 04:37 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/22/20 04:37 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/22/20 04:37 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 04:37 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 101 | %. | 75-125 | 1 | | 10/22/20 04:37 | 460-00-4 | |
| Toluene-d8 (S) | 107 | %. | 75-125 | 1 | | 10/22/20 04:37 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 115 | %. | 75-125 | 1 | | 10/22/20 04:37 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **41.8** | mg/L | 1.2 | 1 | | 10/19/20 19:46 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
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(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-14** **Lab ID: 10535595015** Collected: 10/14/20 14:06 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:01 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 05:01 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 05:01 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:01 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 05:01 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:01 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/22/20 05:01 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/22/20 05:01 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/22/20 05:01 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 05:01 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:01 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:01 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/22/20 05:01 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/22/20 05:01 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/22/20 05:01 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:01 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/22/20 05:01 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/22/20 05:01 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:01 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:01 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:01 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/22/20 05:01 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/22/20 05:01 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
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# ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-14** **Lab ID: 10535595015** Collected: 10/14/20 14:06 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 1.0 | 1 | | 10/22/20 05:01 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 05:01 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/22/20 05:01 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/22/20 05:01 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/22/20 05:01 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/22/20 05:01 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/22/20 05:01 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/22/20 05:01 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:01 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 103 | %. | 75-125 | 1 | | 10/22/20 05:01 | 460-00-4 | |
| Toluene-d8 (S) | 105 | %. | 75-125 | 1 | | 10/22/20 05:01 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 114 | %. | 75-125 | 1 | | 10/22/20 05:01 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **41.9** | mg/L | 1.2 | 1 | | 10/20/20 01:51 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-15** **Lab ID: 10535595016** Collected: 10/14/20 14:20 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:25 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 05:25 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 05:25 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:25 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 05:25 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:25 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/22/20 05:25 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/22/20 05:25 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/22/20 05:25 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 05:25 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:25 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:25 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/22/20 05:25 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/22/20 05:25 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/22/20 05:25 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:25 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/22/20 05:25 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/22/20 05:25 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:25 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:25 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:25 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/22/20 05:25 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/22/20 05:25 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-15** **Lab ID: 10535595016** Collected: 10/14/20 14:20 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 1.0 | 1 | | 10/22/20 05:25 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 05:25 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/22/20 05:25 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/22/20 05:25 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/22/20 05:25 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/22/20 05:25 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/22/20 05:25 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/22/20 05:25 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:25 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 103 | %. | 75-125 | 1 | | 10/22/20 05:25 | 460-00-4 | |
| Toluene-d8 (S) | 107 | %. | 75-125 | 1 | | 10/22/20 05:25 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 114 | %. | 75-125 | 1 | | 10/22/20 05:25 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **2.1** | mg/L | 1.2 | 1 | | 10/20/20 04:23 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-16** **Lab ID: 10535595017** Collected: 10/14/20 14:32 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:49 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 05:49 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 05:49 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:49 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/22/20 05:49 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:49 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/22/20 05:49 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/22/20 05:49 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/22/20 05:49 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 05:49 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:49 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:49 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/22/20 05:49 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/22/20 05:49 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/22/20 05:49 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:49 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/22/20 05:49 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/22/20 05:49 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:49 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:49 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/22/20 05:49 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/22/20 05:49 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/22/20 05:49 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535595

**Sample: W-201014-KJ-16** **Lab ID: 10535595017** Collected: 10/14/20 14:32 Received: 10/14/20 19:00 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 1.0 | 1 | | 10/22/20 05:49 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/22/20 05:49 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/22/20 05:49 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/22/20 05:49 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/22/20 05:49 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/22/20 05:49 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/22/20 05:49 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/22/20 05:49 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/22/20 05:49 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 98 | %. | 75-125 | 1 | | 10/22/20 05:49 | 460-00-4 | |
| Toluene-d8 (S) | 105 | %. | 75-125 | 1 | | 10/22/20 05:49 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 105 | %. | 75-125 | 1 | | 10/22/20 05:49 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **27.2** | mg/L | 1.2 | 1 | | 10/20/20 04:38 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## QUALITY CONTROL DATA

Project: 002012-Revised Report
Pace Project No.: 10535595

QC Batch: 705926
QC Batch Method: EPA 524.2
Analysis Method: EPA 524.2
Analysis Description: 524.2 MSV
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10535595001, 10535595002, 10535595003, 10535595004, 10535595005, 10535595006, 10535595007, 10535595008, 10535595009, 10535595010, 10535595011, 10535595012, 10535595013, 10535595014, 10535595015, 10535595016, 10535595017

METHOD BLANK: 3771249
Matrix: Water
Associated Lab Samples: 10535595001, 10535595002, 10535595003, 10535595004, 10535595005, 10535595006, 10535595007, 10535595008, 10535595009, 10535595010, 10535595011, 10535595012, 10535595013, 10535595014, 10535595015, 10535595016, 10535595017

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| 1,1,1-Trichloroethane | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| 1,1,2-Trichloroethane | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| 1,1,2-Trichlorotrifluoroethane | ug/L | ND | 1.0 | 10/21/20 22:40 | N2 |
| 1,1-Dichloroethane | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| 1,1-Dichloroethene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| 1,1-Dichloropropene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| 1,2,3-Trichlorobenzene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| 1,2,3-Trichloropropane | ug/L | ND | 4.0 | 10/21/20 22:40 | |
| 1,2,4-Trichlorobenzene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| 1,2,4-Trimethylbenzene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 4.0 | 10/21/20 22:40 | N2 |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 0.50 | 10/21/20 22:40 | N2 |
| 1,2-Dichlorobenzene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| 1,2-Dichloroethane | ug/L | ND | 1.0 | 10/21/20 22:40 | MN |
| 1,2-Dichloropropane | ug/L | ND | 4.0 | 10/21/20 22:40 | |
| 1,3,5-Trimethylbenzene | ug/L | ND | 0.50 | 10/21/20 22:40 | N2 |
| 1,3-Dichlorobenzene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| 1,3-Dichloropropane | ug/L | ND | 0.50 | 10/21/20 22:40 | N2 |
| 1,4-Dichlorobenzene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| 2,2-Dichloropropane | ug/L | ND | 1.0 | 10/21/20 22:40 | |
| 2-Butanone (MEK) | ug/L | ND | 5.0 | 10/21/20 22:40 | N2 |
| 2-Chlorotoluene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| 4-Chlorotoluene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 5.0 | 10/21/20 22:40 | N2 |
| Acetone | ug/L | ND | 20.0 | 10/21/20 22:40 | N2 |
| Allyl chloride | ug/L | ND | 4.0 | 10/21/20 22:40 | N2 |
| Benzene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| Bromobenzene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| Bromochloromethane | ug/L | ND | 1.0 | 10/21/20 22:40 | |
| Bromodichloromethane | ug/L | ND | 1.0 | 10/21/20 22:40 | |
| Bromoform | ug/L | ND | 4.0 | 10/21/20 22:40 | |
| Bromomethane | ug/L | ND | 4.0 | 10/21/20 22:40 | |
| Carbon tetrachloride | ug/L | ND | 1.0 | 10/21/20 22:40 | |
| Chlorobenzene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| Chloroethane | ug/L | ND | 1.0 | 10/21/20 22:40 | |

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

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## QUALITY CONTROL DATA

Project: 002012-Revised Report
Pace Project No.: 10535595

METHOD BLANK: 3771249 Matrix: Water

Associated Lab Samples: 10535595001, 10535595002, 10535595003, 10535595004, 10535595005, 10535595006, 10535595007, 10535595008, 10535595009, 10535595010, 10535595011, 10535595012, 10535595013, 10535595014, 10535595015, 10535595016, 10535595017

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Chloroform | ug/L | ND | 1.0 | 10/21/20 22:40 | |
| Chloromethane | ug/L | ND | 4.0 | 10/21/20 22:40 | |
| cis-1,2-Dichloroethene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| cis-1,3-Dichloropropene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| Dibromochloromethane | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| Dibromomethane | ug/L | ND | 1.0 | 10/21/20 22:40 | |
| Dichlorodifluoromethane | ug/L | ND | 1.0 | 10/21/20 22:40 | |
| Dichlorofluoromethane | ug/L | ND | 1.0 | 10/21/20 22:40 | N2 |
| Diethyl ether (Ethyl ether) | ug/L | ND | 4.0 | 10/21/20 22:40 | N2 |
| Ethylbenzene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| Hexachloro-1,3-butadiene | ug/L | ND | 1.0 | 10/21/20 22:40 | |
| Isopropylbenzene (Cumene) | ug/L | ND | 1.0 | 10/21/20 22:40 | MN |
| m&p-Xylene | ug/L | ND | 1.0 | 10/21/20 22:40 | N2 |
| Methyl-tert-butyl ether | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| Methylene Chloride | ug/L | ND | 4.0 | 10/21/20 22:40 | N2 |
| n-Butylbenzene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| n-Propylbenzene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| Naphthalene | ug/L | ND | 1.0 | 10/21/20 22:40 | |
| o-Xylene | ug/L | ND | 0.50 | 10/21/20 22:40 | N2 |
| p-Isopropyltoluene | ug/L | ND | 0.50 | 10/21/20 22:40 | N2 |
| sec-Butylbenzene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| Styrene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| tert-Butylbenzene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| Tetrachloroethene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| Tetrahydrofuran | ug/L | ND | 10.0 | 10/21/20 22:40 | N2 |
| Toluene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| trans-1,2-Dichloroethene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| trans-1,3-Dichloropropene | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| Trichloroethene | ug/L | ND | 0.40 | 10/21/20 22:40 | |
| Trichlorofluoromethane | ug/L | ND | 0.50 | 10/21/20 22:40 | |
| Vinyl chloride | ug/L | ND | 0.20 | 10/21/20 22:40 | |
| Xylene (Total) | ug/L | ND | 1.5 | 10/21/20 22:40 | |
| 1,2-Dichloroethane-d4 (S) | %. | 116 | 75-125 | 10/21/20 22:40 | |
| 4-Bromofluorobenzene (S) | %. | 100 | 75-125 | 10/21/20 22:40 | |
| Toluene-d8 (S) | %. | 107 | 75-125 | 10/21/20 22:40 | |

LABORATORY CONTROL SAMPLE: 3771250

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | 20 | 20.4 | 102 | 70-130 | |
| 1,1,1-Trichloroethane | ug/L | 20 | 21.7 | 108 | 70-130 | |
| 1,1,2,2-Tetrachloroethane | ug/L | 20 | 20.4 | 102 | 70-130 | |

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

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## QUALITY CONTROL DATA

Project: 002012-Revised Report
Pace Project No.: 10535595

LABORATORY CONTROL SAMPLE: 3771250

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,2-Trichloroethane | ug/L | 20 | 21.7 | 108 | 70-130 | |
| 1,1,2-Trichlorotrifluoroethane | ug/L | 20 | 22.3 | 112 | 70-130 | N2 |
| 1,1-Dichloroethane | ug/L | 20 | 20.2 | 101 | 70-130 | |
| 1,1-Dichloroethene | ug/L | 20 | 20.9 | 105 | 70-130 | |
| 1,1-Dichloropropene | ug/L | 20 | 23.1 | 115 | 70-130 | |
| 1,2,3-Trichlorobenzene | ug/L | 20 | 19.8 | 99 | 70-130 | |
| 1,2,3-Trichloropropane | ug/L | 20 | 20.7 | 103 | 70-130 | |
| 1,2,4-Trichlorobenzene | ug/L | 20 | 19.7 | 98 | 70-130 | |
| 1,2,4-Trimethylbenzene | ug/L | 20 | 23.2 | 116 | 70-130 | |
| 1,2-Dibromo-3-chloropropane | ug/L | 50 | 48.6 | 97 | 70-130 | N2 |
| 1,2-Dibromoethane (EDB) | ug/L | 20 | 22.3 | 112 | 70-130 | N2 |
| 1,2-Dichlorobenzene | ug/L | 20 | 21.2 | 106 | 70-130 | |
| 1,2-Dichloroethane | ug/L | 20 | 20.6 | 103 | 70-130 | |
| 1,2-Dichloropropane | ug/L | 20 | 21.5 | 107 | 70-130 | |
| 1,3,5-Trimethylbenzene | ug/L | 20 | 24.3 | 122 | 70-130 | N2 |
| 1,3-Dichlorobenzene | ug/L | 20 | 21.9 | 110 | 70-130 | |
| 1,3-Dichloropropane | ug/L | 20 | 21.8 | 109 | 70-130 | N2 |
| 1,4-Dichlorobenzene | ug/L | 20 | 20.4 | 102 | 70-130 | |
| 2,2-Dichloropropane | ug/L | 20 | 19.9 | 100 | 70-130 | |
| 2-Butanone (MEK) | ug/L | 100 | 97.8 | 98 | 70-130 | N2 |
| 2-Chlorotoluene | ug/L | 20 | 23.1 | 115 | 70-130 | |
| 4-Chlorotoluene | ug/L | 20 | 23.1 | 116 | 70-130 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | 100 | 104 | 104 | 70-130 | N2 |
| Acetone | ug/L | 100 | 111 | 111 | 70-130 | N2 |
| Allyl chloride | ug/L | 20 | 18.6 | 93 | 70-130 | N2 |
| Benzene | ug/L | 20 | 21.9 | 110 | 70-130 | |
| Bromobenzene | ug/L | 20 | 19.6 | 98 | 70-130 | |
| Bromochloromethane | ug/L | 20 | 24.5 | 122 | 70-130 | |
| Bromodichloromethane | ug/L | 20 | 21.2 | 106 | 70-130 | |
| Bromoform | ug/L | 20 | 20.2 | 101 | 70-130 | |
| Bromomethane | ug/L | 20 | 23.6 | 118 | 70-130 | |
| Carbon tetrachloride | ug/L | 20 | 23.4 | 117 | 70-130 | |
| Chlorobenzene | ug/L | 20 | 22.3 | 112 | 70-130 | |
| Chloroethane | ug/L | 20 | 21.9 | 110 | 70-130 | |
| Chloroform | ug/L | 20 | 21.5 | 108 | 70-130 | |
| Chloromethane | ug/L | 20 | 20.9 | 105 | 70-130 | |
| cis-1,2-Dichloroethene | ug/L | 20 | 22.0 | 110 | 70-130 | |
| cis-1,3-Dichloropropene | ug/L | 20 | 22.6 | 113 | 70-130 | |
| Dibromochloromethane | ug/L | 20 | 22.1 | 110 | 70-130 | |
| Dibromomethane | ug/L | 20 | 20.9 | 105 | 70-130 | |
| Dichlorodifluoromethane | ug/L | 20 | 23.7 | 119 | 70-130 | |
| Dichlorofluoromethane | ug/L | 20 | 20.5 | 103 | 70-130 | N2 |
| Diethyl ether (Ethyl ether) | ug/L | 20 | 19.7 | 99 | 70-130 | N2 |
| Ethylbenzene | ug/L | 20 | 23.1 | 115 | 70-130 | |
| Hexachloro-1,3-butadiene | ug/L | 20 | 19.3 | 96 | 70-130 | |
| Isopropylbenzene (Cumene) | ug/L | 20 | 25.0 | 125 | 70-130 | |
| m&p-Xylene | ug/L | 40 | 48.3 | 121 | 70-130 | N2 |

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## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## QUALITY CONTROL DATA

Project: 002012-Revised Report
Pace Project No.: 10535595

LABORATORY CONTROL SAMPLE: 3771250

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Methyl-tert-butyl ether | ug/L | 20 | 19.9 | 100 | 70-130 | |
| Methylene Chloride | ug/L | 20 | 21.2 | 106 | 70-130 | N2 |
| n-Butylbenzene | ug/L | 20 | 25.2 | 126 | 70-130 | |
| n-Propylbenzene | ug/L | 20 | 23.0 | 115 | 70-130 | |
| Naphthalene | ug/L | 20 | 18.9 | 95 | 70-130 | |
| o-Xylene | ug/L | 20 | 24.2 | 121 | 70-130 | N2 |
| p-Isopropyltoluene | ug/L | 20 | 23.6 | 118 | 70-130 | N2 |
| sec-Butylbenzene | ug/L | 20 | 23.0 | 115 | 70-130 | |
| Styrene | ug/L | 20 | 22.9 | 114 | 70-130 | |
| tert-Butylbenzene | ug/L | 20 | 24.9 | 124 | 70-130 | |
| Tetrachloroethene | ug/L | 20 | 22.8 | 114 | 70-130 | |
| Tetrahydrofuran | ug/L | 200 | 222 | 111 | 70-130 | N2 |
| Toluene | ug/L | 20 | 22.0 | 110 | 70-130 | |
| trans-1,2-Dichloroethene | ug/L | 20 | 20.3 | 102 | 70-130 | |
| trans-1,3-Dichloropropene | ug/L | 20 | 22.9 | 114 | 70-130 | |
| Trichloroethene | ug/L | 20 | 24.1 | 120 | 70-130 | |
| Trichlorofluoromethane | ug/L | 20 | 21.6 | 108 | 70-130 | |
| Vinyl chloride | ug/L | 20 | 21.3 | 106 | 70-130 | |
| Xylene (Total) | ug/L | 60 | 72.6 | 121 | 70-130 | |
| 1,2-Dichloroethane-d4 (S) | %. | | | 98 | 75-125 | |
| 4-Bromofluorobenzene (S) | %. | | | 97 | 75-125 | |
| Toluene-d8 (S) | %. | | | 103 | 75-125 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3771251 3771252

| Parameter | Units | 10535595001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 20 | 20 | 17.5 | 15.5 | 87 | 77 | 70-130 | 12 | 20 | |
| 1,1,1-Trichloroethane | ug/L | ND | 20 | 20 | 19.7 | 18.3 | 99 | 92 | 70-130 | 8 | 20 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 20 | 20 | 17.0 | 16.2 | 85 | 81 | 70-130 | 5 | 20 | |
| 1,1,2-Trichloroethane | ug/L | ND | 20 | 20 | 18.3 | 16.8 | 91 | 84 | 70-130 | 9 | 20 | |
| 1,1,2-Trichlorotrifluoroethane | ug/L | ND | 20 | 20 | 21.2 | 18.3 | 106 | 91 | 70-130 | 15 | 20 | N2 |
| 1,1-Dichloroethane | ug/L | ND | 20 | 20 | 18.6 | 16.7 | 93 | 84 | 70-130 | 11 | 20 | |
| 1,1-Dichloroethene | ug/L | ND | 20 | 20 | 20.3 | 17.9 | 102 | 90 | 70-130 | 12 | 20 | |
| 1,1-Dichloropropene | ug/L | ND | 20 | 20 | 21.2 | 19.1 | 106 | 95 | 70-130 | 11 | 20 | |
| 1,2,3-Trichlorobenzene | ug/L | ND | 20 | 20 | 16.6 | 16.0 | 83 | 80 | 70-130 | 3 | 20 | |
| 1,2,3-Trichloropropane | ug/L | ND | 20 | 20 | 16.1 | 16.8 | 81 | 84 | 70-130 | 4 | 20 | |
| 1,2,4-Trichlorobenzene | ug/L | ND | 20 | 20 | 15.5 | 15.7 | 77 | 78 | 70-130 | 1 | 20 | |
| 1,2,4-Trimethylbenzene | ug/L | ND | 20 | 20 | 19.6 | 18.9 | 98 | 94 | 70-130 | 4 | 20 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 50 | 50 | 38.9 | 37.8 | 78 | 76 | 70-130 | 3 | 20 | N2 |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 20 | 20 | 18.7 | 17.4 | 94 | 87 | 70-130 | 7 | 20 | N2 |
| 1,2-Dichlorobenzene | ug/L | ND | 20 | 20 | 17.2 | 17.0 | 86 | 85 | 70-130 | 1 | 20 | |
| 1,2-Dichloroethane | ug/L | ND | 20 | 20 | 18.2 | 16.6 | 91 | 83 | 70-130 | 9 | 20 | |
| 1,2-Dichloropropane | ug/L | ND | 20 | 20 | 18.8 | 17.8 | 94 | 89 | 70-130 | 5 | 20 | |

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## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## QUALITY CONTROL DATA

