June 29, 2023
Discharge Monitoring Report #236
(117-3005050.200)

Ms. Julie Maas, Pretreatment Program Coordinator
Madison Metropolitan Sewerage District
1610 Moorland Road
Madison, WI 53713-3398

RE: May 2023 Discharge Monitoring Report, Hydraulic Barrier System, Hydrite Chemical Co., Cottage Grove, Wisconsin

Dear Ms. Maas:

Tetra Tech, on behalf of Hydrite Chemical Co., has prepared this discharge monitoring report to comply with the reporting requirements listed in Part 3 of the reissued Wastewater Discharge Permit for the Hydrite Chemical Co. Cottage Grove facility Hydraulic Barrier System (Permit No. NTO-88.06). This report provides information on the operation history and discharge monitoring results for the hydraulic barrier system for the month of May 2023. The following information is being provided in accordance with Section 3.01 of Part 3 (Reporting) of the reissued Wastewater Discharge Permit:

- Sample Type: Groundwater

- Place sample collected: Sample tap on the hydraulic barrier system effluent line located in the manhole east of the 110 South Main Street lift station.

- Date and time the sample was collected: May 9, 2023 at 1:25 pm.

- The person that collected the sample: Laura Dykstra, Geologist, Tetra Tech.

- The persons and laboratory performing the analyses: Pace Analytical Services Chemists, Pace Analytical Services, Inc., Green Bay, Wisconsin.

- Dates the analyses were performed and analytical techniques used:
  Analyses performed by Pace Analytical Services, Inc.:

| *Parameters Tested Monthly:* | *Date Analyzed* |
|---|---|
| 1. Volatile Organic Compounds (VOCs) by EPA Method 8260: | May 15, 2023 |
| 2. Chloride by EPA Method 300.0: | May 23, 2023 |



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13555 Bishops Ct, Suite 201, Brookfield, WI 53005
Tel 262.792.1282 Fax 262.792.1310 www.tetratech.com

Analysis performed in the field by Tetra Tech personnel:

1. Field pH, May 9, 2023.
   The effluent sampling and analysis form containing the field pH result for the effluent sample and the equipment calibration form documenting the successful calibration of the instrument used to measure the effluent sample pH in the field are included in Attachment A.

- The laboratory analytical results for the May 9, 2023 effluent sample collected from the hydraulic barrier system are summarized on Table 1.

- Total VOCs time series charts for the effluent samples collected from the hydraulic barrier system are provided as Chart 1 and Chart 2. Chart 1 displays the total VOCs concentrations and average pumping rates for the barrier system from 2003 to present, which is the year the barrier system was brought on-line. Chart 2 displays the total VOCs concentrations and average pumping rates for the barrier system from 2008 to present. A chart showing the total mass of VOCs and chlorinated VOCs discharged to the sanitary sewer is provided as Chart 3.

- The current month discharge and cumulative total discharge volumes are provided below:

| **Reporting Period** | **Groundwater Discharge Volume (gallons)** |
|---|---|
| May 2023 Discharge Volume (March 31 to May 31, 2023) | 4,832,560 |
| Cumulative Total Discharge Volume (October 8, 2003, through May 31, 2023) | 1,132,858,556 |

<u>Hydraulic Barrier System Operation and Maintenance History for the Month of May 2023</u>

Groundwater was pumped from extraction wells P-128, P-130, and P-164 during this reporting period. Total flow readings taken from the 3-inch Badger Magnetoflow® electromagnetic water meter (mag meter) indicate the hydraulic barrier system operated at an average pumping rate of 119 gallons per minute (gpm) in May.

Tetra Tech personnel treated extraction well P-164 with muriatic acid solution May 16$^{th}$ through May 17$^{th}$ to maintain the sustainable pumping rate of the well at the target rate of 50 to 55 gallons per minute (gpm). Approximately 4 gallons of muriatic acid was poured into P-164 with the pump off followed by about 2 gallons of tap water. The pump was turned on for approximately 30 seconds about one hour after the muriatic acid was poured into the well to distribute the muriatic acid solution into the discharge pipe. The pump was kept off for approximately 27 hours to allow the muriatic solution to break down the slime bacteria build-up in the well and pump components. Extraction wells P-128 and P-130 were operating while P-164 was shut down for the muriatic acid solution treatment.

The first semi-annual accuracy test of the 3-inch Badger Magnetoflow® electromagnetic water meter (mag meter) was performed by L-R Meter Testing & Repair, Inc. (L-R Meter) personnel on May 21st. The meter test results indicated the mag meter was recording flow at 98.5% of actual flow, which is within the accuracy limits of plus or minus 3%. The L-R Meter technician adjusted the detector factor from 81.42 to 82.66 to improve the accuracy of the meter. The mag meter recorded flow at 99.6% of actual flow after the detector factor was adjusted. A copy of the mag meter accuracy test report is provided in Attachment B.

Based on the meter readings collected from the water meters in the manholes at extraction wells P-128, P-130 and P-164, and the total barrier system flow readings from the mag meter, the extraction wells operated at the pumping rates listed below during this reporting period:

<u>Extraction Wells Pumping Rates for May 2023</u>

- P-128: 30.2 to 32.5 gpm
- P-130: 32.7 to 34.7 gpm
- P-164: 53.9 to 64.4 gpm

Occasions when the barrier system was shut down and re-started are listed below:

- Village of Cottage Grove Public Works Department personnel performed tests of the backup generator in the 110 South Main Street lift station building on Tuesday, May 2nd, Tuesday, May 9th, Tuesday, May 16th, and Tuesday, May 23rd. The hydraulic barrier system automatically shut down during the generator tests and was re-started the same day by Tetra Tech personnel after the generator tests were completed.

- A temporary power outage caused a shut-down of the hydraulic barrier system at 5:54 am on Sunday, May 21st. The barrier system was re-started by Hydrite Chemical personnel at 10:20 am on Tuesday, May 23rd after the backup generator test was completed in the 110 South Main Street lift station.

This report was prepared by,

**Tetra Tech**

Associate Hydrogeologist
encl.
cc: Mr. Chris Hampton – Town of Cottage Grove
Mr. Thomas J. Miazga - Hydrite Chemical Co. (Electronic copy via email.)
Mr. Raymond R. Krueger - Michael, Best & Friedrich, LLP
Mr. Brian Peterson - Village of Cottage Grove (Electronic copy via email.)
Mr. Luke Lampo – Wisconsin Department of Natural Resources (Electronic copy via email.)