Project: 002012-Revised Report
Pace Project No.: 10535595

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3771251 3771252

| Parameter | Units | 10535595001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,3,5-Trimethylbenzene | ug/L | ND | 20 | 20 | 20.1 | 19.3 | 100 | 97 | 70-130 | 4 | 20 | N2 |
| 1,3-Dichlorobenzene | ug/L | ND | 20 | 20 | 18.2 | 17.4 | 91 | 87 | 70-130 | 4 | 20 | |
| 1,3-Dichloropropane | ug/L | ND | 20 | 20 | 18.4 | 17.4 | 92 | 87 | 70-130 | 6 | 20 | N2 |
| 1,4-Dichlorobenzene | ug/L | ND | 20 | 20 | 17.1 | 16.4 | 86 | 82 | 70-130 | 4 | 20 | |
| 2,2-Dichloropropane | ug/L | ND | 20 | 20 | 19.4 | 16.4 | 97 | 82 | 70-130 | 17 | 20 | |
| 2-Butanone (MEK) | ug/L | ND | 100 | 100 | 74.3 | 72.8 | 74 | 73 | 70-130 | 2 | 20 | N2 |
| 2-Chlorotoluene | ug/L | ND | 20 | 20 | 19.0 | 18.5 | 95 | 93 | 70-130 | 3 | 20 | |
| 4-Chlorotoluene | ug/L | ND | 20 | 20 | 18.8 | 18.0 | 94 | 90 | 70-130 | 4 | 20 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 100 | 100 | 86.2 | 82.1 | 86 | 82 | 70-130 | 5 | 20 | N2 |
| Acetone | ug/L | ND | 100 | 100 | 69.4 | 64.8 | 69 | 65 | 70-130 | 7 | 20 | M1,N2 |
| Allyl chloride | ug/L | ND | 20 | 20 | 17.8 | 16.2 | 89 | 81 | 70-130 | 9 | 20 | N2 |
| Benzene | ug/L | ND | 20 | 20 | 18.5 | 17.9 | 92 | 89 | 70-130 | 3 | 20 | |
| Bromobenzene | ug/L | ND | 20 | 20 | 16.2 | 15.6 | 81 | 78 | 70-130 | 4 | 20 | |
| Bromochloromethane | ug/L | ND | 20 | 20 | 17.9 | 19.9 | 90 | 99 | 70-130 | 10 | 20 | |
| Bromodichloromethane | ug/L | ND | 20 | 20 | 17.7 | 16.3 | 88 | 81 | 70-130 | 8 | 20 | |
| Bromoform | ug/L | ND | 20 | 20 | 17.1 | 15.4 | 85 | 77 | 70-130 | 10 | 20 | |
| Bromomethane | ug/L | ND | 20 | 20 | 22.5 | 23.0 | 113 | 115 | 70-130 | 2 | 20 | |
| Carbon tetrachloride | ug/L | ND | 20 | 20 | 20.2 | 19.2 | 101 | 96 | 70-130 | 5 | 20 | |
| Chlorobenzene | ug/L | ND | 20 | 20 | 18.7 | 17.3 | 93 | 87 | 70-130 | 7 | 20 | |
| Chloroethane | ug/L | ND | 20 | 20 | 19.3 | 18.2 | 96 | 91 | 70-130 | 5 | 20 | |
| Chloroform | ug/L | ND | 20 | 20 | 17.7 | 17.1 | 89 | 85 | 70-130 | 4 | 20 | |
| Chloromethane | ug/L | ND | 20 | 20 | 18.4 | 18.5 | 92 | 93 | 70-130 | 0 | 20 | |
| cis-1,2-Dichloroethene | ug/L | ND | 20 | 20 | 18.5 | 17.8 | 92 | 89 | 70-130 | 4 | 20 | |
| cis-1,3-Dichloropropene | ug/L | ND | 20 | 20 | 16.6 | 15.5 | 83 | 77 | 70-130 | 7 | 20 | |
| Dibromochloromethane | ug/L | ND | 20 | 20 | 18.6 | 17.7 | 93 | 89 | 70-130 | 5 | 20 | |
| Dibromomethane | ug/L | ND | 20 | 20 | 17.2 | 15.4 | 86 | 77 | 70-130 | 11 | 20 | |
| Dichlorodifluoromethane | ug/L | ND | 20 | 20 | 21.2 | 20.7 | 106 | 104 | 70-130 | 2 | 20 | |
| Dichlorofluoromethane | ug/L | ND | 20 | 20 | 18.3 | 18.4 | 92 | 92 | 70-130 | 0 | 20 | N2 |
| Diethyl ether (Ethyl ether) | ug/L | ND | 20 | 20 | 18.2 | 16.9 | 91 | 84 | 70-130 | 8 | 20 | N2 |
| Ethylbenzene | ug/L | ND | 20 | 20 | 19.6 | 18.5 | 98 | 92 | 70-130 | 6 | 20 | |
| Hexachloro-1,3-butadiene | ug/L | ND | 20 | 20 | 15.4 | 15.6 | 77 | 78 | 70-130 | 1 | 20 | |
| Isopropylbenzene (Cumene) | ug/L | ND | 20 | 20 | 20.7 | 19.8 | 104 | 99 | 70-130 | 5 | 20 | |
| m&p-Xylene | ug/L | ND | 40 | 40 | 40.8 | 38.0 | 102 | 95 | 70-130 | 7 | 20 | N2 |
| Methyl-tert-butyl ether | ug/L | ND | 20 | 20 | 17.8 | 16.1 | 89 | 80 | 70-130 | 10 | 20 | |
| Methylene Chloride | ug/L | ND | 20 | 20 | 18.9 | 17.3 | 95 | 86 | 70-130 | 9 | 20 | N2 |
| n-Butylbenzene | ug/L | ND | 20 | 20 | 20.2 | 19.5 | 101 | 98 | 70-130 | 3 | 20 | |
| n-Propylbenzene | ug/L | ND | 20 | 20 | 19.2 | 18.5 | 96 | 93 | 70-130 | 4 | 20 | |
| Naphthalene | ug/L | ND | 20 | 20 | 15.5 | 15.3 | 77 | 77 | 70-130 | 1 | 20 | |
| o-Xylene | ug/L | ND | 20 | 20 | 20.1 | 19.1 | 101 | 95 | 70-130 | 5 | 20 | N2 |
| p-Isopropyltoluene | ug/L | ND | 20 | 20 | 19.9 | 19.0 | 99 | 95 | 70-130 | 4 | 20 | N2 |
| sec-Butylbenzene | ug/L | ND | 20 | 20 | 19.8 | 19.0 | 99 | 95 | 70-130 | 4 | 20 | |
| Styrene | ug/L | ND | 20 | 20 | 19.4 | 18.3 | 97 | 92 | 70-130 | 6 | 20 | |
| tert-Butylbenzene | ug/L | ND | 20 | 20 | 20.6 | 19.6 | 103 | 98 | 70-130 | 5 | 20 | |
| Tetrachloroethene | ug/L | ND | 20 | 20 | 19.8 | 19.1 | 99 | 95 | 70-130 | 4 | 20 | |

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

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## QUALITY CONTROL DATA

Project: 002012-Revised Report
Pace Project No.: 10535595

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3771251 3771252

| Parameter | Units | 10535595001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tetrahydrofuran | ug/L | ND | 200 | 200 | 157 | 161 | 78 | 81 | 70-130 | 3 | 20 | N2 |
| Toluene | ug/L | ND | 20 | 20 | 18.7 | 17.9 | 94 | 89 | 70-130 | 5 | 20 | |
| trans-1,2-Dichloroethene | ug/L | ND | 20 | 20 | 18.7 | 16.7 | 94 | 84 | 70-130 | 11 | 20 | |
| trans-1,3-Dichloropropene | ug/L | ND | 20 | 20 | 19.2 | 18.3 | 96 | 91 | 70-130 | 5 | 20 | |
| Trichloroethene | ug/L | ND | 20 | 20 | 19.8 | 18.4 | 99 | 92 | 70-130 | 7 | 20 | |
| Trichlorofluoromethane | ug/L | ND | 20 | 20 | 19.0 | 18.6 | 95 | 93 | 70-130 | 2 | 20 | |
| Vinyl chloride | ug/L | ND | 20 | 20 | 19.3 | 19.8 | 97 | 99 | 70-130 | 2 | 20 | |
| Xylene (Total) | ug/L | ND | 60 | 60 | 60.9 | 57.0 | 101 | 95 | 70-130 | 7 | 20 | |
| 1,2-Dichloroethane-d4 (S) | %. | | | | | | 101 | 99 | 75-125 | | | |
| 4-Bromofluorobenzene (S) | %. | | | | | | 99 | 103 | 75-125 | | | |
| Toluene-d8 (S) | %. | | | | | | 100 | 101 | 75-125 | | | |

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## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## QUALITY CONTROL DATA

Project: 002012-Revised Report
Pace Project No.: 10535595

QC Batch: 705195
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10535595001, 10535595002, 10535595003, 10535595004, 10535595005, 10535595006, 10535595007, 10535595008, 10535595009, 10535595010, 10535595012, 10535595013, 10535595014, 10535595015, 10535595016, 10535595017

METHOD BLANK: 3767924
Matrix: Water
Associated Lab Samples: 10535595001, 10535595002, 10535595003, 10535595004, 10535595005, 10535595006, 10535595007, 10535595008, 10535595009, 10535595010, 10535595012, 10535595013, 10535595014, 10535595015, 10535595016, 10535595017

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Chloride | mg/L | ND | 1.2 | 10/19/20 10:45 | |

LABORATORY CONTROL SAMPLE: 3767925

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Chloride | mg/L | 50 | 50.8 | 102 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3767926 3767927

| Parameter | Units | 10535595001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | mg/L | 37.5 | 50 | 50 | 80.8 | 81.5 | 87 | 88 | 80-120 | 1 | 20 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3767928 3767929

| Parameter | Units | 10535595002 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | mg/L | 28.1 | 50 | 50 | 71.9 | 72.7 | 88 | 89 | 80-120 | 1 | 20 | |

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

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
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Minneapolis, MN 55414
(612)607-1700

# QUALIFIERS

Project: 002012-Revised Report
Pace Project No.: 10535595

## DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

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

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

TNI - The NELAC Institute.

## ANALYTE QUALIFIERS

| | |
|---|---|
| 1M | Analyte not detected when evaluated to the MDL. |
| M1 | Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery. |
| MN | The reporting limit has been raised in accordance with Minnesota Statutes 4740.2100 Subpart 8. C, D. Reporting Limit Evaluation Rule. |
| N2 | The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request. |

Pace Analytical Services, LLC
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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 002012-Revised Report
Pace Project No.: 10535595

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| **10535595001** | **W-201014-KJ-01** | EPA 524.2 | 705926 | | |
| **10535595002** | **W-201014-KJ-02** | EPA 524.2 | 705926 | | |
| **10535595003** | **W-201014-KJ-03** | EPA 524.2 | 705926 | | |
| **10535595004** | **W-201014-KJ-04** | EPA 524.2 | 705926 | | |
| **10535595005** | **W-201014-KJ-05** | EPA 524.2 | 705926 | | |
| **10535595006** | **W-201014-KJ-06** | EPA 524.2 | 705926 | | |
| **10535595007** | **W-201014-KJ-07** | EPA 524.2 | 705926 | | |
| **10535595008** | **W-201014-KJ-08** | EPA 524.2 | 705926 | | |
| **10535595009** | **W-201014-KJ-09** | EPA 524.2 | 705926 | | |
| **10535595010** | **W-201014-KJ-10** | EPA 524.2 | 705926 | | |
| **10535595011** | **Trip Blank** | EPA 524.2 | 705926 | | |
| **10535595012** | **W-201014-KJ-11** | EPA 524.2 | 705926 | | |
| **10535595013** | **W-201014-KJ-12** | EPA 524.2 | 705926 | | |
| **10535595014** | **W-201014-KJ-13** | EPA 524.2 | 705926 | | |
| **10535595015** | **W-201014-KJ-14** | EPA 524.2 | 705926 | | |
| **10535595016** | **W-201014-KJ-15** | EPA 524.2 | 705926 | | |
| **10535595017** | **W-201014-KJ-16** | EPA 524.2 | 705926 | | |
| **10535595001** | **W-201014-KJ-01** | EPA 300.0 | 705195 | | |
| **10535595002** | **W-201014-KJ-02** | EPA 300.0 | 705195 | | |
| **10535595003** | **W-201014-KJ-03** | EPA 300.0 | 705195 | | |
| **10535595004** | **W-201014-KJ-04** | EPA 300.0 | 705195 | | |
| **10535595005** | **W-201014-KJ-05** | EPA 300.0 | 705195 | | |
| **10535595006** | **W-201014-KJ-06** | EPA 300.0 | 705195 | | |
| **10535595007** | **W-201014-KJ-07** | EPA 300.0 | 705195 | | |
| **10535595008** | **W-201014-KJ-08** | EPA 300.0 | 705195 | | |
| **10535595009** | **W-201014-KJ-09** | EPA 300.0 | 705195 | | |
| **10535595010** | **W-201014-KJ-10** | EPA 300.0 | 705195 | | |
| **10535595012** | **W-201014-KJ-11** | EPA 300.0 | 705195 | | |
| **10535595013** | **W-201014-KJ-12** | EPA 300.0 | 705195 | | |
| **10535595014** | **W-201014-KJ-13** | EPA 300.0 | 705195 | | |
| **10535595015** | **W-201014-KJ-14** | EPA 300.0 | 705195 | | |
| **10535595016** | **W-201014-KJ-15** | EPA 300.0 | 705195 | | |
| **10535595017** | **W-201014-KJ-16** | EPA 300.0 | 705195 | | |

# CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

**ALL SHADED AREAS are for LAB USE ONLY**

| | |
|---|---|
| Company: GHD | Billing Information: |
| Address: 180 oil HWY 8 | |
| Report To: Grant Anderson/Sarah Ell. | Email To: |
| Copy To: | Site Collection Info/Address: |
| Customer Project Name/Number: 002017 | State: MN County/City: North Oaks Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET |
| Phone: Email: 507/272/8071 | Site/Facility ID #: Compliance Monitoring? [ ] Yes [ ] No |
| Collected By (print): K. Jenkins | Purchase Order #: Quote #: DW PWS ID #: DW Location Code: |
| Collected By (signature): | Turnaround Date Required: Immediately Packed on Ice: [X] Yes [ ] No |
| Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold: | Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply) |
| | Field Filtered (if applicable): [ ] Yes [ ] No Analysis: |

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Analyses

Lab Profile/Line: 32510

Lab Sample Receipt Checklist:

| | |
|---|---|
| Custody Seals Present/Intact | Y N NA |
| Custody Signatures Present | Y N NA |
| Collector Signature Present | Y N NA |
| Bottles Intact | Y N NA |
| Correct Bottles | Y N NA |
| Sufficient Volume | Y N NA |
| Samples Received on Ice | Y N NA |
| VOA - Headspace Acceptable | Y N NA |
| | Y N NA |
| | Y N NA |
| | Y N NA |
| | Y N NA |

WO#: 10535595

10535595

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

| Customer Sample ID | Matrix * | Comp / Grab | Collected (or Composite Start) Date | Collected (or Composite Start) Time | Composite End Date | Composite End Time | Res Cl | # of Ctns | VOCs (524.2) | Chloride (300.0) | Lab Sample # / Comments: |
|---|---|---|---|---|---|---|---|---|---|---|---|
| W-201014-KJ-01 | PW | G | 10/14/2020 | 0905 | | | | 12 | X | X | * MS/MSD * 001 |
| -02 | | | | 0941 | | | | 4 | | | 002 |
| -03 | | | | 0942 | | | | | | | 003 |
| -04 | | | | 1006 | | | | | | | 004 |
| -05 | | | | 1020 | | | | | | | 005 |
| -06 | | | | 1035 | | | | | | | 006 |
| -07 | | | | 1101 | | | | | | | 007 |
| -08 | | | | 1126 | | | | | | | 008 |
| -09 | | | | 1157 | | | | | | | 009 |
| -10 | | | | 1228 | | | | | | | 010 |

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2539807

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#:
Cooler 1 Temp Upon Receipt: 0.4 oC
Cooler 1 Therm Corr. Factor: +0.1 oC
Cooler 1 Corrected Temp: 0.5 oC
Comments:

| Relinquished by/Company: (Signature) | Date/Time: | Received by/Company: (Signature) | Date/Time: |
|---|---|---|---|
| | 10/14/20 15:30 | | 10.14.20 15:30 |
| Relinquished by/Company: (Signature) | Date/Time: | Received by/Company: (Signature) | Date/Time: |
| | 10/14/20 16:52 | | 10-14-20 1900 |
| Relinquished by/Company: (Signature) | Date/Time: | Received by/Company: (Signature) | Date/Time: |

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 1 of: _____

# CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

**ALL SHADED AREAS are for LAB USE ONLY**

| | |
|---|---|
| Company: GHD | Billing Information: |
| Address: 1801 Old Hwy 8 | |
| Report To: Grant Anderson / Sarah Ill. | Email To: |
| Copy To: | Site Collection Info/Address: |
| Customer Project Name/Number: 002012 | State: MN / County/City: North Oaks Time Zone Collected: [ ]PT [ ]MT [X]CT [ ]ET |
| Phone: Email: 507-272-8071 | Site/Facility ID #: Compliance Monitoring? [ ] Yes [ ] No |
| Collected By (print): K. Senkyr | Purchase Order #: Quote #: DW PWS ID #: DW Location Code: |
| Collected By (signature): | Turnaround Date Required: Immediately Packed on Ice: [X] Yes [ ] No |
| Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold: | Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply) |
| | Field Filtered (if applicable): [ ] Yes [ ] No Analysis: |

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Analyses

Lab Profile/Line: 32510

Lab Sample Receipt Checklist:

| | | | |
|---|---|---|---|
| Custody Seals Present/Intact | Y | N | NA |
| Custody Signatures Present | Y | N | NA |
| Collector Signature Present | Y | N | NA |
| Bottles Intact | Y | N | NA |
| Correct Bottles | Y | N | NA |
| Sufficient Volume | Y | N | NA |
| Samples Received on Ice | Y | N | NA |
| VOA - Headspace Acceptable | Y | N | NA |
| USDA Regulated Soils | Y | N | NA |
| Samples in Holding Time | Y | N | NA |
| Residual Chlorine Present | Y | N | NA |
| Cl Strips: | | | |
| Sample pH Acceptable | Y | N | NA |
| pH Strips: | | | |
| Sulfide Present | Y | N | NA |
| Lead Acetate Strips: | | | |

LAB USE ONLY:
Lab Sample # / Comments:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

| Customer Sample ID | Matrix * | Comp / Grab | Collected (or Composite Start) Date | Collected (or Composite Start) Time | Composite End Date | Composite End Time | Res Cl | # of Ctns | VOCs (SM, 2) | Chloride 300.0 | Lab Sample # / Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TRIP Blank | — | — | — | — | | | | 2 | X | | 011 |
| W-201014-KJ-11 | DW | G | 10/14/20 | 1250 | | | | | X | X | 012 |
| -12 | | | | 1330 | | | | | | | 013 |
| -13 | | | | 1405 | | | | | | | 014 |
| -14 | | | | 1406 | | | | | | | 015 |
| -15 | | | | 1420 | | | | | | | 016 |
| -16 | | | | 1432 | | | | | | | 017 |
| ~~KJ~~ -17 | | | | | | | | | | | KJ |
| -18 | | | | | | | | | | | KJ |
| -19 | | | | | | | | | | | KJ |

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2539806

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#:
Cooler 1 Temp Upon Receipt: 0.8 oC
Cooler 1 Therm Corr. Factor: 0.1 oC
Cooler 1 Corrected Temp: 0.9 oC
Comments:

| | | | |
|---|---|---|---|
| Relinquished by/Company: (Signature) | Date/Time: 15:30 10/14/20 | Received by/Company: (Signature) | Date/Time: 15:30 10/14/20 |
| Relinquished by/Company: (Signature) | Date/Time: 16:52 10/14/20 | Received by/Company: (Signature) | Date/Time: 10-14-20 1900 |
| Relinquished by/Company: (Signature) | Date/Time: | Received by/Company: (Signature) | Date/Time: |

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 2 of: _____

| Pace Analytical® | Document Name: **Sample Condition Upon Receipt (SCUR) - MN** | Document Revised: 12Aug2020 **Page 1 of 1** |
|---|---|---|
| | Document No.: **ENV-FRM-MIN4-0150 Rev.01** | Pace Analytical Services - **Minneapolis** |

**Sample Condition Upon Receipt**

**Client Name:** GHD

**Project #:** WO#: 10535595

PM: TS1 Due Date: 10/29/20

CLIENT: GHD

**Courier:** ☐Fed Ex ☐UPS ☐USPS ☒Client ☐Pace ☐SpeeDee ☐Commercial

**Tracking Number:** _____ See Exceptions ☐ ENV-FRM-MIN4-0142

**Custody Seal on Cooler/Box Present?** ☐Yes ☒No **Seals Intact?** ☐Yes ☒No **Biological Tissue Frozen?** ☐Yes ☐No ☒N/A

**Packing Material:** ☒Bubble Wrap ☒Bubble Bags ☐None ☐Other:_____ **Temp Blank?** ☒Yes ☐No

**Thermometer:** ☐T1(0461) ☐T2(1336) ☐T3(0459) ☐T4(0254) ☒T5(0489) **Type of Ice:** ☒Wet ☐Blue ☐None ☐Dry ☐Melted

**Did Samples Originate in West Virginia?** ☐Yes ☒No **Were All Container Temps Taken?** ☐Yes ☐No ☒N/A

Temp should be above freezing to 6°C **Cooler Temp Read w/temp blank:** 0.8 °C

**Correction Factor:** +0.1 **Cooler Temp Corrected w/temp blank:** 0.9 °C

**Average Corrected Temp (no temp blank only):** _____ °C ☐See Exceptions ENV-FRM-MIN4-0142 ☐1 Container

**USDA Regulated Soil:** (☒ N/A, water sample/Other:_____)

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐Yes ☐No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐Yes ☐No

**Date/Initials of Person Examining Contents:** 10 15 20 TN

**If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.**

| | | | | COMMENTS: |
|---|---|---|---|---|
| Chain of Custody Present and Filled Out? | ☒Yes | ☐No | | 1. |
| Chain of Custody Relinquished? | ☒Yes | ☐No | | 2. |
| Sampler Name and/or Signature on COC? | ☒Yes | ☐No | ☐N/A | 3. |
| Samples Arrived within Hold Time? | ☒Yes | ☐No | | 4. |
| **Short Hold Time Analysis (<72 hr)?** | ☐Yes | ☒No | | 5. ☐Fecal Coliform ☐HPC ☐Total Coliform/E coli ☐BOD/cBOD ☐Hex Chrome ☐Turbidity ☐Nitrate ☐Nitrite ☐Orthophos ☐Other_____ |
| **Rush Turn Around Time Requested?** | ☐Yes | ☒No | | 6. |
| Sufficient Volume? | ☒Yes | ☐No | | 7. |
| Correct Containers Used? -Pace Containers Used? | ☒Yes ☒Yes | ☐No ☐No | | 8. |
| Containers Intact? | ☒Yes | ☐No | | 9. |
| Field Filtered Volume Received for Dissolved Tests? | ☐Yes | ☐No | ☒N/A | 10. Is sediment visible in the dissolved container? ☐Yes ☐No |
| Is sufficient information available to reconcile the samples to the COC? Matrix: ☒Water ☐Soil ☐Oil ☐Other_____ | ☒Yes | ☐No | | 11. **If no, write ID/ Date/Time on Container Below:** **See Exception** ☐ ENV-FRM-MIN4-0142 |
| All containers needing acid/base preservation have been checked? | ☐Yes | ☐No | ☒N/A | 12. Sample # |
| All containers needing preservation are found to be in compliance with EPA recommendation? ($HNO_3$, $H_2SO_4$, <2pH, NaOH >9 Sulfide, NaOH>10 Cyanide) | ☐Yes | ☐No | ☒N/A | ☐ NaOH ☐ $HNO_3$ ☐ $H_2SO_4$ ☐Zinc Acetate |
| Exceptions: VOA Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS | ☒Yes | ☐No | ☐N/A | Positive for Res. Chlorine? ☐Yes ☐No **pH Paper Lot#** **See Exception** ☐ ENV-FRM-MIN4-0142 |
| | | | | Res. Chlorine \| 0-6 Roll \| 0-6 Strip \| 0-14 Strip |
| Extra labels present on soil VOA or WIDRO containers? | ☐Yes | ☐No | ☒N/A | 13. **See Exception** ☐ ENV-FRM-MIN4-0140 |
| Headspace in VOA Vials (greater than 6mm)? | ☐Yes | ☒No | ☐N/A | |
| Trip Blank Present? | ☒Yes | ☐No | ☐N/A | 14. 2 TB |
| Trip Blank Custody Seals Present? | ☒Yes | ☐No | ☐N/A | Pace Trip Blank Lot # (if purchased): 274154 |

**CLIENT NOTIFICATION/RESOLUTION** **Field Data Required?** ☐Yes ☐No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

**Project Manager Review:** Jna Soltani **Date:** 10/20/20

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers).

Labeled by: TN

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

October 30, 2020

Mr. Grant Anderson
GHD
1801 Old Highway 8 NW
Suite 114
St. Paul, MN 55112

RE: Project: 002012-Revised Report
Pace Project No.: 10535701

Dear Mr. Anderson:

Enclosed are the analytical results for sample(s) received by the laboratory on October 15, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Minneapolis

This report was revised on October 30, 2020 to update the reporting format.

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

Sincerely,

Tina Soltani
tina.soltani@pacelabs.com
(612) 607-6384
Project Manager

Enclosures

cc: Sarah Illi, GHD

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

# CERTIFICATIONS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Pace Analytical Services - Minneapolis MN**

1700 Elm Street SE, Minneapolis, MN 55414
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
A2LA Certification #: 2926.01*
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Massachusetts DWP Certification #: via MN 027-053-137
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Certifcation #: via MN 027-053-137
Minnesota Petrofund Certification #: 1240*
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081*
New Jersey Certification #: MN002
New York Certification #: 11647*
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563*
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## SAMPLE SUMMARY

Project: 002012-Revised Report
Pace Project No.: 10535701

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| **10535701001** | **W-201014-KJ-17** | Drinking Water | 10/14/20 15:00 | 10/15/20 16:14 |
| **10535701002** | **W-201015-KJ-20** | Drinking Water | 10/15/20 12:47 | 10/15/20 16:14 |
| **10535701003** | **W-201015-KJ-21** | Drinking Water | 10/15/20 08:43 | 10/15/20 16:14 |
| **10535701004** | **W-201015-KJ-22** | Drinking Water | 10/15/20 09:12 | 10/15/20 16:14 |
| **10535701005** | **W-201015-KJ-23** | Drinking Water | 10/15/20 09:43 | 10/15/20 16:14 |
| **10535701006** | **W-201015-KJ-24** | Drinking Water | 10/15/20 10:36 | 10/15/20 16:14 |
| **10535701007** | **W-201015-KJ-25** | Drinking Water | 10/15/20 11:46 | 10/15/20 16:14 |
| **10535701008** | **W-201015-KJ-26** | Drinking Water | 10/15/20 11:47 | 10/15/20 16:14 |
| **10535701009** | **W-201015-KJ-27** | Drinking Water | 10/15/20 12:13 | 10/15/20 16:14 |
| **10535701010** | **W-201015-KJ-28** | Drinking Water | 10/15/20 12:17 | 10/15/20 16:14 |
| **10535701011** | **W-201015-KJ-29** | Drinking Water | 10/15/20 13:24 | 10/15/20 16:14 |
| **10535701012** | **W-201015-KJ-30** | Drinking Water | 10/15/20 13:53 | 10/15/20 16:14 |
| **10535701013** | **Trip Blank** | Drinking Water | 10/15/20 00:00 | 10/15/20 16:14 |

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## SAMPLE ANALYTE COUNT

Project: 002012-Revised Report
Pace Project No.: 10535701

| Lab ID | Sample ID | Method | Analysts | Analytes Reported | Laboratory |
|---|---|---|---|---|---|
| **10535701001** | **W-201014-KJ-17** | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| **10535701002** | **W-201015-KJ-20** | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| **10535701003** | **W-201015-KJ-21** | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| **10535701004** | **W-201015-KJ-22** | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| **10535701005** | **W-201015-KJ-23** | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| **10535701006** | **W-201015-KJ-24** | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| **10535701007** | **W-201015-KJ-25** | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| **10535701008** | **W-201015-KJ-26** | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| **10535701009** | **W-201015-KJ-27** | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| **10535701010** | **W-201015-KJ-28** | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| **10535701011** | **W-201015-KJ-29** | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| **10535701012** | **W-201015-KJ-30** | EPA 524.2 | AEZ | 72 | PASI-M |
| | | EPA 300.0 | KEO | 1 | PASI-M |
| **10535701013** | **Trip Blank** | EPA 524.2 | AEZ | 72 | PASI-M |

PASI-M = Pace Analytical Services - Minneapolis

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## SUMMARY OF DETECTION

Project: 002012-Revised Report
Pace Project No.: 10535701

| Lab Sample ID / Method | Client Sample ID / Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|---|
| **10535701001** | **W-201014-KJ-17** | | | | | |
| EPA 300.0 | Chloride | 30.9 | mg/L | 1.2 | 10/20/20 04:53 | |
| **10535701002** | **W-201015-KJ-20** | | | | | |
| EPA 300.0 | Chloride | 36.4 | mg/L | 1.2 | 10/19/20 21:32 | |
| **10535701003** | **W-201015-KJ-21** | | | | | |
| EPA 300.0 | Chloride | 13.6 | mg/L | 1.2 | 10/19/20 22:17 | |
| **10535701004** | **W-201015-KJ-22** | | | | | |
| EPA 300.0 | Chloride | 38.3 | mg/L | 1.2 | 10/20/20 07:10 | |
| **10535701005** | **W-201015-KJ-23** | | | | | |
| EPA 300.0 | Chloride | 28.6 | mg/L | 1.2 | 10/20/20 07:25 | |
| **10535701006** | **W-201015-KJ-24** | | | | | |
| EPA 300.0 | Chloride | 27.7 | mg/L | 1.2 | 10/20/20 07:40 | |
| **10535701007** | **W-201015-KJ-25** | | | | | |
| EPA 300.0 | Chloride | 25.0 | mg/L | 1.2 | 10/20/20 07:55 | |
| **10535701008** | **W-201015-KJ-26** | | | | | |
| EPA 300.0 | Chloride | 25.0 | mg/L | 1.2 | 10/20/20 12:51 | |
| **10535701010** | **W-201015-KJ-28** | | | | | |
| EPA 300.0 | Chloride | 5.2 | mg/L | 1.2 | 10/20/20 13:21 | |
| **10535701011** | **W-201015-KJ-29** | | | | | |
| EPA 300.0 | Chloride | 34.6 | mg/L | 1.2 | 10/20/20 09:41 | |
| **10535701012** | **W-201015-KJ-30** | | | | | |
| EPA 300.0 | Chloride | 118 | mg/L | 6.0 | 10/20/20 12:36 | |

## REPORT OF LABORATORY ANALYSIS

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# PROJECT NARRATIVE

Project: 002012-Revised Report
Pace Project No.: 10535701

**Date:** October 30, 2020

Case Narrative

Volatile Organics Analysis
524.2

The following analytes were evaluated to the method detection limit (MDL) for all samples:

1,1-Dichloroethane (MDL = 0.16 ug/L)
cis-1,2-Dichloroethene (MDL = 0.14 ug/L)
Vinyl chloride (MDL = 0.086 ug/L)

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# PROJECT NARRATIVE

Project: 002012-Revised Report
Pace Project No.: 10535701

**Method:** **EPA 524.2**
**Description:** 524.2 MSV
**Client:** GHD
**Date:** October 30, 2020

**General Information:**
13 samples were analyzed for EPA 524.2 by Pace Analytical Services Minneapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**
The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**
All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**
All criteria were within method requirements with any exceptions noted below.

QC Batch: 707104

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- LCS (Lab ID: 3777860)
  - Bromomethane
- MS (Lab ID: 3777861)
  - Bromomethane
- MSD (Lab ID: 3777862)
  - Bromomethane

**Internal Standards:**
All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**
All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 707104

L3: Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples.

- LCS (Lab ID: 3777860)
  - Bromomethane

**Matrix Spikes:**
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

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# PROJECT NARRATIVE

Project: 002012-Revised Report
Pace Project No.: 10535701

**Method:** **EPA 524.2**
**Description:** 524.2 MSV
**Client:** GHD
**Date:** October 30, 2020

QC Batch: 707104

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10535701002

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 3777861)
  - Bromomethane
- MSD (Lab ID: 3777862)
  - Bromomethane

**Additional Comments:**

Analyte Comments:

QC Batch: 707104

1M: Analyte not detected when evaluated to the MDL.

- Trip Blank (Lab ID: 10535701013)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201014-KJ-17 (Lab ID: 10535701001)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201015-KJ-20 (Lab ID: 10535701002)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201015-KJ-21 (Lab ID: 10535701003)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201015-KJ-22 (Lab ID: 10535701004)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201015-KJ-23 (Lab ID: 10535701005)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201015-KJ-24 (Lab ID: 10535701006)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201015-KJ-25 (Lab ID: 10535701007)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride

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# PROJECT NARRATIVE

Project: 002012-Revised Report
Pace Project No.: 10535701

**Method:** **EPA 524.2**
**Description:** 524.2 MSV
**Client:** GHD
**Date:** October 30, 2020

Analyte Comments:

QC Batch: 707104

1M: Analyte not detected when evaluated to the MDL.

- W-201015-KJ-26 (Lab ID: 10535701008)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201015-KJ-27 (Lab ID: 10535701009)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201015-KJ-28 (Lab ID: 10535701010)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201015-KJ-29 (Lab ID: 10535701011)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride
- W-201015-KJ-30 (Lab ID: 10535701012)
  - 1,1-Dichloroethane
  - cis-1,2-Dichloroethene
  - Vinyl chloride

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- BLANK (Lab ID: 3777859)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- LCS (Lab ID: 3777860)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene

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# PROJECT NARRATIVE

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**Method:** **EPA 524.2**
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Analyte Comments:

QC Batch: 707104

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- LCS (Lab ID: 3777860)
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- MS (Lab ID: 3777861)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- MSD (Lab ID: 3777862)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene

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# PROJECT NARRATIVE

Project: 002012-Revised Report
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**Method:** **EPA 524.2**
**Description:** 524.2 MSV
**Client:** GHD
**Date:** October 30, 2020

Analyte Comments:

QC Batch: 707104

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- MSD (Lab ID: 3777862)
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- Trip Blank (Lab ID: 10535701013)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201014-KJ-17 (Lab ID: 10535701001)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201015-KJ-20 (Lab ID: 10535701002)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene

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# PROJECT NARRATIVE

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**Method:** **EPA 524.2**
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- W-201015-KJ-20 (Lab ID: 10535701002)
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201015-KJ-21 (Lab ID: 10535701003)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201015-KJ-22 (Lab ID: 10535701004)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)

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# PROJECT NARRATIVE

Project: 002012-Revised Report
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**Method:** **EPA 524.2**
**Description:** 524.2 MSV
**Client:** GHD
**Date:** October 30, 2020

Analyte Comments:

QC Batch: 707104

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- W-201015-KJ-22 (Lab ID: 10535701004)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201015-KJ-23 (Lab ID: 10535701005)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201015-KJ-24 (Lab ID: 10535701006)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201015-KJ-25 (Lab ID: 10535701007)
  - 1,2-Dibromo-3-chloropropane

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Analyte Comments:

QC Batch: 707104

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- W-201015-KJ-25 (Lab ID: 10535701007)
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201015-KJ-26 (Lab ID: 10535701008)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201015-KJ-27 (Lab ID: 10535701009)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane

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# PROJECT NARRATIVE

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**Date:** October 30, 2020

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- W-201015-KJ-27 (Lab ID: 10535701009)
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201015-KJ-28 (Lab ID: 10535701010)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane
- W-201015-KJ-29 (Lab ID: 10535701011)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran

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# PROJECT NARRATIVE

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**Method:** **EPA 524.2**
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**Client:** GHD
**Date:** October 30, 2020

Analyte Comments:

QC Batch: 707104

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- W-201015-KJ-29 (Lab ID: 10535701011)
  - 1,1,2-Trichlorotrifluoroethane
- W-201015-KJ-30 (Lab ID: 10535701012)
  - 1,2-Dibromo-3-chloropropane
  - 1,2-Dibromoethane (EDB)
  - 1,3-Dichloropropane
  - 1,3,5-Trimethylbenzene
  - 2-Butanone (MEK)
  - Allyl chloride
  - Acetone
  - Dichlorofluoromethane
  - Diethyl ether (Ethyl ether)
  - Methylene Chloride
  - 4-Methyl-2-pentanone (MIBK)
  - m&p-Xylene
  - o-Xylene
  - p-Isopropyltoluene
  - Tetrahydrofuran
  - 1,1,2-Trichlorotrifluoroethane

- BLANK (Lab ID: 3777859)
  - Dichlorofluoromethane
- LCS (Lab ID: 3777860)
  - Dichlorofluoromethane
- MS (Lab ID: 3777861)
  - Dichlorofluoromethane
- MSD (Lab ID: 3777862)
  - Dichlorofluoromethane
- Trip Blank (Lab ID: 10535701013)
  - Dichlorofluoromethane
- W-201014-KJ-17 (Lab ID: 10535701001)
  - Dichlorofluoromethane
- W-201015-KJ-20 (Lab ID: 10535701002)
  - Dichlorofluoromethane
- W-201015-KJ-21 (Lab ID: 10535701003)
  - Dichlorofluoromethane
- W-201015-KJ-22 (Lab ID: 10535701004)
  - Dichlorofluoromethane
- W-201015-KJ-23 (Lab ID: 10535701005)
  - Dichlorofluoromethane
- W-201015-KJ-24 (Lab ID: 10535701006)
  - Dichlorofluoromethane

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- W-201015-KJ-25 (Lab ID: 10535701007)
  - Dichlorofluoromethane
- W-201015-KJ-26 (Lab ID: 10535701008)
  - Dichlorofluoromethane
- W-201015-KJ-27 (Lab ID: 10535701009)
  - Dichlorofluoromethane
- W-201015-KJ-28 (Lab ID: 10535701010)
  - Dichlorofluoromethane
- W-201015-KJ-29 (Lab ID: 10535701011)
  - Dichlorofluoromethane
- W-201015-KJ-30 (Lab ID: 10535701012)
  - Dichlorofluoromethane