# TABLE
# AND CHARTS

Table 1. Summary of Hydraulic Barrier System Effluent Monitoring VOCs and Chloride Analytical Results, Hydrite Chemical Co., Cottage Grove Facility

| Sample Identification | | | | | EFFLUENT | |
|---|---|---|---|---|---|---|
| Lab Sample Identification | | | | | 40261907001 | |
| Date Sample Collected | | | | | 05/09/23 | |
| Dilution Factor for VOCs | | | | | 10 | |
| COMPOUND | Units | Target Detection Limits | NR140 ES | NR140 PAL | | |
| 1,1,1-Trichloroethane | ug/L | 0.30 | 200 | 40 | 120 | |
| 2-Butanone (MEK) | ug/L | 6.5 | 460 | 90 | | U |
| 4-Methyl-2-Pentanone (MIBK) | ug/L | 6.0 | 500 | 50 | | U |
| Acetone | ug/L | 8.6 | 1000 | 200 | | U |
| cis-1,2-Dichloroethene | ug/L | 0.47 | 70 | 7 | 1200 | |
| Methylene chloride | ug/L | 0.32 | 5.0 | 0.5 | 20.6 | J |
| Tetrachloroethene | ug/L | 0.41 | 5.0 | 0.5 | 8.0 | J |
| Toluene | ug/L | 0.29 | 1000 | 200 | 92.6 | |
| Trichloroethene | ug/L | 0.32 | 5.0 | 0.5 | 25.6 | |
| Vinyl chloride | ug/L | 0.17 | 0.2 | 0.02 | 72.7 | |
| Xylenes (total) | ug/L | 1.0 | 10000 | 1000 | 116 | |
| TOTAL VOCs | ug/L | | | | 1655.5 | |
| Total Chlorinated VOCs | ug/L | | | | 1446.9 | |
| Chloride | mg/L | 2.0 | 250 | 125 | 44.3 | |

Notes:
VOCs - Volatile organic compounds.
Blank spaces indicate the compound was analyzed but not detected. The detection limits for the VOCs are equal to the target detection limits multiplied by the corresponding dilution factor for each sample.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
L1 - Analyte recovery in the laboratory control sample was above QC limits. Results may be biased high.
M0 - Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1 - Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
U - Indicates the compound was analyzed but not detected.
ug/L - micrograms per liter which is equivalent to parts per billion (ppb)
NR140 ES - The compound's Enforcement Standard as listed in Chapter NR140 of the Wisconsin Administrative Code.
NR140 PAL - The compound's Preventive Action Limit as listed in Chapter NR140 of the Wisconsin Administrative Code.
Madison Metropolitan Sewerage District Total VOCs discharge limit for hydraulic barrier system = 10,000 ug/L or 10 mg/L (as of 12/13/2016).
The Madison Metroplitan Sewerage District set no discharge limit for chloride, but it is a parameter of concern.
"Effluent" samples are collected from the sample spigot on the combined effluent discharge line for the barrier system located in the manhole by the Village of Cottage Grove lift station.



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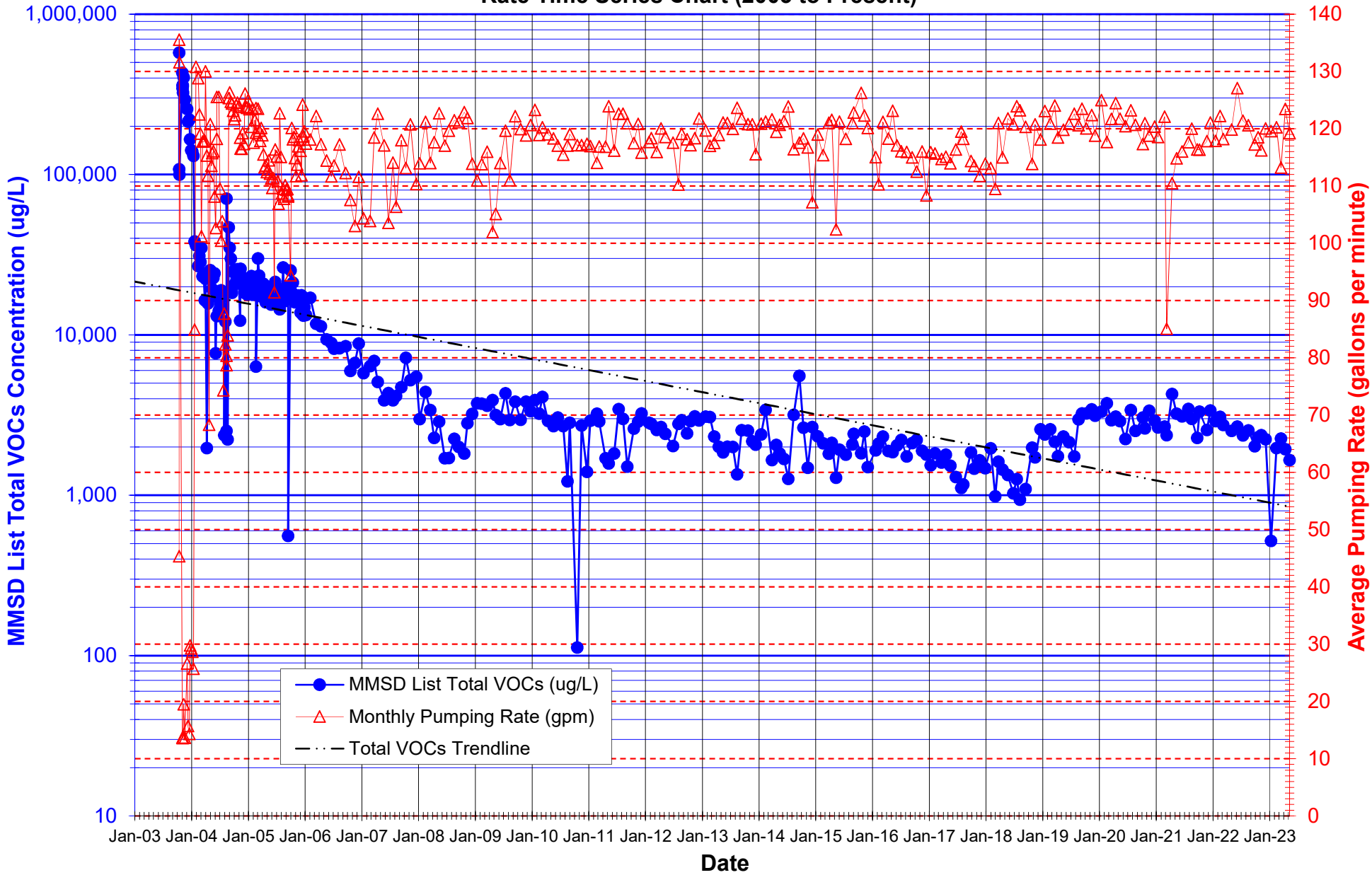
## Chart 1. Hydrite Chemical Co. Hydraulic Barrier System MMSD List Total VOCs and Average Pumping Rate Time Series Chart (2003 to Present)