**Pace Analytical Services, LLC**
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# PROJECT NARRATIVE

Project: 002012-Revised Report
Pace Project No.: 10535701

**Method:** **EPA 300.0**
**Description:** 300.0 IC Anions
**Client:** GHD
**Date:** October 30, 2020

**General Information:**
12 samples were analyzed for EPA 300.0 by Pace Analytical Services Minneapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**
The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**
All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201014-KJ-17** **Lab ID: 10535701001** Collected: 10/14/20 15:00 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 08:41 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 1.0 | 1 | | 10/28/20 08:41 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 08:41 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 08:41 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 08:41 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/28/20 08:41 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/28/20 08:41 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/28/20 08:41 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/28/20 08:41 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 08:41 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 08:41 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 08:41 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/28/20 08:41 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/28/20 08:41 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/28/20 08:41 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 08:41 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/28/20 08:41 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/28/20 08:41 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/28/20 08:41 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 08:41 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 08:41 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/28/20 08:41 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/28/20 08:41 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201014-KJ-17** **Lab ID: 10535701001** Collected: 10/14/20 15:00 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 08:41 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/28/20 08:41 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/28/20 08:41 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/28/20 08:41 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/28/20 08:41 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/28/20 08:41 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/28/20 08:41 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:41 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 99 | %. | 75-125 | 1 | | 10/28/20 08:41 | 460-00-4 | |
| Toluene-d8 (S) | 100 | %. | 75-125 | 1 | | 10/28/20 08:41 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 100 | %. | 75-125 | 1 | | 10/28/20 08:41 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **30.9** | mg/L | 1.2 | 1 | | 10/20/20 04:53 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201015-KJ-20** **Lab ID: 10535701002** Collected: 10/15/20 12:47 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 08:18 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 1.0 | 1 | | 10/28/20 08:18 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 08:18 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 08:18 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 08:18 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/28/20 08:18 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/28/20 08:18 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/28/20 08:18 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/28/20 08:18 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 08:18 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 08:18 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 08:18 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/28/20 08:18 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/28/20 08:18 | 74-83-9 | M0 |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/28/20 08:18 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 08:18 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/28/20 08:18 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/28/20 08:18 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/28/20 08:18 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 08:18 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 08:18 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/28/20 08:18 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/28/20 08:18 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201015-KJ-20** **Lab ID: 10535701002** Collected: 10/15/20 12:47 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 08:18 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/28/20 08:18 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/28/20 08:18 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/28/20 08:18 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/28/20 08:18 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/28/20 08:18 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/28/20 08:18 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 08:18 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 103 | %. | 75-125 | 1 | | 10/28/20 08:18 | 460-00-4 | |
| Toluene-d8 (S) | 101 | %. | 75-125 | 1 | | 10/28/20 08:18 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 97 | %. | 75-125 | 1 | | 10/28/20 08:18 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **36.4** | mg/L | 1.2 | 1 | | 10/19/20 21:32 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201015-KJ-21** **Lab ID: 10535701003** Collected: 10/15/20 08:43 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:05 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 1.0 | 1 | | 10/28/20 09:05 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 09:05 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 09:05 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 09:05 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:05 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/28/20 09:05 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/28/20 09:05 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/28/20 09:05 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 09:05 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:05 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:05 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/28/20 09:05 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/28/20 09:05 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/28/20 09:05 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:05 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/28/20 09:05 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/28/20 09:05 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:05 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:05 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:05 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/28/20 09:05 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/28/20 09:05 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201015-KJ-21** **Lab ID: 10535701003** Collected: 10/15/20 08:43 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 09:05 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/28/20 09:05 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/28/20 09:05 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/28/20 09:05 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/28/20 09:05 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/28/20 09:05 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/28/20 09:05 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:05 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 101 | %. | 75-125 | 1 | | 10/28/20 09:05 | 460-00-4 | |
| Toluene-d8 (S) | 99 | %. | 75-125 | 1 | | 10/28/20 09:05 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 100 | %. | 75-125 | 1 | | 10/28/20 09:05 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **13.6** | mg/L | 1.2 | 1 | | 10/19/20 22:17 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201015-KJ-22** **Lab ID: 10535701004** Collected: 10/15/20 09:12 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:29 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 1.0 | 1 | | 10/28/20 09:29 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 09:29 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 09:29 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 09:29 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:29 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/28/20 09:29 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/28/20 09:29 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/28/20 09:29 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 09:29 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:29 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:29 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/28/20 09:29 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/28/20 09:29 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/28/20 09:29 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:29 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/28/20 09:29 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/28/20 09:29 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:29 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:29 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:29 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/28/20 09:29 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/28/20 09:29 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201015-KJ-22** **Lab ID: 10535701004** Collected: 10/15/20 09:12 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 09:29 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/28/20 09:29 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/28/20 09:29 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/28/20 09:29 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/28/20 09:29 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/28/20 09:29 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/28/20 09:29 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:29 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 98 | %. | 75-125 | 1 | | 10/28/20 09:29 | 460-00-4 | |
| Toluene-d8 (S) | 101 | %. | 75-125 | 1 | | 10/28/20 09:29 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 99 | %. | 75-125 | 1 | | 10/28/20 09:29 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **38.3** | mg/L | 1.2 | 1 | | 10/20/20 07:10 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201015-KJ-23** **Lab ID: 10535701005** Collected: 10/15/20 09:43 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:53 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 1.0 | 1 | | 10/28/20 09:53 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 09:53 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 09:53 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 09:53 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:53 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/28/20 09:53 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/28/20 09:53 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/28/20 09:53 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 09:53 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:53 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:53 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/28/20 09:53 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/28/20 09:53 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/28/20 09:53 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:53 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/28/20 09:53 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/28/20 09:53 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:53 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:53 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 09:53 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/28/20 09:53 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/28/20 09:53 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201015-KJ-23** **Lab ID: 10535701005** Collected: 10/15/20 09:43 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 09:53 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/28/20 09:53 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/28/20 09:53 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/28/20 09:53 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/28/20 09:53 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/28/20 09:53 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/28/20 09:53 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 09:53 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 97 | %. | 75-125 | 1 | | 10/28/20 09:53 | 460-00-4 | |
| Toluene-d8 (S) | 103 | %. | 75-125 | 1 | | 10/28/20 09:53 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 99 | %. | 75-125 | 1 | | 10/28/20 09:53 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **28.6** | mg/L | 1.2 | 1 | | 10/20/20 07:25 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201015-KJ-24** **Lab ID: 10535701006** Collected: 10/15/20 10:36 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 10:17 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 1.0 | 1 | | 10/28/20 10:17 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 10:17 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 10:17 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 10:17 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/28/20 10:17 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/28/20 10:17 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/28/20 10:17 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/28/20 10:17 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 10:17 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 10:17 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 10:17 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/28/20 10:17 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/28/20 10:17 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/28/20 10:17 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 10:17 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/28/20 10:17 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/28/20 10:17 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/28/20 10:17 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 10:17 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 10:17 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/28/20 10:17 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/28/20 10:17 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
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(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201015-KJ-24** **Lab ID: 10535701006** Collected: 10/15/20 10:36 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 10:17 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/28/20 10:17 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/28/20 10:17 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/28/20 10:17 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/28/20 10:17 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/28/20 10:17 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/28/20 10:17 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:17 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 97 | %. | 75-125 | 1 | | 10/28/20 10:17 | 460-00-4 | |
| Toluene-d8 (S) | 98 | %. | 75-125 | 1 | | 10/28/20 10:17 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 98 | %. | 75-125 | 1 | | 10/28/20 10:17 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **27.7** | mg/L | 1.2 | 1 | | 10/20/20 07:40 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201015-KJ-25** **Lab ID: 10535701007** Collected: 10/15/20 11:46 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 10:41 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 1.0 | 1 | | 10/28/20 10:41 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 10:41 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 10:41 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 10:41 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/28/20 10:41 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/28/20 10:41 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/28/20 10:41 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/28/20 10:41 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 10:41 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 10:41 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 10:41 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/28/20 10:41 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/28/20 10:41 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/28/20 10:41 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 10:41 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/28/20 10:41 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/28/20 10:41 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/28/20 10:41 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 10:41 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 10:41 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/28/20 10:41 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/28/20 10:41 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201015-KJ-25** **Lab ID: 10535701007** Collected: 10/15/20 11:46 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 10:41 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/28/20 10:41 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/28/20 10:41 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/28/20 10:41 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/28/20 10:41 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/28/20 10:41 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/28/20 10:41 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 10:41 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 101 | %. | 75-125 | 1 | | 10/28/20 10:41 | 460-00-4 | |
| Toluene-d8 (S) | 99 | %. | 75-125 | 1 | | 10/28/20 10:41 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 97 | %. | 75-125 | 1 | | 10/28/20 10:41 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **25.0** | mg/L | 1.2 | 1 | | 10/20/20 07:55 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201015-KJ-26** **Lab ID: 10535701008** Collected: 10/15/20 11:47 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:04 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 1.0 | 1 | | 10/28/20 11:04 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 11:04 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 11:04 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 11:04 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:04 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/28/20 11:04 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/28/20 11:04 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/28/20 11:04 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 11:04 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:04 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:04 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/28/20 11:04 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/28/20 11:04 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/28/20 11:04 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:04 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/28/20 11:04 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/28/20 11:04 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:04 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:04 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:04 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/28/20 11:04 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/28/20 11:04 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201015-KJ-26** **Lab ID: 10535701008** Collected: 10/15/20 11:47 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 11:04 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/28/20 11:04 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/28/20 11:04 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/28/20 11:04 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/28/20 11:04 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/28/20 11:04 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/28/20 11:04 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:04 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 99 | %. | 75-125 | 1 | | 10/28/20 11:04 | 460-00-4 | |
| Toluene-d8 (S) | 98 | %. | 75-125 | 1 | | 10/28/20 11:04 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 100 | %. | 75-125 | 1 | | 10/28/20 11:04 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **25.0** | mg/L | 1.2 | 1 | | 10/20/20 12:51 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201015-KJ-27** **Lab ID: 10535701009** Collected: 10/15/20 12:13 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:28 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 1.0 | 1 | | 10/28/20 11:28 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 11:28 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 11:28 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 11:28 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:28 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/28/20 11:28 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/28/20 11:28 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/28/20 11:28 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 11:28 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:28 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:28 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/28/20 11:28 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/28/20 11:28 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/28/20 11:28 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:28 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/28/20 11:28 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/28/20 11:28 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:28 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:28 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:28 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/28/20 11:28 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/28/20 11:28 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201015-KJ-27** **Lab ID: 10535701009** Collected: 10/15/20 12:13 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 11:28 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/28/20 11:28 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/28/20 11:28 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/28/20 11:28 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/28/20 11:28 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/28/20 11:28 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/28/20 11:28 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:28 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 99 | %. | 75-125 | 1 | | 10/28/20 11:28 | 460-00-4 | |
| Toluene-d8 (S) | 100 | %. | 75-125 | 1 | | 10/28/20 11:28 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 99 | %. | 75-125 | 1 | | 10/28/20 11:28 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | ND | mg/L | 1.2 | 1 | | 10/20/20 13:06 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201015-KJ-28** **Lab ID: 10535701010** Collected: 10/15/20 12:17 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:52 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 1.0 | 1 | | 10/28/20 11:52 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 11:52 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 11:52 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 11:52 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:52 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/28/20 11:52 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/28/20 11:52 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/28/20 11:52 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 11:52 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:52 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:52 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/28/20 11:52 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/28/20 11:52 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/28/20 11:52 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:52 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/28/20 11:52 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/28/20 11:52 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:52 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:52 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 11:52 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/28/20 11:52 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/28/20 11:52 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201015-KJ-28** **Lab ID: 10535701010** Collected: 10/15/20 12:17 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 11:52 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/28/20 11:52 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/28/20 11:52 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/28/20 11:52 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/28/20 11:52 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/28/20 11:52 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/28/20 11:52 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 11:52 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 100 | %. | 75-125 | 1 | | 10/28/20 11:52 | 460-00-4 | |
| Toluene-d8 (S) | 100 | %. | 75-125 | 1 | | 10/28/20 11:52 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 103 | %. | 75-125 | 1 | | 10/28/20 11:52 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **5.2** | mg/L | 1.2 | 1 | | 10/20/20 13:21 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201015-KJ-29** **Lab ID: 10535701011** Collected: 10/15/20 13:24 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 12:16 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 1.0 | 1 | | 10/28/20 12:16 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 12:16 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 12:16 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 12:16 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/28/20 12:16 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/28/20 12:16 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/28/20 12:16 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/28/20 12:16 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 12:16 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 12:16 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 12:16 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/28/20 12:16 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/28/20 12:16 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/28/20 12:16 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 12:16 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/28/20 12:16 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/28/20 12:16 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/28/20 12:16 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 12:16 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 12:16 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/28/20 12:16 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/28/20 12:16 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
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## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201015-KJ-29** **Lab ID: 10535701011** Collected: 10/15/20 13:24 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 12:16 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/28/20 12:16 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/28/20 12:16 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/28/20 12:16 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/28/20 12:16 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/28/20 12:16 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/28/20 12:16 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:16 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 101 | %. | 75-125 | 1 | | 10/28/20 12:16 | 460-00-4 | |
| Toluene-d8 (S) | 102 | %. | 75-125 | 1 | | 10/28/20 12:16 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 100 | %. | 75-125 | 1 | | 10/28/20 12:16 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **34.6** | mg/L | 1.2 | 1 | | 10/20/20 09:41 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201015-KJ-30** **Lab ID: 10535701012** Collected: 10/15/20 13:53 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 12:39 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 1.0 | 1 | | 10/28/20 12:39 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 12:39 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 12:39 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 12:39 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/28/20 12:39 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/28/20 12:39 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/28/20 12:39 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/28/20 12:39 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 12:39 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 12:39 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 12:39 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/28/20 12:39 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/28/20 12:39 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/28/20 12:39 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 12:39 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/28/20 12:39 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/28/20 12:39 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/28/20 12:39 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 12:39 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 12:39 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/28/20 12:39 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/28/20 12:39 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: W-201015-KJ-30** **Lab ID: 10535701012** Collected: 10/15/20 13:53 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 12:39 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/28/20 12:39 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/28/20 12:39 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/28/20 12:39 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/28/20 12:39 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/28/20 12:39 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/28/20 12:39 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 12:39 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 95 | %. | 75-125 | 1 | | 10/28/20 12:39 | 460-00-4 | |
| Toluene-d8 (S) | 102 | %. | 75-125 | 1 | | 10/28/20 12:39 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 102 | %. | 75-125 | 1 | | 10/28/20 12:39 | 17060-07-0 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| Chloride | **118** | mg/L | 6.0 | 5 | | 10/20/20 12:36 | 16887-00-6 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: Trip Blank** **Lab ID: 10535701013** Collected: 10/15/20 00:00 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2 | | | | | | | |
| | Pace Analytical Services - Minneapolis | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 630-20-6 | |
| 1,1,1-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 71-55-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 79-34-5 | |
| 1,1,2-Trichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 79-00-5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 07:30 | 76-13-1 | N2 |
| 1,1-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 75-34-3 | 1M |
| 1,1-Dichloroethene | ND | ug/L | 1.0 | 1 | | 10/28/20 07:30 | 75-35-4 | |
| 1,1-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 563-58-6 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 87-61-6 | |
| 1,2,3-Trichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 07:30 | 96-18-4 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 120-82-1 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 95-63-6 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 07:30 | 96-12-8 | N2 |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 106-93-4 | N2 |
| 1,2-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 95-50-1 | |
| 1,2-Dichloroethane | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 107-06-2 | |
| 1,2-Dichloropropane | ND | ug/L | 4.0 | 1 | | 10/28/20 07:30 | 78-87-5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 108-67-8 | N2 |
| 1,3-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 541-73-1 | |
| 1,3-Dichloropropane | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 142-28-9 | N2 |
| 1,4-Dichlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 106-46-7 | |
| 2,2-Dichloropropane | ND | ug/L | 1.0 | 1 | | 10/28/20 07:30 | 594-20-7 | |
| 2-Butanone (MEK) | ND | ug/L | 5.0 | 1 | | 10/28/20 07:30 | 78-93-3 | N2 |
| 2-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 106-43-4 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 5.0 | 1 | | 10/28/20 07:30 | 108-10-1 | N2 |
| Acetone | ND | ug/L | 20.0 | 1 | | 10/28/20 07:30 | 67-64-1 | N2 |
| Allyl chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 07:30 | 107-05-1 | N2 |
| Benzene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 07:30 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 07:30 | 75-27-4 | |
| Bromoform | ND | ug/L | 4.0 | 1 | | 10/28/20 07:30 | 75-25-2 | |
| Bromomethane | ND | ug/L | 4.0 | 1 | | 10/28/20 07:30 | 74-83-9 | |
| Carbon tetrachloride | ND | ug/L | 1.0 | 1 | | 10/28/20 07:30 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 108-90-7 | |
| Chloroethane | ND | ug/L | 1.0 | 1 | | 10/28/20 07:30 | 75-00-3 | |
| Chloroform | ND | ug/L | 1.0 | 1 | | 10/28/20 07:30 | 67-66-3 | |
| Chloromethane | ND | ug/L | 4.0 | 1 | | 10/28/20 07:30 | 74-87-3 | |
| Dibromochloromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 124-48-1 | |
| Dibromomethane | ND | ug/L | 1.0 | 1 | | 10/28/20 07:30 | 74-95-3 | |
| Dichlorodifluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 07:30 | 75-71-8 | |
| Dichlorofluoromethane | ND | ug/L | 1.0 | 1 | | 10/28/20 07:30 | 75-43-4 | N2 |
| Diethyl ether (Ethyl ether) | ND | ug/L | 4.0 | 1 | | 10/28/20 07:30 | 60-29-7 | N2 |
| Ethylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 100-41-4 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 1.0 | 1 | | 10/28/20 07:30 | 87-68-3 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: 002012-Revised Report
Pace Project No.: 10535701

**Sample: Trip Blank** **Lab ID: 10535701013** Collected: 10/15/20 00:00 Received: 10/15/20 16:14 Matrix: Drinking Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **524.2 MSV** | Analytical Method: EPA 524.2<br>Pace Analytical Services - Minneapolis | | | | | | | |
| Isopropylbenzene (Cumene) | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 98-82-8 | |
| Methyl-tert-butyl ether | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 1634-04-4 | |
| Methylene Chloride | ND | ug/L | 4.0 | 1 | | 10/28/20 07:30 | 75-09-2 | N2 |
| Naphthalene | ND | ug/L | 1.0 | 1 | | 10/28/20 07:30 | 91-20-3 | |
| Styrene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 100-42-5 | |
| Tetrachloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 127-18-4 | |
| Tetrahydrofuran | ND | ug/L | 10.0 | 1 | | 10/28/20 07:30 | 109-99-9 | N2 |
| Toluene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 108-88-3 | |
| Trichloroethene | ND | ug/L | 0.40 | 1 | | 10/28/20 07:30 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 75-69-4 | |
| Vinyl chloride | ND | ug/L | 0.20 | 1 | | 10/28/20 07:30 | 75-01-4 | 1M |
| Xylene (Total) | ND | ug/L | 1.5 | 1 | | 10/28/20 07:30 | 1330-20-7 | |
| cis-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 156-59-2 | 1M |
| cis-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 10061-01-5 | |
| m&p-Xylene | ND | ug/L | 1.0 | 1 | | 10/28/20 07:30 | 179601-23-1 | N2 |
| n-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 104-51-8 | |
| n-Propylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 103-65-1 | |
| o-Xylene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 95-47-6 | N2 |
| p-Isopropyltoluene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 99-87-6 | N2 |
| sec-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 98-06-6 | |
| trans-1,2-Dichloroethene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 156-60-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 0.50 | 1 | | 10/28/20 07:30 | 10061-02-6 | |
| ***Surrogates*** | | | | | | | | |
| 4-Bromofluorobenzene (S) | 96 | %. | 75-125 | 1 | | 10/28/20 07:30 | 460-00-4 | |
| Toluene-d8 (S) | 102 | %. | 75-125 | 1 | | 10/28/20 07:30 | 2037-26-5 | |
| 1,2-Dichloroethane-d4 (S) | 97 | %. | 75-125 | 1 | | 10/28/20 07:30 | 17060-07-0 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## QUALITY CONTROL DATA

Project: 002012-Revised Report
Pace Project No.: 10535701

QC Batch: 707104
QC Batch Method: EPA 524.2
Analysis Method: EPA 524.2
Analysis Description: 524.2 MSV
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10535701001, 10535701002, 10535701003, 10535701004, 10535701005, 10535701006, 10535701007, 10535701008, 10535701009, 10535701010, 10535701011, 10535701012, 10535701013

METHOD BLANK: 3777859
Matrix: Water
Associated Lab Samples: 10535701001, 10535701002, 10535701003, 10535701004, 10535701005, 10535701006, 10535701007, 10535701008, 10535701009, 10535701010, 10535701011, 10535701012, 10535701013

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| 1,1,1-Trichloroethane | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| 1,1,2-Trichloroethane | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| 1,1,2-Trichlorotrifluoroethane | ug/L | ND | 1.0 | 10/28/20 07:07 | N2 |
| 1,1-Dichloroethane | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| 1,1-Dichloroethene | ug/L | ND | 1.0 | 10/28/20 07:07 | MN |
| 1,1-Dichloropropene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| 1,2,3-Trichlorobenzene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| 1,2,3-Trichloropropane | ug/L | ND | 4.0 | 10/28/20 07:07 | |
| 1,2,4-Trichlorobenzene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| 1,2,4-Trimethylbenzene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 4.0 | 10/28/20 07:07 | N2 |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 0.50 | 10/28/20 07:07 | N2 |
| 1,2-Dichlorobenzene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| 1,2-Dichloroethane | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| 1,2-Dichloropropane | ug/L | ND | 4.0 | 10/28/20 07:07 | |
| 1,3,5-Trimethylbenzene | ug/L | ND | 0.50 | 10/28/20 07:07 | N2 |
| 1,3-Dichlorobenzene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| 1,3-Dichloropropane | ug/L | ND | 0.50 | 10/28/20 07:07 | N2 |
| 1,4-Dichlorobenzene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| 2,2-Dichloropropane | ug/L | ND | 1.0 | 10/28/20 07:07 | |
| 2-Butanone (MEK) | ug/L | ND | 5.0 | 10/28/20 07:07 | N2 |
| 2-Chlorotoluene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| 4-Chlorotoluene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 5.0 | 10/28/20 07:07 | N2 |
| Acetone | ug/L | ND | 20.0 | 10/28/20 07:07 | N2 |
| Allyl chloride | ug/L | ND | 4.0 | 10/28/20 07:07 | N2 |
| Benzene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| Bromobenzene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| Bromochloromethane | ug/L | ND | 1.0 | 10/28/20 07:07 | |
| Bromodichloromethane | ug/L | ND | 1.0 | 10/28/20 07:07 | |
| Bromoform | ug/L | ND | 4.0 | 10/28/20 07:07 | |
| Bromomethane | ug/L | ND | 4.0 | 10/28/20 07:07 | |
| Carbon tetrachloride | ug/L | ND | 1.0 | 10/28/20 07:07 | |
| Chlorobenzene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| Chloroethane | ug/L | ND | 1.0 | 10/28/20 07:07 | |
| Chloroform | ug/L | ND | 1.0 | 10/28/20 07:07 | |
| Chloromethane | ug/L | ND | 4.0 | 10/28/20 07:07 | |

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

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## QUALITY CONTROL DATA

Project: 002012-Revised Report
Pace Project No.: 10535701

METHOD BLANK: 3777859 Matrix: Water

Associated Lab Samples: 10535701001, 10535701002, 10535701003, 10535701004, 10535701005, 10535701006, 10535701007, 10535701008, 10535701009, 10535701010, 10535701011, 10535701012, 10535701013

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| cis-1,2-Dichloroethene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| cis-1,3-Dichloropropene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| Dibromochloromethane | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| Dibromomethane | ug/L | ND | 1.0 | 10/28/20 07:07 | |
| Dichlorodifluoromethane | ug/L | ND | 1.0 | 10/28/20 07:07 | |
| Dichlorofluoromethane | ug/L | ND | 1.0 | 10/28/20 07:07 | N2 |
| Diethyl ether (Ethyl ether) | ug/L | ND | 4.0 | 10/28/20 07:07 | N2 |
| Ethylbenzene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| Hexachloro-1,3-butadiene | ug/L | ND | 1.0 | 10/28/20 07:07 | |
| Isopropylbenzene (Cumene) | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| m&p-Xylene | ug/L | ND | 1.0 | 10/28/20 07:07 | N2 |
| Methyl-tert-butyl ether | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| Methylene Chloride | ug/L | ND | 4.0 | 10/28/20 07:07 | |
| n-Butylbenzene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| n-Propylbenzene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| Naphthalene | ug/L | ND | 1.0 | 10/28/20 07:07 | |
| o-Xylene | ug/L | ND | 0.50 | 10/28/20 07:07 | N2 |
| p-Isopropyltoluene | ug/L | ND | 0.50 | 10/28/20 07:07 | N2 |
| sec-Butylbenzene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| Styrene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| tert-Butylbenzene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| Tetrachloroethene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| Tetrahydrofuran | ug/L | ND | 10.0 | 10/28/20 07:07 | N2 |
| Toluene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| trans-1,2-Dichloroethene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| trans-1,3-Dichloropropene | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| Trichloroethene | ug/L | ND | 0.40 | 10/28/20 07:07 | |
| Trichlorofluoromethane | ug/L | ND | 0.50 | 10/28/20 07:07 | |
| Vinyl chloride | ug/L | ND | 0.20 | 10/28/20 07:07 | |
| Xylene (Total) | ug/L | ND | 1.5 | 10/28/20 07:07 | |
| 1,2-Dichloroethane-d4 (S) | %. | 96 | 75-125 | 10/28/20 07:07 | |
| 4-Bromofluorobenzene (S) | %. | 98 | 75-125 | 10/28/20 07:07 | |
| Toluene-d8 (S) | %. | 99 | 75-125 | 10/28/20 07:07 | |

LABORATORY CONTROL SAMPLE: 3777860

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | 20 | 18.2 | 91 | 70-130 | |
| 1,1,1-Trichloroethane | ug/L | 20 | 18.5 | 93 | 70-130 | |
| 1,1,2,2-Tetrachloroethane | ug/L | 20 | 19.2 | 96 | 70-130 | |
| 1,1,2-Trichloroethane | ug/L | 20 | 20.1 | 101 | 70-130 | |
| 1,1,2-Trichlorotrifluoroethane | ug/L | 20 | 20.3 | 101 | 70-130 | N2 |
| 1,1-Dichloroethane | ug/L | 20 | 18.8 | 94 | 70-130 | |

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

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## QUALITY CONTROL DATA

Project: 002012-Revised Report
Pace Project No.: 10535701

LABORATORY CONTROL SAMPLE: 3777860

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | ug/L | 20 | 20.3 | 101 | 70-130 | |
| 1,1-Dichloropropene | ug/L | 20 | 18.1 | 90 | 70-130 | |
| 1,2,3-Trichlorobenzene | ug/L | 20 | 20.6 | 103 | 70-130 | |
| 1,2,3-Trichloropropane | ug/L | 20 | 19.8 | 99 | 70-130 | |
| 1,2,4-Trichlorobenzene | ug/L | 20 | 19.1 | 95 | 70-130 | |
| 1,2,4-Trimethylbenzene | ug/L | 20 | 19.1 | 95 | 70-130 | |
| 1,2-Dibromo-3-chloropropane | ug/L | 50 | 48.7 | 97 | 70-130 | N2 |
| 1,2-Dibromoethane (EDB) | ug/L | 20 | 19.0 | 95 | 70-130 | N2 |
| 1,2-Dichlorobenzene | ug/L | 20 | 19.4 | 97 | 70-130 | |
| 1,2-Dichloroethane | ug/L | 20 | 17.4 | 87 | 70-130 | |
| 1,2-Dichloropropane | ug/L | 20 | 19.3 | 96 | 70-130 | |
| 1,3,5-Trimethylbenzene | ug/L | 20 | 19.1 | 96 | 70-130 | N2 |
| 1,3-Dichlorobenzene | ug/L | 20 | 19.3 | 96 | 70-130 | |
| 1,3-Dichloropropane | ug/L | 20 | 18.9 | 95 | 70-130 | N2 |
| 1,4-Dichlorobenzene | ug/L | 20 | 18.9 | 95 | 70-130 | |
| 2,2-Dichloropropane | ug/L | 20 | 15.6 | 78 | 70-130 | |
| 2-Butanone (MEK) | ug/L | 100 | 93.6 | 94 | 70-130 | N2 |
| 2-Chlorotoluene | ug/L | 20 | 18.6 | 93 | 70-130 | |
| 4-Chlorotoluene | ug/L | 20 | 18.6 | 93 | 70-130 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | 100 | 101 | 101 | 70-130 | N2 |
| Acetone | ug/L | 100 | 95.8 | 96 | 70-130 | N2 |
| Allyl chloride | ug/L | 20 | 19.7 | 98 | 70-130 | N2 |
| Benzene | ug/L | 20 | 18.6 | 93 | 70-130 | |
| Bromobenzene | ug/L | 20 | 19.6 | 98 | 70-130 | |
| Bromochloromethane | ug/L | 20 | 18.9 | 95 | 70-130 | |
| Bromodichloromethane | ug/L | 20 | 18.8 | 94 | 70-130 | |
| Bromoform | ug/L | 20 | 18.5 | 92 | 70-130 | |
| Bromomethane | ug/L | 20 | 32.8 | 164 | 70-130 | CH,L3 |
| Carbon tetrachloride | ug/L | 20 | 18.3 | 91 | 70-130 | |
| Chlorobenzene | ug/L | 20 | 19.5 | 98 | 70-130 | |
| Chloroethane | ug/L | 20 | 21.5 | 107 | 70-130 | |
| Chloroform | ug/L | 20 | 18.0 | 90 | 70-130 | |
| Chloromethane | ug/L | 20 | 21.5 | 107 | 70-130 | |
| cis-1,2-Dichloroethene | ug/L | 20 | 18.2 | 91 | 70-130 | |
| cis-1,3-Dichloropropene | ug/L | 20 | 18.3 | 92 | 70-130 | |
| Dibromochloromethane | ug/L | 20 | 18.9 | 95 | 70-130 | |
| Dibromomethane | ug/L | 20 | 20.5 | 103 | 70-130 | |
| Dichlorodifluoromethane | ug/L | 20 | 19.3 | 96 | 70-130 | |
| Dichlorofluoromethane | ug/L | 20 | 21.2 | 106 | 70-130 | N2 |
| Diethyl ether (Ethyl ether) | ug/L | 20 | 20.3 | 101 | 70-130 | N2 |
| Ethylbenzene | ug/L | 20 | 19.7 | 99 | 70-130 | |
| Hexachloro-1,3-butadiene | ug/L | 20 | 18.2 | 91 | 70-130 | |
| Isopropylbenzene (Cumene) | ug/L | 20 | 19.5 | 97 | 70-130 | |
| m&p-Xylene | ug/L | 40 | 37.9 | 95 | 70-130 | N2 |
| Methyl-tert-butyl ether | ug/L | 20 | 20.5 | 102 | 70-130 | |
| Methylene Chloride | ug/L | 20 | 20.9 | 104 | 70-130 | |
| n-Butylbenzene | ug/L | 20 | 18.8 | 94 | 70-130 | |

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## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## QUALITY CONTROL DATA

Project: 002012-Revised Report
Pace Project No.: 10535701

LABORATORY CONTROL SAMPLE: 3777860

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| n-Propylbenzene | ug/L | 20 | 18.6 | 93 | 70-130 | |
| Naphthalene | ug/L | 20 | 18.9 | 94 | 70-130 | |
| o-Xylene | ug/L | 20 | 19.7 | 98 | 70-130 | N2 |
| p-Isopropyltoluene | ug/L | 20 | 19.3 | 97 | 70-130 | N2 |
| sec-Butylbenzene | ug/L | 20 | 19.2 | 96 | 70-130 | |
| Styrene | ug/L | 20 | 19.7 | 99 | 70-130 | |
| tert-Butylbenzene | ug/L | 20 | 19.3 | 96 | 70-130 | |
| Tetrachloroethene | ug/L | 20 | 19.9 | 99 | 70-130 | |
| Tetrahydrofuran | ug/L | 200 | 169 | 85 | 70-130 | N2 |
| Toluene | ug/L | 20 | 19.3 | 97 | 70-130 | |
| trans-1,2-Dichloroethene | ug/L | 20 | 19.1 | 96 | 70-130 | |
| trans-1,3-Dichloropropene | ug/L | 20 | 18.5 | 93 | 70-130 | |
| Trichloroethene | ug/L | 20 | 19.4 | 97 | 70-130 | |
| Trichlorofluoromethane | ug/L | 20 | 23.0 | 115 | 70-130 | |
| Vinyl chloride | ug/L | 20 | 21.9 | 110 | 70-130 | |
| Xylene (Total) | ug/L | 60 | 57.6 | 96 | 70-130 | |
| 1,2-Dichloroethane-d4 (S) | %. | | | 96 | 75-125 | |
| 4-Bromofluorobenzene (S) | %. | | | 96 | 75-125 | |
| Toluene-d8 (S) | %. | | | 102 | 75-125 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3777861 3777862

| Parameter | Units | 10535701002 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 20 | 20 | 17.7 | 18.5 | 89 | 93 | 70-130 | 4 | 20 | |
| 1,1,1-Trichloroethane | ug/L | ND | 20 | 20 | 18.4 | 19.7 | 92 | 99 | 70-130 | 7 | 20 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 20 | 20 | 18.6 | 18.9 | 93 | 95 | 70-130 | 2 | 20 | |
| 1,1,2-Trichloroethane | ug/L | ND | 20 | 20 | 19.3 | 19.6 | 97 | 98 | 70-130 | 1 | 20 | |
| 1,1,2-Trichlorotrifluoroethane | ug/L | ND | 20 | 20 | 21.4 | 22.5 | 107 | 113 | 70-130 | 5 | 20 | N2 |
| 1,1-Dichloroethane | ug/L | ND | 20 | 20 | 18.1 | 18.6 | 90 | 93 | 70-130 | 3 | 20 | |
| 1,1-Dichloroethene | ug/L | ND | 20 | 20 | 21.0 | 21.8 | 105 | 109 | 70-130 | 4 | 20 | |
| 1,1-Dichloropropene | ug/L | ND | 20 | 20 | 18.7 | 19.8 | 93 | 99 | 70-130 | 6 | 20 | |
| 1,2,3-Trichlorobenzene | ug/L | ND | 20 | 20 | 20.3 | 19.5 | 101 | 97 | 70-130 | 4 | 20 | |
| 1,2,3-Trichloropropane | ug/L | ND | 20 | 20 | 19.8 | 18.9 | 99 | 95 | 70-130 | 4 | 20 | |
| 1,2,4-Trichlorobenzene | ug/L | ND | 20 | 20 | 18.3 | 18.6 | 92 | 93 | 70-130 | 1 | 20 | |
| 1,2,4-Trimethylbenzene | ug/L | ND | 20 | 20 | 18.5 | 19.2 | 93 | 96 | 70-130 | 3 | 20 | |
| 1,2-Dibromo-3-chloropropane | ug/L | ND | 50 | 50 | 45.1 | 45.3 | 90 | 91 | 70-130 | 1 | 20 | N2 |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 20 | 20 | 18.2 | 18.4 | 91 | 92 | 70-130 | 1 | 20 | N2 |
| 1,2-Dichlorobenzene | ug/L | ND | 20 | 20 | 18.0 | 18.7 | 90 | 94 | 70-130 | 4 | 20 | |
| 1,2-Dichloroethane | ug/L | ND | 20 | 20 | 16.5 | 17.1 | 83 | 86 | 70-130 | 4 | 20 | |
| 1,2-Dichloropropane | ug/L | ND | 20 | 20 | 18.8 | 19.0 | 94 | 95 | 70-130 | 1 | 20 | |
| 1,3,5-Trimethylbenzene | ug/L | ND | 20 | 20 | 19.1 | 19.0 | 95 | 95 | 70-130 | 0 | 20 | N2 |
| 1,3-Dichlorobenzene | ug/L | ND | 20 | 20 | 18.5 | 19.0 | 92 | 95 | 70-130 | 3 | 20 | |
| 1,3-Dichloropropane | ug/L | ND | 20 | 20 | 18.1 | 18.4 | 91 | 92 | 70-130 | 2 | 20 | N2 |

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## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## QUALITY CONTROL DATA

Project: 002012-Revised Report
Pace Project No.: 10535701

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3777861 3777862

| Parameter | Units | 10535701002 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | ug/L | ND | 20 | 20 | 18.3 | 18.4 | 92 | 92 | 70-130 | 1 | 20 | |
| 2,2-Dichloropropane | ug/L | ND | 20 | 20 | 15.7 | 16.4 | 78 | 82 | 70-130 | 5 | 20 | |
| 2-Butanone (MEK) | ug/L | ND | 100 | 100 | 79.5 | 83.9 | 80 | 84 | 70-130 | 5 | 20 | N2 |
| 2-Chlorotoluene | ug/L | ND | 20 | 20 | 18.7 | 18.7 | 94 | 93 | 70-130 | 0 | 20 | |
| 4-Chlorotoluene | ug/L | ND | 20 | 20 | 18.1 | 18.5 | 91 | 93 | 70-130 | 2 | 20 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 100 | 100 | 96.7 | 95.9 | 97 | 96 | 70-130 | 1 | 20 | N2 |
| Acetone | ug/L | ND | 100 | 100 | 78.8 | 82.2 | 79 | 82 | 70-130 | 4 | 20 | N2 |
| Allyl chloride | ug/L | ND | 20 | 20 | 19.5 | 20.8 | 97 | 104 | 70-130 | 7 | 20 | N2 |
| Benzene | ug/L | ND | 20 | 20 | 18.0 | 18.8 | 90 | 94 | 70-130 | 4 | 20 | |
| Bromobenzene | ug/L | ND | 20 | 20 | 19.7 | 18.7 | 98 | 94 | 70-130 | 5 | 20 | |
| Bromochloromethane | ug/L | ND | 20 | 20 | 18.2 | 18.9 | 91 | 95 | 70-130 | 4 | 20 | |
| Bromodichloromethane | ug/L | ND | 20 | 20 | 18.7 | 18.6 | 94 | 93 | 70-130 | 1 | 20 | |
| Bromoform | ug/L | ND | 20 | 20 | 17.4 | 17.9 | 87 | 89 | 70-130 | 3 | 20 | |
| Bromomethane | ug/L | ND | 20 | 20 | 31.1 | 32.4 | 156 | 162 | 70-130 | 4 | 20 | CH,M0 |
| Carbon tetrachloride | ug/L | ND | 20 | 20 | 18.4 | 19.6 | 92 | 98 | 70-130 | 6 | 20 | |
| Chlorobenzene | ug/L | ND | 20 | 20 | 19.1 | 19.2 | 95 | 96 | 70-130 | 1 | 20 | |
| Chloroethane | ug/L | ND | 20 | 20 | 21.1 | 22.4 | 106 | 112 | 70-130 | 6 | 20 | |
| Chloroform | ug/L | ND | 20 | 20 | 16.7 | 18.0 | 83 | 90 | 70-130 | 7 | 20 | |
| Chloromethane | ug/L | ND | 20 | 20 | 20.8 | 20.9 | 104 | 105 | 70-130 | 0 | 20 | |
| cis-1,2-Dichloroethene | ug/L | ND | 20 | 20 | 17.6 | 18.1 | 88 | 90 | 70-130 | 2 | 20 | |
| cis-1,3-Dichloropropene | ug/L | ND | 20 | 20 | 18.1 | 18.0 | 90 | 90 | 70-130 | 1 | 20 | |
| Dibromochloromethane | ug/L | ND | 20 | 20 | 18.8 | 18.5 | 94 | 93 | 70-130 | 2 | 20 | |
| Dibromomethane | ug/L | ND | 20 | 20 | 19.3 | 19.8 | 97 | 99 | 70-130 | 3 | 20 | |
| Dichlorodifluoromethane | ug/L | ND | 20 | 20 | 19.2 | 19.5 | 96 | 98 | 70-130 | 2 | 20 | |
| Dichlorofluoromethane | ug/L | ND | 20 | 20 | 20.9 | 21.2 | 105 | 106 | 70-130 | 2 | 20 | N2 |
| Diethyl ether (Ethyl ether) | ug/L | ND | 20 | 20 | 19.3 | 19.7 | 96 | 99 | 70-130 | 2 | 20 | N2 |
| Ethylbenzene | ug/L | ND | 20 | 20 | 19.1 | 19.4 | 96 | 97 | 70-130 | 2 | 20 | |
| Hexachloro-1,3-butadiene | ug/L | ND | 20 | 20 | 18.3 | 18.6 | 92 | 93 | 70-130 | 2 | 20 | |
| Isopropylbenzene (Cumene) | ug/L | ND | 20 | 20 | 19.6 | 19.6 | 98 | 98 | 70-130 | 0 | 20 | |
| m&p-Xylene | ug/L | ND | 40 | 40 | 37.1 | 38.0 | 93 | 95 | 70-130 | 3 | 20 | N2 |
| Methyl-tert-butyl ether | ug/L | ND | 20 | 20 | 18.8 | 19.6 | 94 | 98 | 70-130 | 4 | 20 | |
| Methylene Chloride | ug/L | ND | 20 | 20 | 19.5 | 20.5 | 97 | 103 | 70-130 | 5 | 20 | |
| n-Butylbenzene | ug/L | ND | 20 | 20 | 18.3 | 19.2 | 91 | 96 | 70-130 | 5 | 20 | |
| n-Propylbenzene | ug/L | ND | 20 | 20 | 18.9 | 19.2 | 94 | 96 | 70-130 | 2 | 20 | |
| Naphthalene | ug/L | ND | 20 | 20 | 18.5 | 18.9 | 93 | 94 | 70-130 | 2 | 20 | |
| o-Xylene | ug/L | ND | 20 | 20 | 19.1 | 19.3 | 96 | 97 | 70-130 | 1 | 20 | N2 |
| p-Isopropyltoluene | ug/L | ND | 20 | 20 | 19.5 | 19.7 | 98 | 99 | 70-130 | 1 | 20 | N2 |
| sec-Butylbenzene | ug/L | ND | 20 | 20 | 19.3 | 19.8 | 96 | 99 | 70-130 | 3 | 20 | |
| Styrene | ug/L | ND | 20 | 20 | 19.7 | 19.3 | 99 | 96 | 70-130 | 2 | 20 | |
| tert-Butylbenzene | ug/L | ND | 20 | 20 | 19.3 | 19.8 | 97 | 99 | 70-130 | 3 | 20 | |
| Tetrachloroethene | ug/L | ND | 20 | 20 | 20.6 | 20.7 | 103 | 103 | 70-130 | 0 | 20 | |
| Tetrahydrofuran | ug/L | ND | 200 | 200 | 164 | 169 | 82 | 85 | 70-130 | 3 | 20 | N2 |
| Toluene | ug/L | ND | 20 | 20 | 18.7 | 18.9 | 93 | 95 | 70-130 | 1 | 20 | |
| trans-1,2-Dichloroethene | ug/L | ND | 20 | 20 | 19.1 | 20.2 | 96 | 101 | 70-130 | 5 | 20 | |

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## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## QUALITY CONTROL DATA

Project: 002012-Revised Report
Pace Project No.: 10535701

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3777861 3777862

| Parameter | Units | 10535701002 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| trans-1,3-Dichloropropene | ug/L | ND | 20 | 20 | 18.5 | 18.3 | 93 | 92 | 70-130 | 1 | 20 | |
| Trichloroethene | ug/L | ND | 20 | 20 | 19.7 | 19.4 | 98 | 97 | 70-130 | 2 | 20 | |
| Trichlorofluoromethane | ug/L | ND | 20 | 20 | 22.8 | 23.9 | 114 | 119 | 70-130 | 5 | 20 | |
| Vinyl chloride | ug/L | ND | 20 | 20 | 22.0 | 22.9 | 110 | 114 | 70-130 | 4 | 20 | |
| Xylene (Total) | ug/L | ND | 60 | 60 | 56.2 | 57.4 | 94 | 96 | 70-130 | 2 | 20 | |
| 1,2-Dichloroethane-d4 (S) | %. | | | | | | 94 | 96 | 75-125 | | | |
| 4-Bromofluorobenzene (S) | %. | | | | | | 95 | 95 | 75-125 | | | |
| Toluene-d8 (S) | %. | | | | | | 100 | 98 | 75-125 | | | |

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## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## QUALITY CONTROL DATA

Project: 002012-Revised Report
Pace Project No.: 10535701

QC Batch: 705196 — Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 — Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10535701001, 10535701002, 10535701003, 10535701004, 10535701005, 10535701006, 10535701007, 10535701008, 10535701009, 10535701010, 10535701011, 10535701012

METHOD BLANK: 3767930 — Matrix: Water
Associated Lab Samples: 10535701001, 10535701002, 10535701003, 10535701004, 10535701005, 10535701006, 10535701007, 10535701008, 10535701009, 10535701010, 10535701011, 10535701012

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Chloride | mg/L | ND | 1.2 | 10/19/20 17:27 | |

LABORATORY CONTROL SAMPLE: 3767931

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Chloride | mg/L | 50 | 50.5 | 101 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3767932 3767933

| Parameter | Units | 10535701002 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | mg/L | 36.4 | 50 | 50 | 78.6 | 79.3 | 85 | 86 | 80-120 | 1 | 20 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3767934 3767935

| Parameter | Units | 10535701003 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | mg/L | 13.6 | 50 | 50 | 59.2 | 60.6 | 91 | 94 | 80-120 | 2 | 20 | |

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

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
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Minneapolis, MN 55414
(612)607-1700

# QUALIFIERS

Project: 002012-Revised Report
Pace Project No.: 10535701

## DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

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

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

TNI - The NELAC Institute.

## ANALYTE QUALIFIERS

| | |
|---|---|
| 1M | Analyte not detected when evaluated to the MDL. |
| CH | The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high. |
| L3 | Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. |
| M0 | Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits. |
| MN | The reporting limit has been raised in accordance with Minnesota Statutes 4740.2100 Subpart 8. C, D. Reporting Limit Evaluation Rule. |
| N2 | The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request. |

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 002012-Revised Report
Pace Project No.: 10535701

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| **10535701001** | **W-201014-KJ-17** | EPA 524.2 | 707104 | | |
| **10535701002** | **W-201015-KJ-20** | EPA 524.2 | 707104 | | |
| **10535701003** | **W-201015-KJ-21** | EPA 524.2 | 707104 | | |
| **10535701004** | **W-201015-KJ-22** | EPA 524.2 | 707104 | | |
| **10535701005** | **W-201015-KJ-23** | EPA 524.2 | 707104 | | |
| **10535701006** | **W-201015-KJ-24** | EPA 524.2 | 707104 | | |
| **10535701007** | **W-201015-KJ-25** | EPA 524.2 | 707104 | | |
| **10535701008** | **W-201015-KJ-26** | EPA 524.2 | 707104 | | |
| **10535701009** | **W-201015-KJ-27** | EPA 524.2 | 707104 | | |
| **10535701010** | **W-201015-KJ-28** | EPA 524.2 | 707104 | | |
| **10535701011** | **W-201015-KJ-29** | EPA 524.2 | 707104 | | |
| **10535701012** | **W-201015-KJ-30** | EPA 524.2 | 707104 | | |
| **10535701013** | **Trip Blank** | EPA 524.2 | 707104 | | |
| **10535701001** | **W-201014-KJ-17** | EPA 300.0 | 705196 | | |
| **10535701002** | **W-201015-KJ-20** | EPA 300.0 | 705196 | | |
| **10535701003** | **W-201015-KJ-21** | EPA 300.0 | 705196 | | |
| **10535701004** | **W-201015-KJ-22** | EPA 300.0 | 705196 | | |
| **10535701005** | **W-201015-KJ-23** | EPA 300.0 | 705196 | | |
| **10535701006** | **W-201015-KJ-24** | EPA 300.0 | 705196 | | |
| **10535701007** | **W-201015-KJ-25** | EPA 300.0 | 705196 | | |
| **10535701008** | **W-201015-KJ-26** | EPA 300.0 | 705196 | | |
| **10535701009** | **W-201015-KJ-27** | EPA 300.0 | 705196 | | |
| **10535701010** | **W-201015-KJ-28** | EPA 300.0 | 705196 | | |
| **10535701011** | **W-201015-KJ-29** | EPA 300.0 | 705196 | | |
| **10535701012** | **W-201015-KJ-30** | EPA 300.0 | 705196 | | |

# CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

**ALL SHADED AREAS are for LAB USE ONLY**

| | |
|---|---|
| Company: GHD | Billing Information: |
| Address: 1301 old HWY 8 | |
| Report To: Grant Anderson / Sarah Ilic | Email To: |
| Copy To: | Site Collection Info/Address: |
| Customer Project Name/Number: 002012 | State: / County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET |
| Phone: Email: 507/272/8071 | Site/Facility ID #: Compliance Monitoring? [ ] Yes [ ] No |
| Collected By (print): K. Sinkin | Purchase Order #: Quote #: DW PWS ID #: DW Location Code: |
| Collected By (signature): | Turnaround Date Required: Immediately Packed on Ice: [X] Yes [ ] No |
| Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold: | Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply) |
| | Field Filtered (if applicable): [ ] Yes [ ] No Analysis: |