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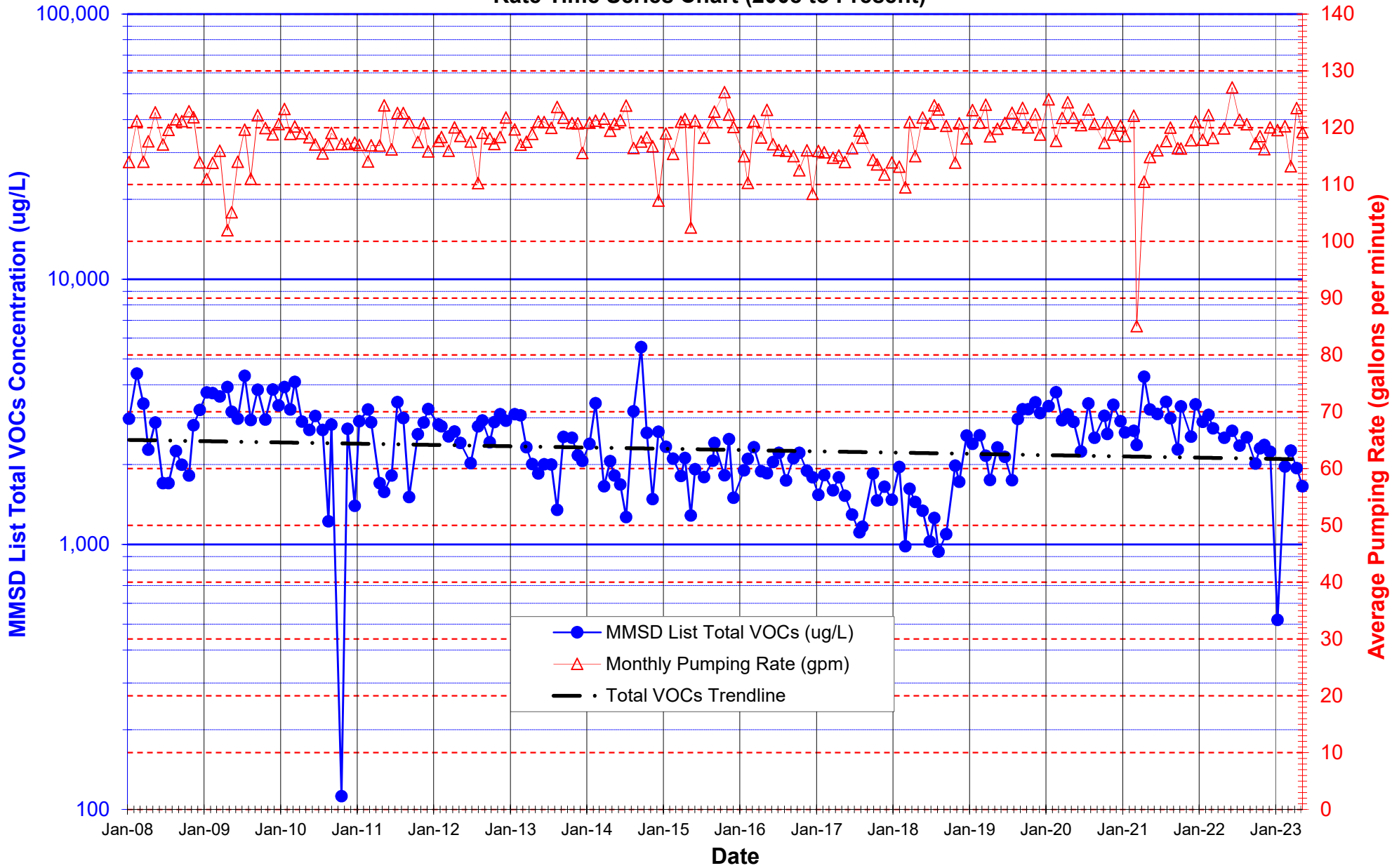
## Chart 2. Hydrite Chemical Co. Hydraulic Barrier System MMSD List Total VOCs and Average Pumping Rate Time Series Chart (2008 to Present)