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Analyses

Lab Profile/Line: 32510

Lab Sample Receipt Checklist:

| | | | |
|---|---|---|---|
| Custody Seals Present/Intact | Y | N | NA |
| Custody Signatures Present | Y | N | NA |
| Collector Signature Present | Y | N | NA |
| Bottles Intact | Y | N | NA |
| Correct Bottles | Y | N | NA |
| Sufficient Volume | Y | N | NA |
| Samples Received on Ice | Y | N | NA |
| VOA - Headspace Acceptable | Y | N | NA |
| USDA Regulated Soils | Y | N | NA |

WO#: 10535701

10535701

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

| Customer Sample ID | Matrix * | Comp / Grab | Collected (or Composite Start) Date | Collected (or Composite Start) Time | Composite End Date | Composite End Time | Res Cl | # of Ctns | VOCs 524.2 | Chloride 300.00 | Comments: |
|---|---|---|---|---|---|---|---|---|---|---|---|
| W-201014-KS-17 | DW | G | 10/14/2020 | 1500 | | | | 4 | X | X | 001 |
| W-201015-KS-20 | | | 10/15/2020 | ~~0543~~ | 1247 | | | 12 | | | MS/MSD 002 |
| -21 | | | | 0843 | | | | 4 | | | 003 |
| -22 | | | | 0912 | | | | 4 | | | 004 |
| -23 | | | | 0943 | | | | 4 | | | 005 |
| -24 | | | | 1036 | | | | 4 | | | 006 |
| -25 | | | | 1146 | | | | 4 | | | 007 |
| -26 | | | | 1147 | | | | 4 | | | 008 |
| -27 | | | | 1213 | | | | 4 | | | 009 |
| -28 | | | | 1217 | | | | 4 | | | 010 |

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2539804

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#:
Cooler 1 Temp Upon Receipt: 2.4 oC
Cooler 1 Therm Corr. Factor: +0.1 oC
Cooler 1 Corrected Temp: 2.5 oC
Comments:

| | | | |
|---|---|---|---|
| Relinquished by/Company: (Signature) GHD | Date/Time: 10/15/2020 1530 | Received by/Company: (Signature) Pace | Date/Time: 15:51 10/15/2020 |
| Relinquished by/Company: (Signature) Pace | Date/Time: 16:14 10/15/20 | Received by/Company: (Signature) TN Pace | Date/Time: 10/15/20 16:14 |
| Relinquished by/Company: (Signature) | Date/Time: | Received by/Company: (Signature) | Date/Time: |

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 1 of: 2

# CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

**ALL SHADED AREAS are for LAB USE ONLY**

| | |
|---|---|
| Company: GHD | Billing Information: |
| Address: 1501 Old HWY 8 | |
| Report To: Grant Anderson / Sarah Ill. | Email To: |
| Copy To: | Site Collection Info/Address: |
| Customer Project Name/Number: 002012 | State: / County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET |
| Phone: Email: 507/272/8071 | Site/Facility ID #: Compliance Monitoring? [ ] Yes [ ] No |
| Collected By (print): K-Jenkin | Purchase Order #: Quote #: DW PWS ID #: DW Location Code: |
| Collected By (signature): | Turnaround Date Required: Immediately Packed on Ice: [X] Yes [ ] No |
| Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold: | Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply) |
| | Field Filtered (if applicable): [ ] Yes [ ] No Analysis: |

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Lab Project Manager:

Lab Profile/Line: 32510

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

| Customer Sample ID | Matrix * | Comp / Grab | Collected (or Composite Start) Date | Collected (or Composite Start) Time | Composite End Date | Composite End Time | Res Cl | # of Ctns | Analyses: VOCs 524.2 | Analyses: Chloride 300.0 | Lab Sample # / Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WI-20/015-KS-29 | DW | G | 10/15/2020 | 1329 | | | | 4 | X | X | 001 |
| -30 | DW | G | 10/15/2020 | 1353 | | | | 4 | X | X | 002 |
| TRIP Blank | | | | | | | | 2 | X | | 003 |

Lab Sample Receipt Checklist:

| | | | |
|---|---|---|---|
| Custody Seals Present/Intact | Y | N | NA |
| Custody Signatures Present | Y | N | NA |
| Collector Signature Present | Y | N | NA |
| Bottles Intact | Y | N | NA |
| Correct Bottles | Y | N | NA |
| Sufficient Volume | Y | N | NA |
| Samples Received on Ice | Y | N | NA |
| VOA - Headspace Acceptable | Y | N | NA |
| USDA Regulated Soils | Y | N | NA |
| Samples in Holding Time | Y | N | NA |
| Residual Chlorine Present | Y | N | NA |
| Cl Strips: | | | |
| Sample pH Acceptable | Y | N | NA |
| pH Strips: | | | |
| Sulfide Present | Y | N | NA |
| Lead Acetate Strips: | | | |

LAB USE ONLY:

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2539805

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
- Temp Blank Received: Y N NA
- Therm ID#:
- Cooler 1 Temp Upon Receipt: 2.4 oC
- Cooler 1 Therm Corr. Factor: -0.1 oC
- Cooler 1 Corrected Temp: 2.5 oC
- Comments:

| Relinquished by/Company: (Signature) | Date/Time: | Received by/Company: (Signature) | Date/Time: |
|---|---|---|---|
| GHD | 10/15/2020 1530 | Pace | 10/15/2020 15:51 |
| Pace | 10/15/2020 16:14 | TN/Pace | 10/15/20 1614 |
| | | | |

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 2 of: 2

| Pace Analytical® | Document Name: **Sample Condition Upon Receipt (SCUR) - MN** | Document Revised: 12Aug2020 **Page 1 of 1** |
|---|---|---|
| | Document No.: **ENV-FRM-MIN4-0150 Rev.01** | Pace Analytical Services - **Minneapolis** |

**Sample Condition Upon Receipt**

**Client Name:** GHD

**Project #:** WO#: 10535701

PM: TS1 Due Date: 10/29/20

CLIENT: GHD

**Courier:** ☐Fed Ex ☐UPS ☐USPS ☐Client ☒Pace ☐SpeeDee ☐Commercial

**Tracking Number:** _____ See Exceptions ☐ ENV-FRM-MIN4-0142

**Custody Seal on Cooler/Box Present?** ☐Yes ☒No **Seals Intact?** ☐Yes ☒No **Biological Tissue Frozen?** ☐Yes ☐No ☒N/A

**Packing Material:** ☒Bubble Wrap ☒Bubble Bags ☐None ☐Other:_____ **Temp Blank?** ☒Yes ☐No

**Thermometer:** ☐T1(0461) ☐T2(1336) ☐T3(0459) ☐T4(0254) ☒T5(0489) **Type of Ice:** ☒Wet ☐Blue ☐None ☐Dry ☐Melted

**Did Samples Originate in West Virginia?** ☐Yes ☒No **Were All Container Temps Taken?** ☐Yes ☐No ☒N/A

Temp should be above freezing to 6°C **Cooler Temp Read w/temp blank:** 2.4 °C

**Correction Factor:** +0.1 **Cooler Temp Corrected w/temp blank:** 2.5 °C

**Average Corrected Temp (no temp blank only):** _____ °C ☐See Exceptions ENV-FRM-MIN4-0142 ☐1 Container

**USDA Regulated Soil:** (☒ N/A, water sample/Other:_____)

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐Yes ☐No

**Date/Initials of Person Examining Contents:** 10 15 20 TN

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐Yes ☐No

**If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.**

| | | | | **COMMENTS:** |
|---|---|---|---|---|
| Chain of Custody Present and Filled Out? | ☒Yes | ☐No | | 1. |
| Chain of Custody Relinquished? | ☒Yes | ☐No | | 2. |
| Sampler Name and/or Signature on COC? | ☒Yes | ☐No | ☐N/A | 3. |
| Samples Arrived within Hold Time? | ☒Yes | ☐No | | 4. |
| **Short Hold Time Analysis (<72 hr)?** | ☐Yes | ☒No | | 5. ☐Fecal Coliform ☐HPC ☐Total Coliform/E coli ☐BOD/cBOD ☐Hex Chrome ☐Turbidity ☐Nitrate ☐Nitrite ☐Orthophos ☐Other_____ |
| **Rush Turn Around Time Requested?** | ☐Yes | ☒No | | 6. |
| Sufficient Volume? | ☒Yes | ☐No | | 7. |
| Correct Containers Used? -Pace Containers Used? | ☒Yes ☒Yes | ☐No ☐No | | 8. |
| Containers Intact? | ☒Yes | ☐No | | 9. |
| Field Filtered Volume Received for Dissolved Tests? | ☐Yes | ☐No | ☒N/A | 10. Is sediment visible in the dissolved container? ☐Yes ☐No |
| Is sufficient information available to reconcile the samples to the COC? Matrix: ☒Water ☐Soil ☐Oil ☐Other_____ | ☒Yes | ☐No | | 11. **If no, write ID/ Date/Time on Container Below:** **See Exception** ☐ ENV-FRM-MIN4-0142 |
| All containers needing acid/base preservation have been checked? | ☐Yes | ☐No | ☒N/A | 12. Sample # |
| All containers needing preservation are found to be in compliance with EPA recommendation? ($HNO_3$, $H_2SO_4$, <2pH, NaOH >9 Sulfide, NaOH>10 Cyanide) | ☐Yes | ☐No | ☒N/A | ☐ NaOH ☐ $HNO_3$ ☐ $H_2SO_4$ ☐Zinc Acetate |
| Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS | ☒Yes | ☐No | ☐N/A | Positive for Res. Chlorine? ☐Yes ☐No **pH Paper Lot#** **See Exception** ☐ ENV-FRM-MIN4-0142 |
| | | | | Res. Chlorine \| 0-6 Roll \| 0-6 Strip \| 0-14 Strip |
| Extra labels present on soil VOA or WIDRO containers? | ☐Yes | ☐No | ☒N/A | 13. **See Exception** ☐ ENV-FRM-MIN4-0140 |
| Headspace in VOA Vials (greater than 6mm)? | ☐Yes | ☒No | ☐N/A | |
| Trip Blank Present? | ☒Yes | ☐No | ☐N/A | 14. Pace Trip Blank Lot # (if purchased): 2TB 241154 |
| Trip Blank Custody Seals Present? | ☒Yes | ☐No | ☐N/A | |

**CLIENT NOTIFICATION/RESOLUTION** **Field Data Required?** ☐Yes ☐No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

**Project Manager Review:** _____ **Date:** 10/20/20

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers).

Labeled by: MM2

# Attachment B
# Data Quality Assessment and Validation Memorandum

# Memorandum

November 11, 2020

| | | | |
|---|---|---|---|
| To: | Sarah Illi, GHD | Ref. No.: | 002012-01-040 |
| From: | Grant Anderson/md/33 | Tel: | 612-524-6836 |

**Subject:** **Analytical Results and Reduced Validation**
**Highway 96 Site**
**Residential Well Sampling Event**
**North Oaks, Minnesota**
**October 2020**

## 1. Introduction

The following document details a reduced validation of analytical results for residential well samples collected in support of the residential well sampling event at the Highway 96 Site in October 2020. Samples were submitted to Pace Analytical Services, Inc. (Pace) located in Minneapolis, Minnesota. A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2. A summary of the analytical methodology is presented in Table 3.

Standard GHD Services Inc. (GHD) report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody forms, finished report forms, method blank data, recovery data from surrogate spikes, laboratory control samples (LCS), matrix spikes (MS), and field QA/QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 3 and applicable guidance from the documents entitled:

i) "National Functional Guidelines for Organic Superfund Methods Data Review", United States Environmental Protection Agency (USEPA) EPA-540-R-2017-002, January 2017

ii) "National Functional Guidelines for Inorganic Superfund Methods Data Review", USEPA EPA-540-R-2017-001, January 2017

Items i) and ii) will subsequently be referred to as the "Guidelines" in this Memorandum.

## 2. Sample Holding Time and Preservation

The sample holding time criteria for the analyses are summarized in Table 3. Sample chain of custody documents and analytical reports were used to determine sample holding times. All samples were analyzed within the required holding times.

All samples were properly preserved, delivered on ice, and stored by the laboratory at the required temperature (0-6°C).

## 3. Laboratory Method Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

Laboratory method blanks were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

All method blank results were non-detect, indicating that laboratory contamination was not a factor for this investigation.

## 4. Surrogate Spike Recoveries - Organic Analyses

In accordance with the methods employed, all samples, blanks, and QC samples analyzed for organics are spiked with surrogate compounds prior to sample analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for volatile organic compound (VOC) determinations were spiked with the appropriate number of surrogate compounds prior to sample analysis.

Surrogate recoveries were assessed per the "Guidelines" and were within laboratory control limits, indicating individual sample performance was adequate.

## 5. Laboratory Control Sample Analyses

LCS are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects.

LCS were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

### *Organic Analyses*

The LCS contained all compounds of interest. LCS were assessed per the “Guidelines”. With the exception of bromomethane, all LCS recoveries were within the laboratory control limits. Bromomethane yielded a high LCS recovery in batch 707104. However, associated sample results were non-detect; therefore, no qualification of data was necessary based on outlying LCS results.

### *Inorganic Analyses*

The LCS contained all analytes of interest. LCS and were assessed per the "Guidelines" and were within the laboratory control limits, demonstrating acceptable analytical accuracy.

## 6. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses

To evaluate the effects of sample matrices on the preparation process, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as MS/MSD samples. The RPD between the MS and MSD is used to assess analytical precision. If the original investigative sample result for any analyte is significantly greater than the associated spike concentration, the recovery and RPD for that analyte are not assessed.

MS/MSD analyses were performed as specified in Table 1. The laboratory performed additional MS/MSD analyses internally.

### *Organic Analyses*

The MS/MSD samples were spiked with all compounds of interest. The percent recoveries and RPD values were evaluated using the "Guidelines". With the exception of acetone in sample W-201014-KJ-01, all percent recoveries and RPD values were within the laboratory control limits or yielded recoveries above the control limits that did not result in qualification of data. Table 4 lists the outlying acetone MS/MSD results. The associated sample result is qualified as noted in the table.

### *Inorganic Analyses*

The MS/MSD samples were spiked with the analytes of interest, and the results were evaluated using the "Guidelines". All percent recoveries and RPD values were within the control limits, demonstrating acceptable analytical accuracy and precision.

## 7. Field QA/QC Samples

The field QA/QC consisted of two trip blank samples (VOCs), three field blank samples (per parameter), and three field duplicate sample sets (per parameter).

### *Trip Blank Sample Analysis*

To evaluate contamination from sample collection, transportation, storage, and analytical activities, two trip blank samples were submitted to the laboratory for VOC analysis, as identified in Table 1. The trip blanks were non-detect for the compounds of interest.

### *Field Blank Sample Analysis*

To assess ambient conditions at the Site, three field blanks per parameter were submitted for analysis, as identified in Table 1. Chloride was detected in field blank W-201014-KJ-15. However, associated chloride results were sufficiently high enough; therefore, no qualification of data was not necessary based on analytes detected in the field blanks.

### *Field Duplicate Sample Analysis*

To assess the analytical and sampling protocol precision, three field duplicate sample sets per parameter were submitted "blind" to the laboratory, as specified in Table 1.

If both sample results associated with the field duplicate sample set are detects greater than five times the reporting limit (RL), the RPD must be less than 50 percent. If one of the sample results associated with the field duplicate sample set is non-detect, the RPD must be less than 50 percent (using the RL in place of the non-detect result to calculate the RPD). If any reported concentration in the field duplicate sample set is between one times the RL and five times the RL, the difference between the results must be less than one times the RL value (using the RL in place of the non-detect result to calculate the difference). If any reported concentration in the field duplicate sample set is less than the RL, the difference between the results must be less than one times the method detection limit (MDL) value (using the MDL in place of the non-detect result to calculate the difference).

All field duplicate results were within acceptable agreement, demonstrating acceptable sampling and analytical precision.

## 8. Analyte Reporting

### *VOCs (524.2)*

Pace reported detected results down to the laboratory's MDL for a select list of VOC analytes, as approved by the Minnesota Pollution Control Agency (MPCA). This list includes: 1,1-dichloroethane, cis-1,2-dichloroethene and vinyl chloride. Positive analyte detections less than the quantitation limit (i.e., RL) but greater than the MDL were qualified as estimated (J) unless qualified otherwise in this memorandum. The remaining VOC analytes were reported down to the laboratory RL. Non-detect results were presented as non-detect at the laboratory RL.

### *Chloride (300.0)*

Pace reported detected results down to the laboratory RL. Non-detect results were presented as non-detect at the laboratory RL.

## 9. Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Table 2 are acceptable with the specific qualification noted herein.

**Table 1**

**Sample Collection and Analysis Summary**
**Highway 96 Site**
**Residential Well Sampling Event**
**North Oaks, Minnesota**
**October 2020**

| Sample Identification | Location | Matrix | Collection Date (mm/dd/yyyy) | Collection Time (hr:min) | Analysis/Parameters | Comments |
|---|---|---|---|---|---|---|
| W-201014-KJ-01 | SKI-04 | water | 10/14/2020 | 09:05 | VOC (524.2), chloride | MS/MSD |
| W-201014-KJ-02 | SKI-06 | water | 10/14/2020 | 09:41 | VOC (524.2), chloride | |
| W-201014-KJ-03 | SKI-06 | water | 10/14/2020 | 09:42 | VOC (524.2), chloride | Duplicate (KJ-02) |
| W-201014-KJ-04 | SKI-08 | water | 10/14/2020 | 10:06 | VOC (524.2), chloride | |
| W-201014-KJ-05 | SKI-10 | water | 10/14/2020 | 10:20 | VOC (524.2), chloride | Field Blank |
| W-201014-KJ-06 | SKI-10 | water | 10/14/2020 | 10:35 | VOC (524.2), chloride | |
| W-201014-KJ-07 | SKI-12 | water | 10/14/2020 | 11:01 | VOC (524.2), chloride | |
| W-201014-KJ-08 | SKI-14 | water | 10/14/2020 | 11:26 | VOC (524.2), chloride | |
| W-201014-KJ-09 | SKI-16 | water | 10/14/2020 | 11:57 | VOC (524.2), chloride | |
| W-201014-KJ-10 | BUF-03 | water | 10/14/2020 | 12:28 | VOC (524.2), chloride | |
| Trip Blank | Lab | water | 10/14/2020 | 00:00 | VOC (524.2) | Trip Blank |
| W-201014-KJ-11 | BUF-01 | water | 10/14/2020 | 12:58 | VOC (524.2), chloride | |
| W-201014-KJ-12 | EAG-01 | water | 10/14/2020 | 13:30 | VOC (524.2), chloride | |
| W-201014-KJ-13 | EAG-06 | water | 10/14/2020 | 14:05 | VOC (524.2), chloride | |
| W-201014-KJ-14 | EAG-06 | water | 10/14/2020 | 14:06 | VOC (524.2), chloride | Duplicate (KJ-13) |
| W-201014-KJ-15 | EAG-04 | water | 10/14/2020 | 14:20 | VOC (524.2), chloride | Field Blank |
| W-201014-KJ-16 | EAG-04 | water | 10/14/2020 | 14:32 | VOC (524.2), chloride | |
| W-201014-KJ-17 | EAG-02 | water | 10/14/2020 | 15:00 | VOC (524.2), chloride | |
| W-201015-KJ-20 | POP-08 | water | 10/15/2020 | 12:47 | VOC (524.2), chloride | MS/MSD |
| W-201015-KJ-21 | EAS-44 | water | 10/15/2020 | 08:43 | VOC (524.2), chloride | |
| W-201015-KJ-22 | WES-15 | water | 10/15/2020 | 09:12 | VOC (524.2), chloride | |
| W-201015-KJ-23 | WES-10 | water | 10/15/2020 | 09:43 | VOC (524.2), chloride | |
| W-201015-KJ-24 | THO-01 | water | 10/15/2020 | 10:36 | VOC (524.2), chloride | |
| W-201015-KJ-25 | WES-09 | water | 10/15/2020 | 11:46 | VOC (524.2), chloride | |
| W-201015-KJ-26 | WES-09 | water | 10/15/2020 | 11:47 | VOC (524.2), chloride | Duplicate (KJ-25) |
| W-201015-KJ-27 | WES-08 | water | 10/15/2020 | 12:13 | VOC (524.2), chloride | Field Blank |
| W-201015-KJ-28 | WES-08 | water | 10/15/2020 | 12:17 | VOC (524.2), chloride | |
| W-201015-KJ-29 | EAS-50 | water | 10/15/2020 | 13:24 | VOC (524.2), chloride | |
| W-201015-KJ-30 | THO-04 | water | 10/15/2020 | 13:53 | VOC (524.2), chloride | |
| Trip Blank | Lab | water | 10/15/2020 | 00:00 | VOC (524.2) | Trip Blank |