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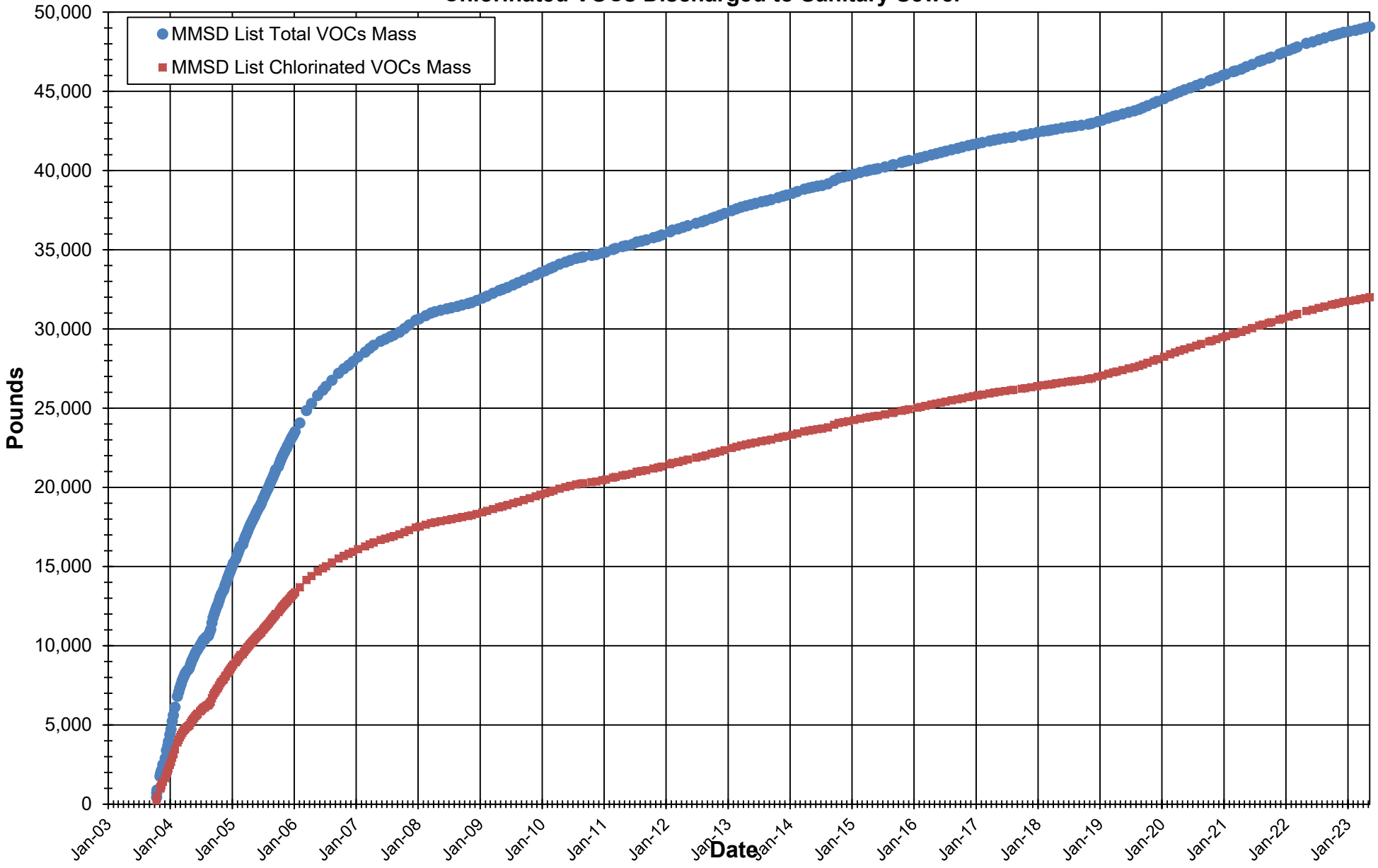
## Chart 3. Hydrite Chemical Co. Hydraulic Barrier System Cumulative Mass of MMSD List Total Vocs and Chlorinated VOCs Discharged to Sanitary Sewer

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# ATTACHMENT A
# HYDRAULIC BARRIER SYSTEM
# EFFLUENT SAMPLE FIELD FORM AND
# LABORATORY ANALYTICAL REPORT

## TETRA TECH REMEDIATION SYSTEM EFFLUENT WATER QUALITY SAMPLING AND ANALYSIS FORM

| PROJECT INFORMATION | | INSTRUMENTS | |
|---|---|---|---|
| PROJECT | Hydrite Chemical Co., Cottage Grove Facility Layer 5 Hydraulic Barrier System Monitoring | Temp. & pH | Hanna Combo |
| PROJECT NO. | 117-30050047A.600 | Conductivity | Hanna Combo |
| LOCATION | Cottage Grove, WI | ORP | NA |
| PERSONNEL | Laura Dykstra | DO | NA |

| SAMPLE ID | Effluent | | | |
|---|---|---|---|---|
| WATER TYPE | Groundwater | | | |
| DATE (month/day/year) | 5/9/23 | | | |
| CLOCK TIME (Military) | 1325 | | | |
| FLOW METER READING (gallons) | 101310 | | | |
| FLOW RATE (gpm) | 116.81 | | | |
| SAMPLING DEVICE | Sample Spigot on 6-inch discharge line | | | |
| FIELD TEMPERATURE (°C) | 13.9 | | | |
| pH | 6.99 | | | |
| ELECTRICAL CONDUCTIVITY at 25° C (µS/cm) | 815 | | | |
| ORP (mV) | NM | | | |
| DISSOLVED OXYGEN (ppm) | NM | | | |
| DISSOLVED OXYGEN (% Sat.) | NM | | | |
| COLOR | Clear | | | |
| ODOR | None | | | |
| CLARITY | Clear | | | |
| SAMPLING PARAMETERS | # OF CONTAINERS & VOLUME; CONTAINER TYPE (A = AMBER GLASS; G = GLASS; P = PLASTIC); PRESERVATIVE TYPE (L = LAB ADDED; F = FIELD ADDED) OR NEUTRAL; FILTERED (YES or NO) | | | |
| TCL VOCs (Method SW846 8260B) | 3-40 ml; G; HCL-L; No | | | |
| Chloride (Method 300.0) | 250-ml; P; None; No | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| NAME OF LABORATORY | Pace Analytical | | | |
| DATE SENT TO LAB | 5/9/23 | | | |

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# TETRA TECH EQUIPMENT CALIBRATION FORM

| | |
|---|---|
| Equipment Make | HANNA Instruments |
| Equipment Model | HI 98130 pH/EC/TDC/Temperature Meter |
| Tetra Tech GEO ID Number | 1 |

| DATE | TIME | CALIBRATION MEDIA | RESULTS | COMMENTS |
|---|---|---|---|---|
| 5/9/23 | 1320 | pH 4.0 and pH 7.0 buffer solutions | Calibration successful | |
| 5/9/23 | 1320 | pH 4.0 and pH 7.0 buffer solutions | Calibration successful | |
| | | | | |
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TETRA TECH

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

May 24, 2023

Mark Manthey
Tetra Tech Geo
13555 Bishops Ct
Suite 201
Brookfield, WI 53005

RE: Project: HYDRITE
Pace Project No.: 40261907

Dear Mark Manthey:

Enclosed are the analytical results for sample(s) received by the laboratory on May 10, 2023. 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 - Green Bay

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

Sincerely,

Brian Basten
brian.basten@pacelabs.com
(920)469-2436
Project Manager

Enclosures



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## CERTIFICATIONS

Project: HYDRITE
Pace Project No.: 40261907

**Pace Analytical Services Green Bay**
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-21-8
Virginia VELAP Certification ID: 11873
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-21-00008
Federal Fish & Wildlife Permit #: 51774A



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## SAMPLE SUMMARY

Project: HYDRITE
Pace Project No.: 40261907

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| **40261907001** | **EFFLUENT** | Water | 05/09/23 13:25 | 05/10/23 09:25 |



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## SAMPLE ANALYTE COUNT

Project: HYDRITE
Pace Project No.: 40261907

| Lab ID | Sample ID | Method | Analysts | Analytes Reported | Laboratory |
|---|---|---|---|---|---|
| **40261907001** | **EFFLUENT** | EPA 8260 | CXJ | 38 | PASI-G |
| | | EPA 300.0 | HMB | 1 | PASI-G |

PASI-G = Pace Analytical Services - Green Bay



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# PROJECT NARRATIVE

Project: HYDRITE
Pace Project No.: 40261907

**Method:** **EPA 8260**
**Description:** 8260 MSV
**Client:** Tetra Tech GEO - Brookfield
**Date:** May 24, 2023

**General Information:**
1 sample was analyzed for EPA 8260 by Pace Analytical Services Green Bay. 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.

**Additional Comments:**



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# PROJECT NARRATIVE

Project: HYDRITE
Pace Project No.: 40261907

**Method:** **EPA 300.0**
**Description:** 300.0 IC Anions
**Client:** Tetra Tech GEO - Brookfield
**Date:** May 24, 2023

**General Information:**
1 sample was analyzed for EPA 300.0 by Pace Analytical Services Green Bay. 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: HYDRITE
Pace Project No.: 40261907

**Sample: EFFLUENT** **Lab ID: 40261907001** Collected: 05/09/23 13:25 Received: 05/10/23 09:25 Matrix: Water

| Parameters | Results | Units | LOQ | LOD | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | | |
| | Pace Analytical Services - Green Bay | | | | | | | | |
| Acetone | **<86.4** | ug/L | 250 | 86.4 | 10 | | 05/15/23 13:44 | 67-64-1 | |
| Benzene | **<3.0** | ug/L | 10.0 | 3.0 | 10 | | 05/15/23 13:44 | 71-43-2 | |
| Bromodichloromethane | **<4.2** | ug/L | 10.0 | 4.2 | 10 | | 05/15/23 13:44 | 75-27-4 | |
| Bromoform | **<4.3** | ug/L | 10.0 | 4.3 | 10 | | 05/15/23 13:44 | 75-25-2 | |
| Bromomethane | **<11.9** | ug/L | 50.0 | 11.9 | 10 | | 05/15/23 13:44 | 74-83-9 | |
| 2-Butanone (MEK) | **<65.2** | ug/L | 250 | 65.2 | 10 | | 05/15/23 13:44 | 78-93-3 | |
| Carbon disulfide | **<6.5** | ug/L | 10.0 | 6.5 | 10 | | 05/15/23 13:44 | 75-15-0 | |
| Carbon tetrachloride | **<3.7** | ug/L | 10.0 | 3.7 | 10 | | 05/15/23 13:44 | 56-23-5 | |
| Chlorobenzene | **<8.6** | ug/L | 10.0 | 8.6 | 10 | | 05/15/23 13:44 | 108-90-7 | |
| Chloroethane | **276** | ug/L | 50.0 | 13.8 | 10 | | 05/15/23 13:44 | 75-00-3 | |
| Chloroform | **<5.0** | ug/L | 50.0 | 5.0 | 10 | | 05/15/23 13:44 | 67-66-3 | |
| Chloromethane | **<16.4** | ug/L | 50.0 | 16.4 | 10 | | 05/15/23 13:44 | 74-87-3 | |
| Dibromochloromethane | **<26.4** | ug/L | 50.0 | 26.4 | 10 | | 05/15/23 13:44 | 124-48-1 | |
| 1,1-Dichloroethane | **308** | ug/L | 10.0 | 3.0 | 10 | | 05/15/23 13:44 | 75-34-3 | |
| 1,2-Dichloroethane | **<2.9** | ug/L | 10.0 | 2.9 | 10 | | 05/15/23 13:44 | 107-06-2 | |
| 1,1-Dichloroethene | **82.0** | ug/L | 10.0 | 5.8 | 10 | | 05/15/23 13:44 | 75-35-4 | |
| cis-1,2-Dichloroethene | **1200** | ug/L | 10.0 | 4.7 | 10 | | 05/15/23 13:44 | 156-59-2 | |
| trans-1,2-Dichloroethene | **<5.3** | ug/L | 10.0 | 5.3 | 10 | | 05/15/23 13:44 | 156-60-5 | |
| 1,2-Dichloropropane | **<4.5** | ug/L | 10.0 | 4.5 | 10 | | 05/15/23 13:44 | 78-87-5 | |
| cis-1,3-Dichloropropene | **<2.4** | ug/L | 10.0 | 2.4 | 10 | | 05/15/23 13:44 | 10061-01-5 | |
| trans-1,3-Dichloropropene | **<2.7** | ug/L | 10.0 | 2.7 | 10 | | 05/15/23 13:44 | 10061-02-6 | |
| Ethylbenzene | **18.1** | ug/L | 10.0 | 3.3 | 10 | | 05/15/23 13:44 | 100-41-4 | |
| 2-Hexanone | **<62.8** | ug/L | 250 | 62.8 | 10 | | 05/15/23 13:44 | 591-78-6 | |
| Methylene Chloride | **20.6J** | ug/L | 50.0 | 3.2 | 10 | | 05/15/23 13:44 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | **<59.5** | ug/L | 250 | 59.5 | 10 | | 05/15/23 13:44 | 108-10-1 | |
| Styrene | **<3.6** | ug/L | 10.0 | 3.6 | 10 | | 05/15/23 13:44 | 100-42-5 | |
| 1,1,2,2-Tetrachloroethane | **<3.8** | ug/L | 10.0 | 3.8 | 10 | | 05/15/23 13:44 | 79-34-5 | |
| Tetrachloroethene | **8.0J** | ug/L | 10.0 | 4.1 | 10 | | 05/15/23 13:44 | 127-18-4 | |
| Toluene | **92.6** | ug/L | 10.0 | 2.9 | 10 | | 05/15/23 13:44 | 108-88-3 | |
| 1,1,1-Trichloroethane | **120** | ug/L | 10.0 | 3.0 | 10 | | 05/15/23 13:44 | 71-55-6 | |
| 1,1,2-Trichloroethane | **<3.4** | ug/L | 10.0 | 3.4 | 10 | | 05/15/23 13:44 | 79-00-5 | |
| Trichloroethene | **25.6** | ug/L | 10.0 | 3.2 | 10 | | 05/15/23 13:44 | 79-01-6 | |
| Vinyl acetate | **<13.3** | ug/L | 50.0 | 13.3 | 10 | | 05/15/23 13:44 | 108-05-4 | |
| Vinyl chloride | **72.7** | ug/L | 10.0 | 1.7 | 10 | | 05/15/23 13:44 | 75-01-4 | |
| Xylene (Total) | **116** | ug/L | 30.0 | 10.5 | 10 | | 05/15/23 13:44 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | | |
| 4-Bromofluorobenzene (S) | 99 | % | 70-130 | | 10 | | 05/15/23 13:44 | 460-00-4 | |
| 1,2-Dichlorobenzene-d4 (S) | 99 | % | 70-130 | | 10 | | 05/15/23 13:44 | 2199-69-1 | |
| Toluene-d8 (S) | 99 | % | 70-130 | | 10 | | 05/15/23 13:44 | 2037-26-5 | |
| **300.0 IC Anions** | Analytical Method: EPA 300.0 | | | | | | | | |
| | Pace Analytical Services - Green Bay | | | | | | | | |
| Chloride | **44.3** | mg/L | 10.0 | 2.2 | 5 | | 05/23/23 20:55 | 16887-00-6 | |