Note

VOC - Volatile Organic Compounds
MS/MSD - Matrix Spike/Matrix Spike Duplicate

**Table 2**

**Validated Analytical Results Summary**
**Highway 96 Site**
**Residential Well Sampling Event**
**North Oaks, Minnesota**
**October 2020**

| Location ID: | | BUF-01 | EAG-01 | THO-01 | EAG-02 | BUF-03 | EAG-04 | SKI-04 | THO-04 | EAG-06 | EAG-06 | SKI-06 | SKI-06 | POP-08 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Name: | | W-201014-KJ-11 | W-201014-KJ-12 | W-201015-KJ-24 | W-201014-KJ-17 | W-201014-KJ-10 | W-201014-KJ-16 | W-201014-KJ-01 | W-201015-KJ-30 | W-201014-KJ-13 | W-201014-KJ-14 | W-201014-KJ-02 | W-201014-KJ-03 | W-201015-KJ-20 |
| Sample Date: | | 10/14/2020 | 10/14/2020 | 10/15/2020 | 10/14/2020 | 10/14/2020 | 10/14/2020 | 10/14/2020 | 10/15/2020 | 10/14/2020 | 10/14/2020 Duplicate | 10/14/2020 | 10/14/2020 Duplicate | 10/15/2020 |
| **Parameters** | **Unit** | | | | | | | | | | | | | |
| **Volatile Organic Compounds** | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,1,1-Trichloroethane | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,1,2,2-Tetrachloroethane | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,1,2-Trichloroethane | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,1-Dichloroethane | µg/L | 0.22 J | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,1-Dichloroethene | µg/L | 0.50 U | 0.50 U | 1.0 U | 1.0 U | 0.50 U | 0.50 U | 0.50 U | 1.0 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 1.0 U |
| 1,1-Dichloropropene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,2,3-Trichlorobenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,2,3-Trichloropropane | µg/L | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U |
| 1,2,4-Trichlorobenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,2,4-Trimethylbenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,2-Dibromo-3-chloropropane (DBCP) | µg/L | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U |
| 1,2-Dibromoethane (Ethylene dibromide) | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,2-Dichlorobenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,2-Dichloroethane | µg/L | 1.0 U | 1.0 U | 0.50 U | 0.50 U | 1.0 U | 1.0 U | 1.0 U | 0.50 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 0.50 U |
| 1,2-Dichloropropane | µg/L | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U |
| 1,3,5-Trimethylbenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,3-Dichlorobenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,3-Dichloropropane | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,4-Dichlorobenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 2,2-Dichloropropane | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 2-Butanone (Methyl ethyl ketone) (MEK) | µg/L | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| 2-Chlorotoluene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 2-Phenylbutane (sec-Butylbenzene) | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 4-Chlorotoluene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK) | µg/L | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Acetone | µg/L | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 20.0 UJ | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 20.0 U |
| Allyl chloride | µg/L | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U |
| Benzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Bromobenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Bromodichloromethane | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Bromoform | µg/L | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U |
| Bromomethane (Methyl bromide) | µg/L | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U |
| Carbon tetrachloride | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Chlorobenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Chlorobromomethane | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Chloroethane | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Chloroform (Trichloromethane) | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Chloromethane (Methyl chloride) | µg/L | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U |
| cis-1,2-Dichloroethene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| cis-1,3-Dichloropropene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Cymene (p-Isopropyltoluene) | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Dibromochloromethane | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Dibromomethane | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Dichlorodifluoromethane (CFC-12) | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Dichlorofluoromethane | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Ethyl ether | µg/L | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U |
| Ethylbenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Hexachlorobutadiene | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Isopropyl benzene | µg/L | 1.0 U | 1.0 U | 0.50 U | 0.50 U | 1.0 U | 1.0 U | 1.0 U | 0.50 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 0.50 U |
| m&p-Xylenes | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Methyl tert butyl ether (MTBE) | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Methylene chloride | µg/L | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U |
| N-Butylbenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| N-Propylbenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Naphthalene | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |

**Table 2**

**Validated Analytical Results Summary**
**Highway 96 Site**
**Residential Well Sampling Event**
**North Oaks, Minnesota**
**October 2020**

| Location ID: | | BUF-01 | EAG-01 | THO-01 | EAG-02 | BUF-03 | EAG-04 | SKI-04 | THO-04 | EAG-06 | EAG-06 | SKI-06 | SKI-06 | POP-08 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Name: | | W-201014-KJ-11 | W-201014-KJ-12 | W-201015-KJ-24 | W-201014-KJ-17 | W-201014-KJ-10 | W-201014-KJ-16 | W-201014-KJ-01 | W-201015-KJ-30 | W-201014-KJ-13 | W-201014-KJ-14 | W-201014-KJ-02 | W-201014-KJ-03 | W-201015-KJ-20 |
| Sample Date: | | 10/14/2020 | 10/14/2020 | 10/15/2020 | 10/14/2020 | 10/14/2020 | 10/14/2020 | 10/14/2020 | 10/15/2020 | 10/14/2020 | 10/14/2020 Duplicate | 10/14/2020 | 10/14/2020 Duplicate | 10/15/2020 |
| **Parameters** | **Unit** | | | | | | | | | | | | | |
| o-Xylene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Styrene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| tert-Butylbenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Tetrachloroethene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Tetrahydrofuran | µg/L | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U |
| Toluene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| trans-1,2-Dichloroethene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| trans-1,3-Dichloropropene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Trichloroethene | µg/L | 0.40 U | 0.40 U | 0.40 U | 0.40 U | 0.40 U | 0.40 U | 0.40 U | 0.40 U | 0.40 U | 0.40 U | 0.40 U | 0.40 U | 0.40 U |
| Trichlorofluoromethane (CFC-11) | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Trifluorotrichloroethane (CFC-113) | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Vinyl chloride | µg/L | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U |
| Xylenes (total) | µg/L | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| **General Chemistry** | | | | | | | | | | | | | | |
| Chloride | mg/L | 30.7 | 24.6 | 27.7 | 30.9 | 29.6 | 27.2 | 37.5 | 118 | 41.8 | 41.9 | 28.1 | 28.1 | 36.4 |

**Table 2**

**Validated Analytical Results Summary**
**Highway 96 Site**
**Residential Well Sampling Event**
**North Oaks, Minnesota**
**October 2020**

| Location ID: | | SKI-08 | WES-08 | WES-09 | WES-09 | SKI-10 | WES-10 | SKI-12 | SKI-14 | WES-15 | SKI-16 | EAS-44 | EAS-50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Name: | | W-201014-KJ-04 | W-201015-KJ-28 | W-201015-KJ-25 | W-201015-KJ-26 | W-201014-KJ-06 | W-201015-KJ-23 | W-201014-KJ-07 | W-201014-KJ-08 | W-201015-KJ-22 | W-201014-KJ-09 | W-201015-KJ-21 | W-201015-KJ-29 |
| Sample Date: | | 10/14/2020 | 10/15/2020 | 10/15/2020 | 10/15/2020 Duplicate | 10/14/2020 | 10/15/2020 | 10/14/2020 | 10/14/2020 | 10/15/2020 | 10/14/2020 | 10/15/2020 | 10/15/2020 |
| **Parameters** | **Unit** | | | | | | | | | | | | |
| **Volatile Organic Compounds** | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,1,1-Trichloroethane | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,1,2,2-Tetrachloroethane | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,1,2-Trichloroethane | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,1-Dichloroethane | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,1-Dichloroethene | µg/L | 0.50 U | 1.0 U | 1.0 U | 1.0 U | 0.50 U | 1.0 U | 0.50 U | 0.50 U | 1.0 U | 0.50 U | 1.0 U | 1.0 U |
| 1,1-Dichloropropene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,2,3-Trichlorobenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,2,3-Trichloropropane | µg/L | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U |
| 1,2,4-Trichlorobenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,2,4-Trimethylbenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,2-Dibromo-3-chloropropane (DBCP) | µg/L | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U |
| 1,2-Dibromoethane (Ethylene dibromide) | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,2-Dichlorobenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,2-Dichloroethane | µg/L | 1.0 U | 0.50 U | 0.50 U | 0.50 U | 1.0 U | 0.50 U | 1.0 U | 1.0 U | 0.50 U | 1.0 U | 0.50 U | 0.50 U |
| 1,2-Dichloropropane | µg/L | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U |
| 1,3,5-Trimethylbenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,3-Dichlorobenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,3-Dichloropropane | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 1,4-Dichlorobenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 2,2-Dichloropropane | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| 2-Butanone (Methyl ethyl ketone) (MEK) | µg/L | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| 2-Chlorotoluene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 2-Phenylbutane (sec-Butylbenzene) | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 4-Chlorotoluene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| 4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK) | µg/L | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Acetone | µg/L | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 20.0 U |
| Allyl chloride | µg/L | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U |
| Benzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Bromobenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Bromodichloromethane | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Bromoform | µg/L | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U |
| Bromomethane (Methyl bromide) | µg/L | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U |
| Carbon tetrachloride | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Chlorobenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Chlorobromomethane | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Chloroethane | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Chloroform (Trichloromethane) | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Chloromethane (Methyl chloride) | µg/L | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U |
| cis-1,2-Dichloroethene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| cis-1,3-Dichloropropene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Cymene (p-Isopropyltoluene) | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Dibromochloromethane | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Dibromomethane | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Dichlorodifluoromethane (CFC-12) | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Dichlorofluoromethane | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Ethyl ether | µg/L | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U |
| Ethylbenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Hexachlorobutadiene | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Isopropyl benzene | µg/L | 1.0 U | 0.50 U | 0.50 U | 0.50 U | 1.0 U | 0.50 U | 1.0 U | 1.0 U | 0.50 U | 1.0 U | 0.50 U | 0.50 U |
| m&p-Xylenes | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Methyl tert butyl ether (MTBE) | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Methylene chloride | µg/L | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U | 4.0 U |
| N-Butylbenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| N-Propylbenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Naphthalene | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |

**Table 2**

**Validated Analytical Results Summary**
**Highway 96 Site**
**Residential Well Sampling Event**
**North Oaks, Minnesota**
**October 2020**

| Location ID: | | SKI-08 | WES-08 | WES-09 | WES-09 | SKI-10 | WES-10 | SKI-12 | SKI-14 | WES-15 | SKI-16 | EAS-44 | EAS-50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Name: | | W-201014-KJ-04 | W-201015-KJ-28 | W-201015-KJ-25 | W-201015-KJ-26 | W-201014-KJ-06 | W-201015-KJ-23 | W-201014-KJ-07 | W-201014-KJ-08 | W-201015-KJ-22 | W-201014-KJ-09 | W-201015-KJ-21 | W-201015-KJ-29 |
| Sample Date: | | 10/14/2020 | 10/15/2020 | 10/15/2020 | 10/15/2020 Duplicate | 10/14/2020 | 10/15/2020 | 10/14/2020 | 10/14/2020 | 10/15/2020 | 10/14/2020 | 10/15/2020 | 10/15/2020 |
| **Parameters** | **Unit** | | | | | | | | | | | | |
| o-Xylene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Styrene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| tert-Butylbenzene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Tetrachloroethene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Tetrahydrofuran | µg/L | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U |
| Toluene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| trans-1,2-Dichloroethene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| trans-1,3-Dichloropropene | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Trichloroethene | µg/L | 0.40 U | 0.40 U | 0.40 U | 0.40 U | 0.40 U | 0.40 U | 0.40 U | 0.40 U | 0.40 U | 0.40 U | 0.40 U | 0.40 U |
| Trichlorofluoromethane (CFC-11) | µg/L | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U | 0.50 U |
| Trifluorotrichloroethane (CFC-113) | µg/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Vinyl chloride | µg/L | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U |
| Xylenes (total) | µg/L | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| **General Chemistry** | | | | | | | | | | | | | |
| Chloride | mg/L | 28.8 | 5.2 | 25.0 | 25.0 | 25.0 | 28.6 | 26.0 | 36.8 | 38.3 | 27.5 | 13.6 | 34.6 |

Notes:

U - Not detected at the associated reporting limit
J - Estimated concentration
UJ - Not detected; associated reporting limit is estimated

**Table 3**

**Analytical Methods and Holding Time Criteria**
**Highway 96 Site**
**Residential Well Sampling Event**
**North Oaks, Minnesota**
**October 2020**

| | | | Holding Time | |
|---|---|---|---|---|
| **Parameter** | **Method** | **Matrix** | **Collection to Extraction (Days)** | **Collection or Extraction to Analysis (Days)** |
| VOC | EPA 524.2 | Water | - | 14 |
| Chloride | EPA 300.0 | Water | - | 28 |

Notes:

EPA 524.2 - "Methods for the Determination of Organic Compounds in Drinking Water", EPA/600/4-88/039, December 1988 and its supplements.
EPA 300.0 - "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

**Table 4**

**Qualified Sample Results Due to Outlying MS/MSD Results**
**Highway 96 Site**
**Residential Well Sampling Event**
**North Oaks, Minnesota**
**October 2020**

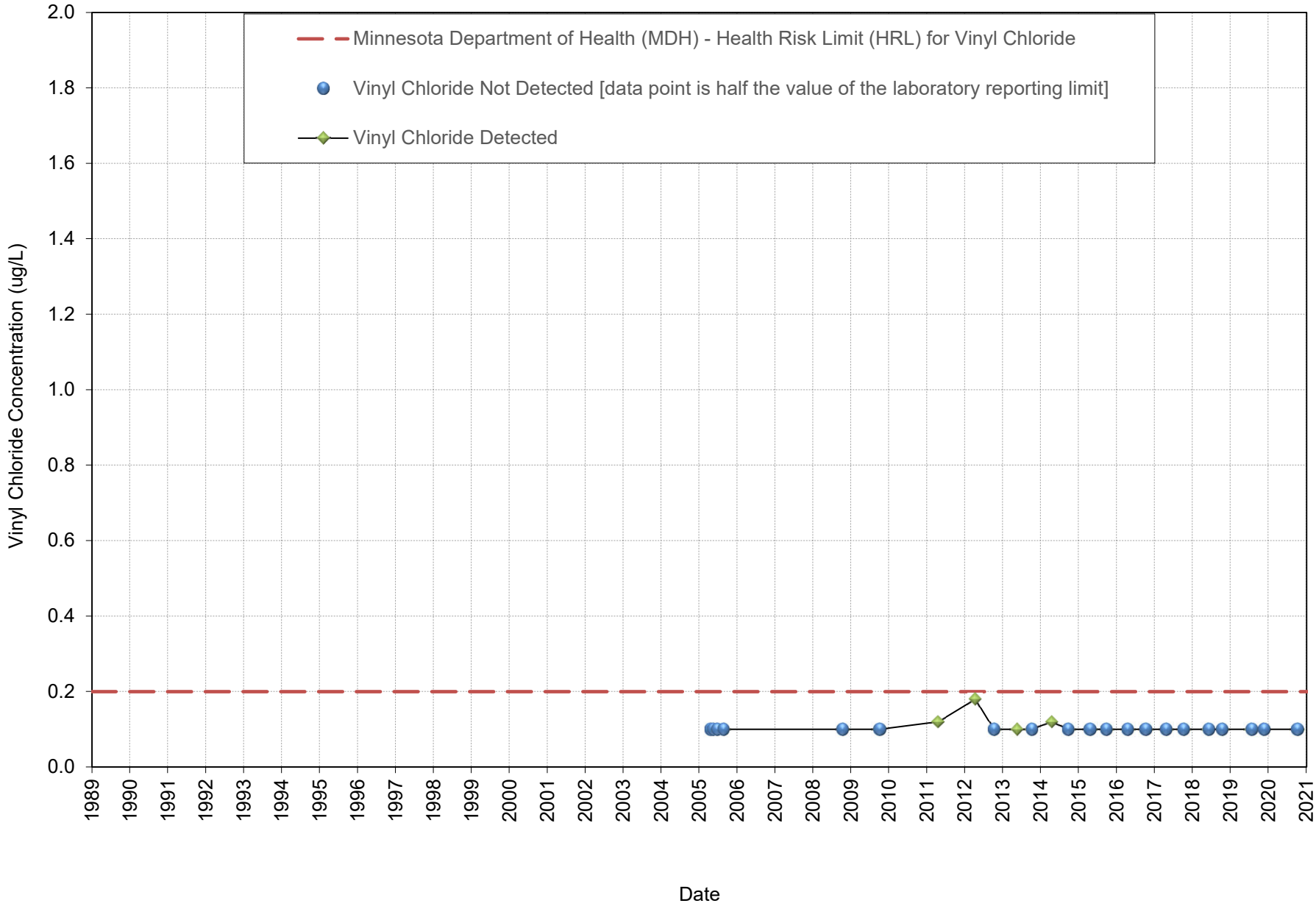
| Parameter | Sample ID | Analyte | MS % Recovery | MSD % Recovery | RPD (percent) | Control Limits % Recovery | Control Limits RPD | Qualified Result | Units |
|---|---|---|---|---|---|---|---|---|---|
| VOC | W-201014-KJ-01 | Acetone | 69 | 65 | 7 | 70-130 | 20 | 20.0 UJ | ug/L |

Notes:

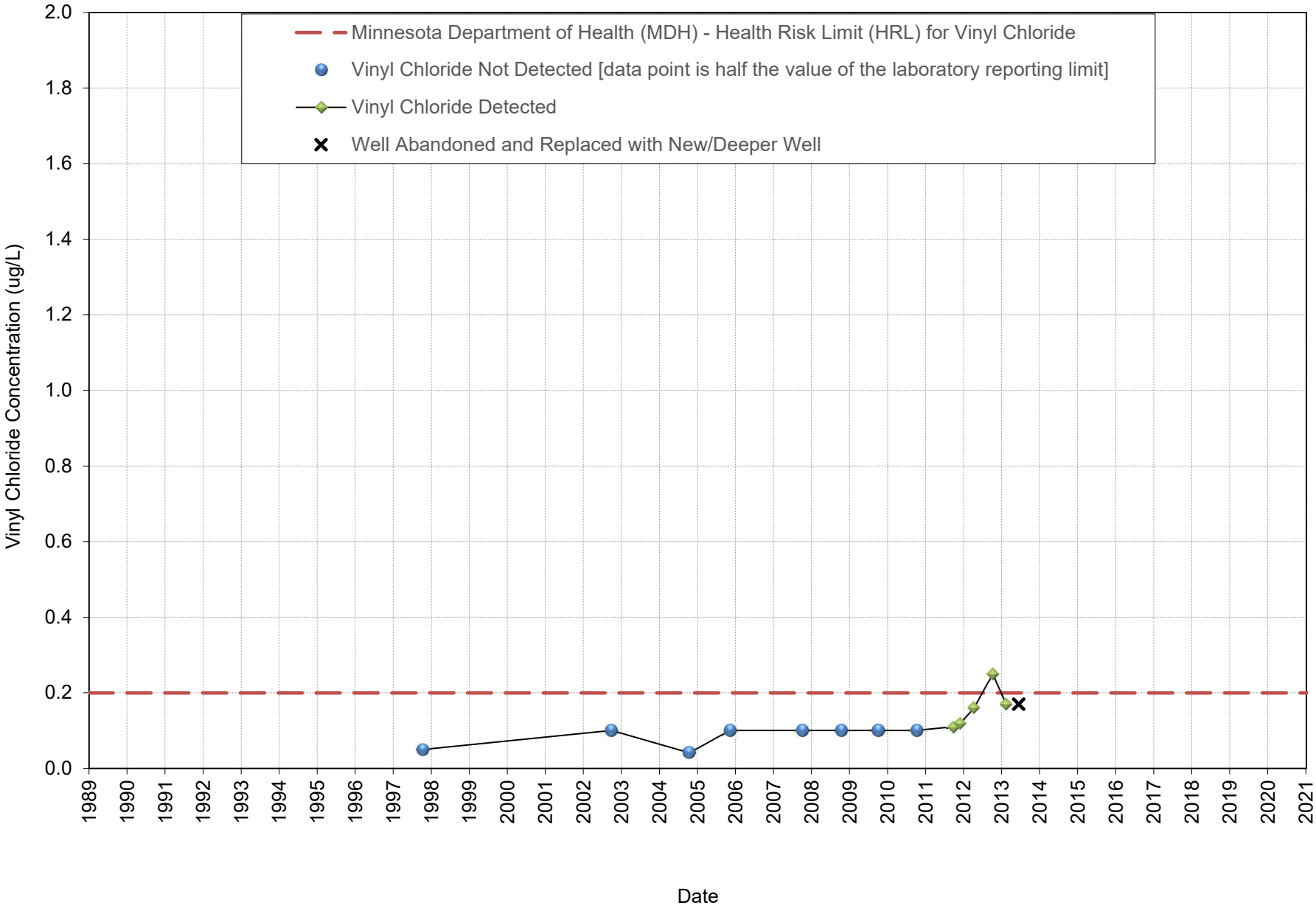
MS - Matrix Spike
MSD - Matrix Spike Duplicate
RPD - Relative Percent Difference
UJ - Not detected; associated reporting limit is estimated