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# QUALITY CONTROL DATA

Project: HYDRITE
Pace Project No.: 40261907

QC Batch: 444655
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40261907001

METHOD BLANK: 2552608
Matrix: Water
Associated Lab Samples: 40261907001

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | <0.30 | 1.0 | 05/12/23 15:46 | |
| 1,1,2,2-Tetrachloroethane | ug/L | <0.38 | 1.0 | 05/12/23 15:46 | |
| 1,1,2-Trichloroethane | ug/L | <0.34 | 1.0 | 05/12/23 15:46 | |
| 1,1-Dichloroethane | ug/L | <0.30 | 1.0 | 05/12/23 15:46 | |
| 1,1-Dichloroethene | ug/L | <0.58 | 1.0 | 05/12/23 15:46 | |
| 1,2-Dichloroethane | ug/L | <0.29 | 1.0 | 05/12/23 15:46 | |
| 1,2-Dichloropropane | ug/L | <0.45 | 1.0 | 05/12/23 15:46 | |
| 2-Butanone (MEK) | ug/L | <6.5 | 25.0 | 05/12/23 15:46 | |
| 2-Hexanone | ug/L | <6.3 | 25.0 | 05/12/23 15:46 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | <6.0 | 25.0 | 05/12/23 15:46 | |
| Acetone | ug/L | <8.6 | 25.0 | 05/12/23 15:46 | |
| Benzene | ug/L | <0.30 | 1.0 | 05/12/23 15:46 | |
| Bromodichloromethane | ug/L | <0.42 | 1.0 | 05/12/23 15:46 | |
| Bromoform | ug/L | <0.43 | 1.0 | 05/12/23 15:46 | |
| Bromomethane | ug/L | <1.2 | 5.0 | 05/12/23 15:46 | |
| Carbon disulfide | ug/L | <0.65 | 1.0 | 05/12/23 15:46 | |
| Carbon tetrachloride | ug/L | <0.37 | 1.0 | 05/12/23 15:46 | |
| Chlorobenzene | ug/L | <0.86 | 1.0 | 05/12/23 15:46 | |
| Chloroethane | ug/L | <1.4 | 5.0 | 05/12/23 15:46 | |
| Chloroform | ug/L | <0.50 | 5.0 | 05/12/23 15:46 | |
| Chloromethane | ug/L | <1.6 | 5.0 | 05/12/23 15:46 | |
| cis-1,2-Dichloroethene | ug/L | <0.47 | 1.0 | 05/12/23 15:46 | |
| cis-1,3-Dichloropropene | ug/L | <0.24 | 1.0 | 05/12/23 15:46 | |
| Dibromochloromethane | ug/L | <2.6 | 5.0 | 05/12/23 15:46 | |
| Ethylbenzene | ug/L | <0.33 | 1.0 | 05/12/23 15:46 | |
| Methylene Chloride | ug/L | <0.32 | 5.0 | 05/12/23 15:46 | |
| Styrene | ug/L | <0.36 | 1.0 | 05/12/23 15:46 | |
| Tetrachloroethene | ug/L | <0.41 | 1.0 | 05/12/23 15:46 | |
| Toluene | ug/L | <0.29 | 1.0 | 05/12/23 15:46 | |
| trans-1,2-Dichloroethene | ug/L | <0.53 | 1.0 | 05/12/23 15:46 | |
| trans-1,3-Dichloropropene | ug/L | <0.27 | 1.0 | 05/12/23 15:46 | |
| Trichloroethene | ug/L | <0.32 | 1.0 | 05/12/23 15:46 | |
| Vinyl acetate | ug/L | <1.3 | 5.0 | 05/12/23 15:46 | |
| Vinyl chloride | ug/L | <0.17 | 1.0 | 05/12/23 15:46 | |
| Xylene (Total) | ug/L | <1.0 | 3.0 | 05/12/23 15:46 | |
| 1,2-Dichlorobenzene-d4 (S) | % | 98 | 70-130 | 05/12/23 15:46 | |
| 4-Bromofluorobenzene (S) | % | 99 | 70-130 | 05/12/23 15:46 | |
| Toluene-d8 (S) | % | 101 | 70-130 | 05/12/23 15:46 | |

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# QUALITY CONTROL DATA

Project: HYDRITE
Pace Project No.: 40261907

LABORATORY CONTROL SAMPLE: 2552609

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | 50 | 50.5 | 101 | 70-134 | |
| 1,1,2,2-Tetrachloroethane | ug/L | 50 | 43.0 | 86 | 69-130 | |
| 1,1,2-Trichloroethane | ug/L | 50 | 44.0 | 88 | 70-130 | |
| 1,1-Dichloroethane | ug/L | 50 | 48.4 | 97 | 70-130 | |
| 1,1-Dichloroethene | ug/L | 50 | 48.5 | 97 | 74-131 | |
| 1,2-Dichloroethane | ug/L | 50 | 53.8 | 108 | 70-137 | |
| 1,2-Dichloropropane | ug/L | 50 | 49.7 | 99 | 80-121 | |
| Benzene | ug/L | 50 | 48.8 | 98 | 70-130 | |
| Bromodichloromethane | ug/L | 50 | 49.0 | 98 | 70-130 | |
| Bromoform | ug/L | 50 | 39.4 | 79 | 70-130 | |
| Bromomethane | ug/L | 50 | 35.7 | 71 | 21-147 | |
| Carbon disulfide | ug/L | 50 | 44.5 | 89 | 70-130 | |
| Carbon tetrachloride | ug/L | 50 | 50.3 | 101 | 80-146 | |
| Chlorobenzene | ug/L | 50 | 49.5 | 99 | 70-130 | |
| Chloroethane | ug/L | 50 | 53.3 | 107 | 52-165 | |
| Chloroform | ug/L | 50 | 51.4 | 103 | 80-123 | |
| Chloromethane | ug/L | 50 | 45.4 | 91 | 51-122 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 48.8 | 98 | 70-130 | |
| cis-1,3-Dichloropropene | ug/L | 50 | 49.9 | 100 | 70-130 | |
| Dibromochloromethane | ug/L | 50 | 43.6 | 87 | 70-130 | |
| Ethylbenzene | ug/L | 50 | 49.4 | 99 | 80-120 | |
| Methylene Chloride | ug/L | 50 | 53.8 | 108 | 70-130 | |
| Styrene | ug/L | 50 | 57.0 | 114 | 70-130 | |
| Tetrachloroethene | ug/L | 50 | 46.1 | 92 | 70-130 | |
| Toluene | ug/L | 50 | 48.0 | 96 | 80-120 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 52.3 | 105 | 70-130 | |
| trans-1,3-Dichloropropene | ug/L | 50 | 43.8 | 88 | 70-130 | |
| Trichloroethene | ug/L | 50 | 49.3 | 99 | 70-130 | |
| Vinyl chloride | ug/L | 50 | 52.0 | 104 | 63-134 | |
| Xylene (Total) | ug/L | 150 | 147 | 98 | 70-130 | |
| 1,2-Dichlorobenzene-d4 (S) | % | | | 99 | 70-130 | |
| 4-Bromofluorobenzene (S) | % | | | 100 | 70-130 | |
| Toluene-d8 (S) | % | | | 100 | 70-130 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2552917 2552918

| Parameter | Units | 40261963013 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | <0.30 | 50 | 50 | 50.4 | 50.6 | 101 | 101 | 70-134 | 0 | 20 | |
| 1,1,2,2-Tetrachloroethane | ug/L | <0.38 | 50 | 50 | 45.3 | 44.1 | 91 | 88 | 61-135 | 3 | 20 | |
| 1,1,2-Trichloroethane | ug/L | <0.34 | 50 | 50 | 46.3 | 45.1 | 93 | 90 | 70-130 | 2 | 20 | |
| 1,1-Dichloroethane | ug/L | <0.30 | 50 | 50 | 49.9 | 49.3 | 100 | 99 | 70-130 | 1 | 20 | |
| 1,1-Dichloroethene | ug/L | <0.58 | 50 | 50 | 49.7 | 49.2 | 99 | 98 | 71-130 | 1 | 20 | |
| 1,2-Dichloroethane | ug/L | <0.29 | 50 | 50 | 54.8 | 54.4 | 110 | 109 | 70-137 | 1 | 20 | |
| 1,2-Dichloropropane | ug/L | <0.45 | 50 | 50 | 50.2 | 50.4 | 100 | 101 | 80-121 | 0 | 20 | |

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# QUALITY CONTROL DATA

Project: HYDRITE
Pace Project No.: 40261907

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2552917 2552918

| Parameter | Units | 40261963013 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | ug/L | <0.30 | 50 | 50 | 49.8 | 49.4 | 100 | 99 | 70-130 | 1 | 20 | |
| Bromodichloromethane | ug/L | <0.42 | 50 | 50 | 51.1 | 50.2 | 102 | 100 | 70-130 | 2 | 20 | |
| Bromoform | ug/L | <0.43 | 50 | 50 | 41.9 | 40.4 | 84 | 81 | 70-133 | 4 | 20 | |
| Bromomethane | ug/L | 1.3J | 50 | 50 | 41.0 | 43.9 | 80 | 85 | 21-149 | 7 | 22 | |
| Carbon disulfide | ug/L | <0.65 | 50 | 50 | 45.1 | 44.4 | 90 | 89 | 70-130 | 2 | 20 | |
| Carbon tetrachloride | ug/L | <0.37 | 50 | 50 | 51.6 | 51.0 | 103 | 102 | 80-146 | 1 | 20 | |
| Chlorobenzene | ug/L | <0.86 | 50 | 50 | 51.2 | 49.8 | 102 | 100 | 70-130 | 3 | 20 | |
| Chloroethane | ug/L | <1.4 | 50 | 50 | 52.6 | 52.3 | 105 | 105 | 52-165 | 1 | 20 | |
| Chloroform | ug/L | <0.50 | 50 | 50 | 51.8 | 51.2 | 104 | 102 | 80-123 | 1 | 20 | |
| Chloromethane | ug/L | <1.6 | 50 | 50 | 46.5 | 46.4 | 93 | 93 | 42-125 | 0 | 20 | |
| cis-1,2-Dichloroethene | ug/L | <0.47 | 50 | 50 | 49.1 | 48.9 | 98 | 98 | 70-130 | 0 | 20 | |
| cis-1,3-Dichloropropene | ug/L | <0.24 | 50 | 50 | 51.8 | 50.7 | 104 | 101 | 70-130 | 2 | 20 | |
| Dibromochloromethane | ug/L | <2.6 | 50 | 50 | 46.4 | 45.5 | 93 | 91 | 70-130 | 2 | 20 | |
| Ethylbenzene | ug/L | <0.33 | 50 | 50 | 50.6 | 48.9 | 101 | 98 | 80-121 | 4 | 20 | |
| Methylene Chloride | ug/L | <0.32 | 50 | 50 | 54.5 | 53.5 | 109 | 107 | 70-130 | 2 | 20 | |
| Styrene | ug/L | <0.36 | 50 | 50 | 58.6 | 57.3 | 117 | 115 | 70-132 | 2 | 20 | |
| Tetrachloroethene | ug/L | <0.41 | 50 | 50 | 46.3 | 44.8 | 93 | 90 | 70-130 | 3 | 20 | |
| Toluene | ug/L | <0.29 | 50 | 50 | 49.5 | 47.6 | 99 | 95 | 80-120 | 4 | 20 | |
| trans-1,2-Dichloroethene | ug/L | <0.53 | 50 | 50 | 53.2 | 53.0 | 106 | 106 | 70-130 | 0 | 20 | |
| trans-1,3-Dichloropropene | ug/L | <0.27 | 50 | 50 | 46.9 | 45.3 | 94 | 91 | 70-130 | 4 | 20 | |
| Trichloroethene | ug/L | <0.32 | 50 | 50 | 50.1 | 49.0 | 100 | 98 | 70-130 | 2 | 20 | |
| Vinyl chloride | ug/L | <0.17 | 50 | 50 | 51.6 | 51.3 | 103 | 103 | 60-137 | 1 | 20 | |
| Xylene (Total) | ug/L | <1.0 | 150 | 150 | 152 | 146 | 102 | 98 | 70-130 | 4 | 20 | |
| 1,2-Dichlorobenzene-d4 (S) | % | | | | | | 98 | 98 | 70-130 | | | |
| 4-Bromofluorobenzene (S) | % | | | | | | 100 | 100 | 70-130 | | | |
| Toluene-d8 (S) | % | | | | | | 100 | 99 | 70-130 | | | |