# Attachment C
# Vinyl Chloride Graphs

# Historical Vinyl Chloride Concentrations
# 50 East Oaks Road
# North Oaks, Minnesota

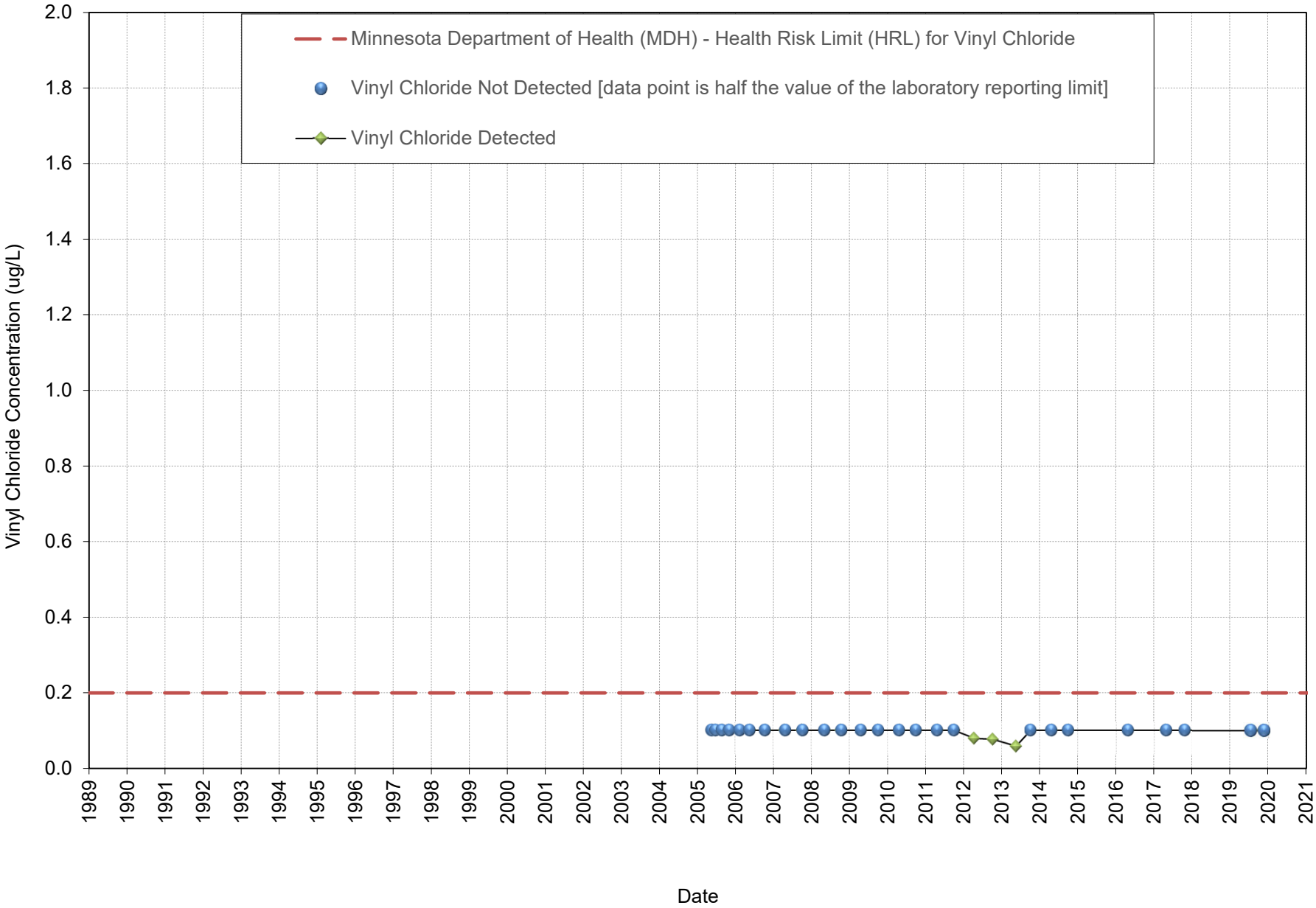


# Historical Vinyl Chloride Concentrations
# 2 Heron Lane (Old Well)
# North Oaks, Minnesota

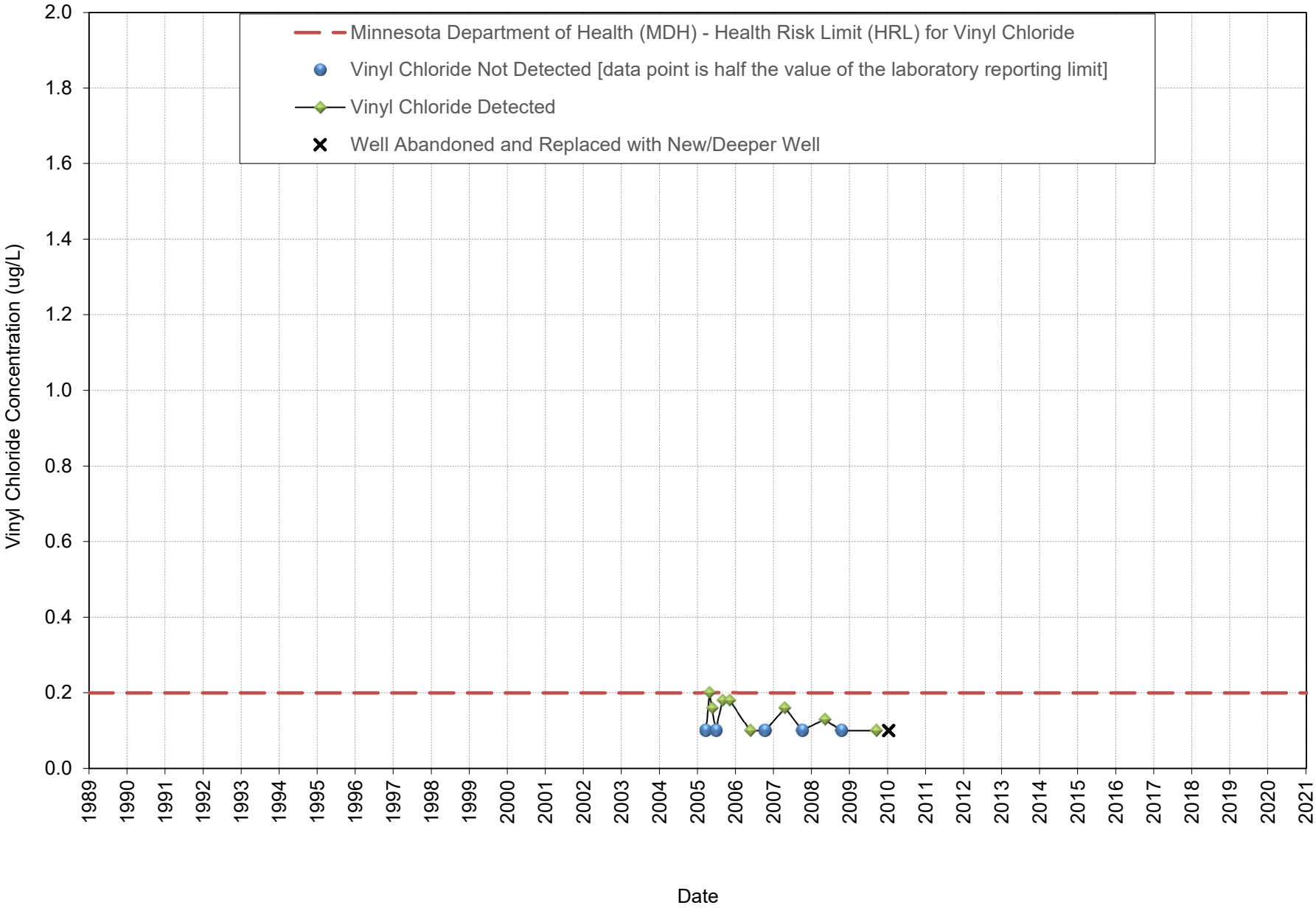


# Historical Vinyl Chloride Concentrations
# 3 Heron Lane
# North Oaks, Minnesota

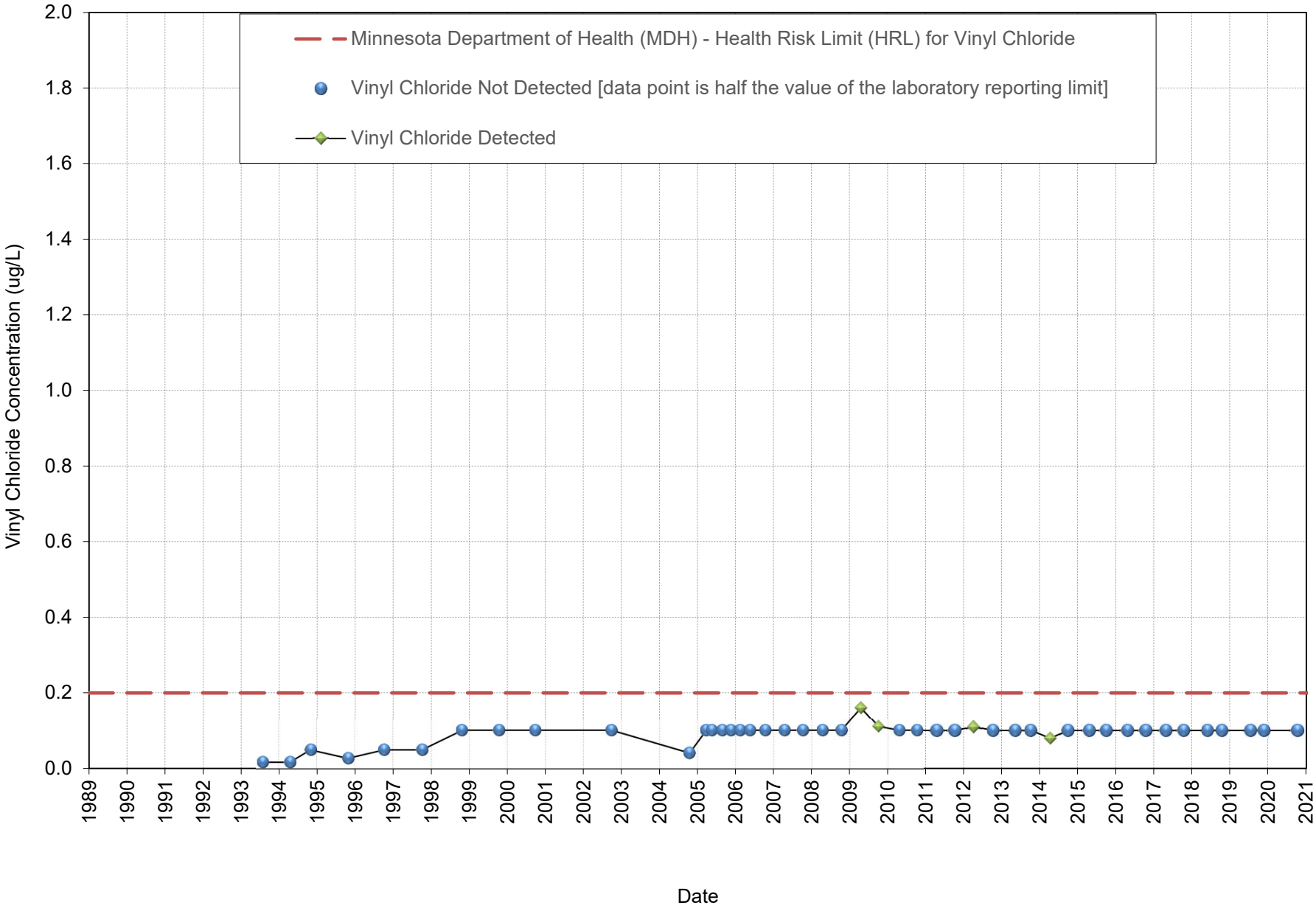
# Historical Vinyl Chloride Concentrations
# 1 Hummingbird Hill
# North Oaks, Minnesota



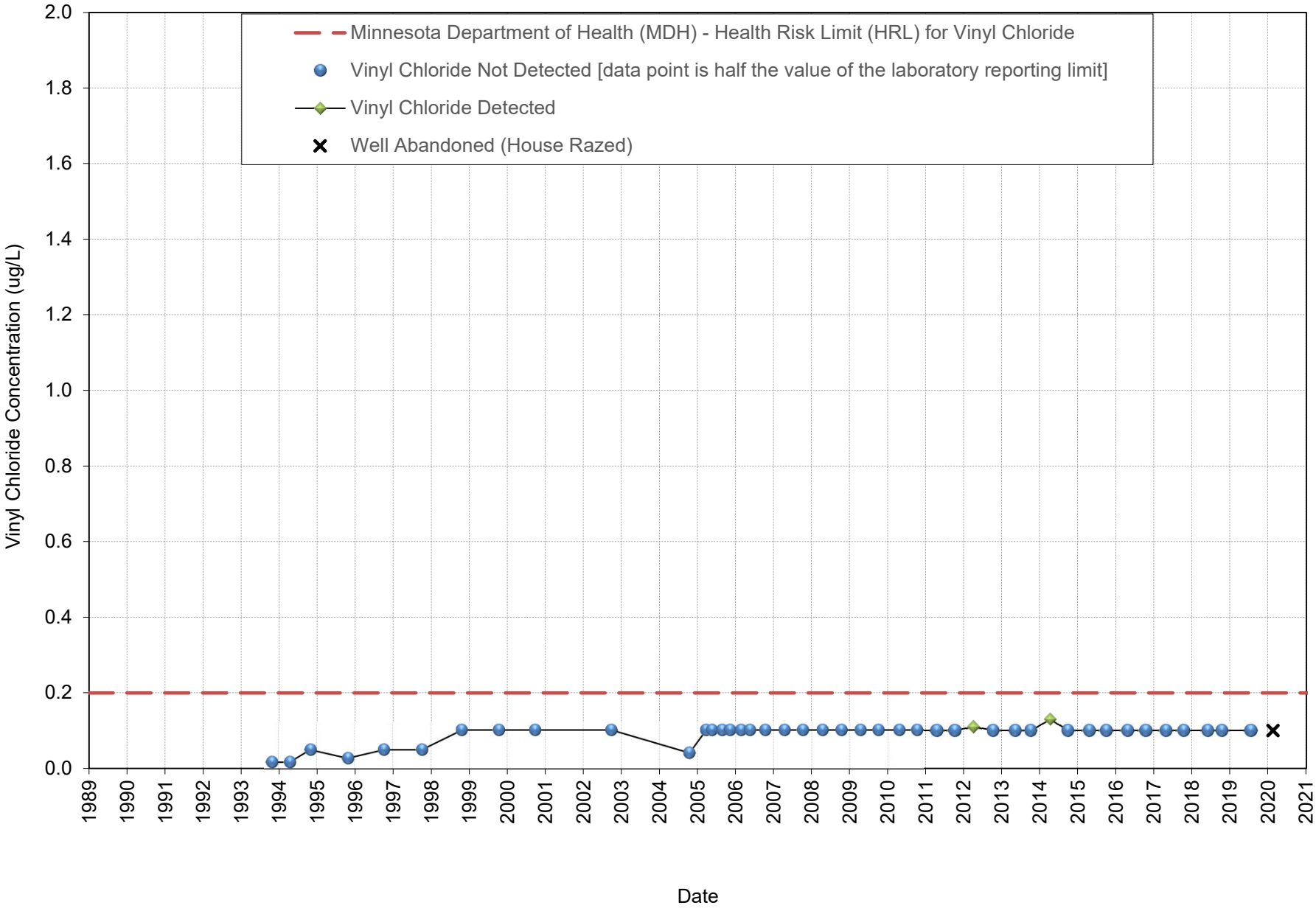
# Historical Vinyl Chloride Concentrations
# 2 Hummingbird Hill (Old Well)
# North Oaks, Minnesota



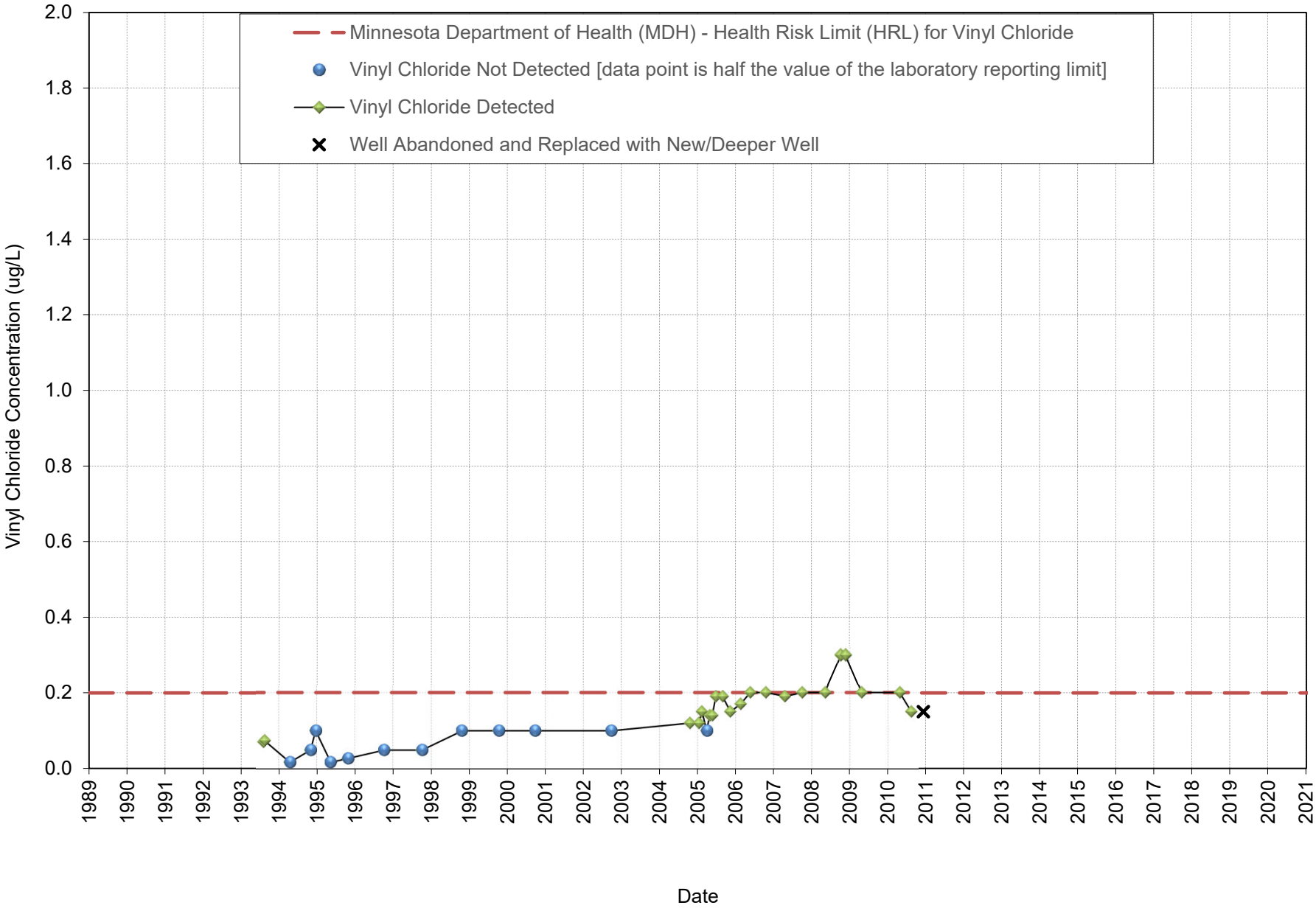
# Historical Vinyl Chloride Concentrations
# 10 West Shore Road
# North Oaks, Minnesota



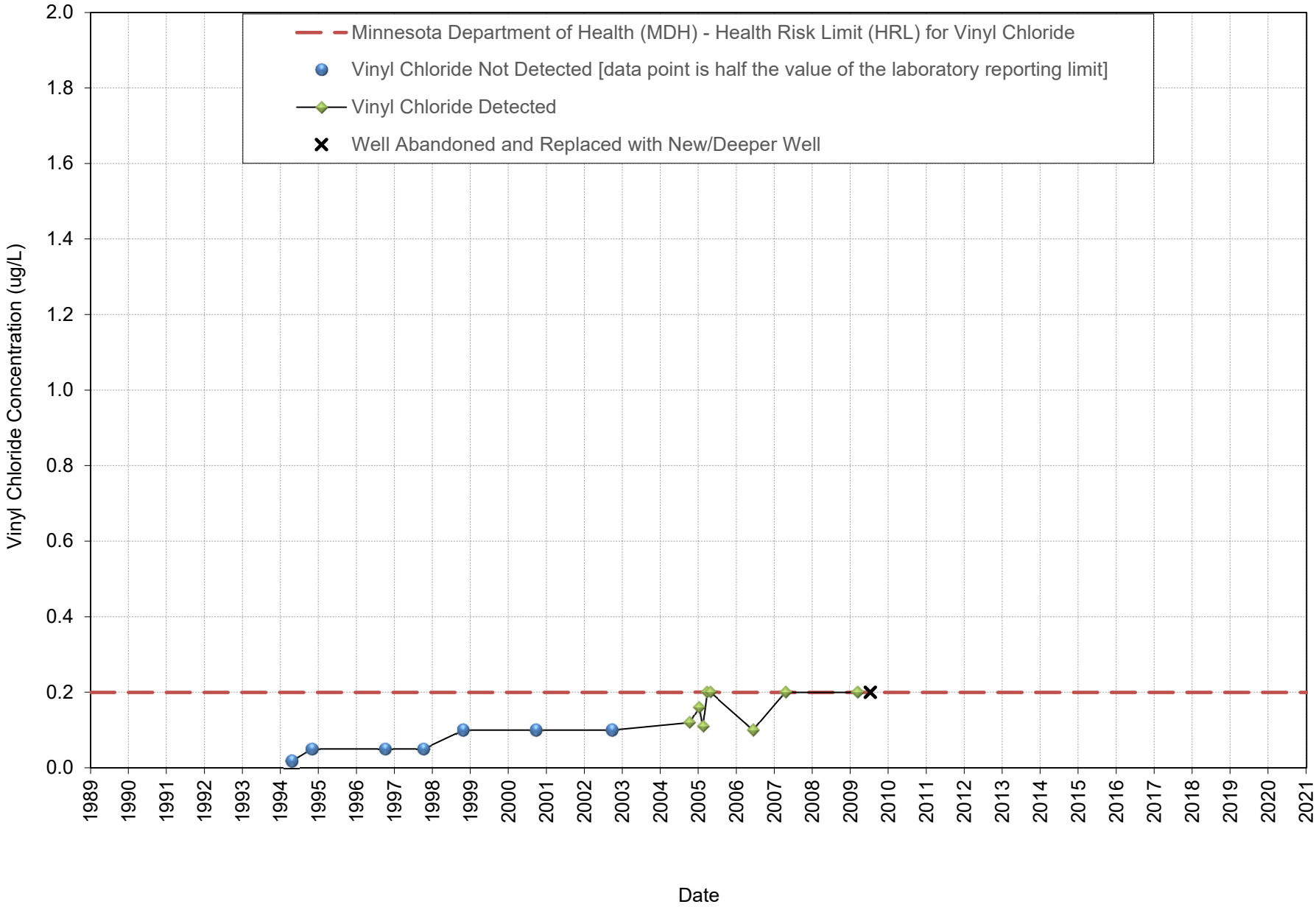
# Historical Vinyl Chloride Concentrations
# 11 West Shore Road
# North Oaks, Minnesota



# Historical Vinyl Chloride Concentrations
# 12 West Shore Road (Old Well)
# North Oaks, Minnesota



# Historical Vinyl Chloride Concentrations
# 13 West Shore Road (Old Well)
# North Oaks, Minnesota



# Historical Vinyl Chloride Concentrations
# 15 West Shore Road
# North Oaks, Minnesota