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# QUALITY CONTROL DATA

Project: HYDRITE
Pace Project No.: 40261907

QC Batch: 445357
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40261907001

METHOD BLANK: 2557339
Matrix: Water
Associated Lab Samples: 40261907001

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Chloride | mg/L | <0.43 | 2.0 | 05/23/23 12:49 | |

LABORATORY CONTROL SAMPLE: 2557340

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Chloride | mg/L | 20 | 20.4 | 102 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2557341 2557342

| Parameter | Units | 40261907001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | mg/L | 44.3 | 100 | 100 | 149 | 149 | 104 | 104 | 90-110 | 0 | 15 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2557343 2557344

| Parameter | Units | 40261946002 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | mg/L | 213 | 400 | 400 | 613 | 606 | 100 | 98 | 90-110 | 1 | 15 | |

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# QUALIFIERS

Project: HYDRITE
Pace Project No.: 40261907

**DEFINITIONS**

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

ND - Not Detected at or above LOD.

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

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

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

DL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.



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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HYDRITE
Pace Project No.: 40261907

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| **40261907001** | **EFFLUENT** | EPA 8260 | 444655 | | |
| **40261907001** | **EFFLUENT** | EPA 300.0 | 445357 | | |



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# CHAIN-OF-CUSTODY Analytical Request Document

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https //info pacelabs com/hubfs/pas-standard-terms pdf

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

**LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here** 40261907

**ALL BOLD OUTLINED AREAS are for LAB USE ONLY**

Company: TetraTech

Address →

Billing Information: 13555 Bishops Ct. Ste 201 Brookfield, WI 53005

Report To: Mark Manthey

Email To: Mark.Manthey@tetratech.com

Copy To:

Site Collection Info/Address:

Customer Project Name/Number: Hydrite

State: County/City: Time Zone Collected: / [ ]PT [ ]MT [ ]CT [ ]ET

Phone: Email: 630-408-5161

Site/Facility ID #:

Compliance Monitoring? [ ] Yes [ ] No

Collected By (print): Laura Dykstra

Purchase Order # : Quote #.

DW PWS ID #: DW Location Code.

Collected By (signature): Laura Dykstra

Turnaround Date Required: Standard

Immediately Packed on Ice: [X] Yes [ ] No

Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive. ____ [ ] Hold ____

Rush: (Expedite Charges Apply) [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis: ____

* 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)

Container Preservative Type **: 3 U

** 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:

Analyses: TCL VOCs 8260B; Chloride (300)

| 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 | Container Type: Plastic (P) or Glass (G) | TCL VOCs 8260B | Chloride (300) | Lab Sample # / Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Effluent | GW | G | 5-9 | 1325 | | | | | | 3 | 1 | 001 |
| ~~Effluent~~ | ~~GW~~ | ~~G~~ | ~~5-9~~ | ~~1325~~ | | | | | | | | |

Lab Profile/Line:

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:

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 #:

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: ___oC
Cooler 1 Therm Corr. Factor: ___oC
Cooler 1 Corrected Temp: ___oC
Comments:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 1 of: 1

| Relinquished by/Company: (Signature) | Date/Time: | Received by/Company: (Signature) | Date/Time: |
|---|---|---|---|
| Laura Dykstra | 5/9/23 17:00 | | |
| CS Logistics | 5-10-23 0925 | Rodrigo Pace | 5-10-23 0925 |
| | | | |

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

DC#_Title: ENV-FRM-GBAY-0035 v03_Sample Preservation Receipt Form
Effective Date: 8/16/2022

# Sample Preservation Receipt Form

Client Name: Tetratech

Project # 402601907

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

Lab Lot# of pH paper:

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

Initial when completed:

Date/ Time:

| Pace Lab # | Glass | | | | | | | Plastic | | | | | | Vials | | | | | | Jars | | | | General | | | | VOA Vials (>6mm) * | H2SO4 pH ≤2 | NaOH+Zn Act pH ≥9 | NaOH pH ≥12 | HNO3 pH ≤2 | pH after adjusted | Volume (mL) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AG1U | BG1U | AG1H | AG4S | AG5U | AG2S | BG3U | BP1U | BP3U | BP3B | BP3N | BP3S | BP2Z | VG9C | DG9T | VG9U | VG9H | VG9M | VG9D | JGFU | JG9U | WGFU | WPFU | SP5T | ZPLC | GN 1 | GN 2 | | | | | | | |
| 001 | | | | | | | | | 1 | | | | | | | | 3 | | | | | | | | | | | | | | | | | 2.5 / 5 |
| 002 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 |
| 003 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 |
| 004 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 |
| 005 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 |
| 006 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 |
| 007 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 |
| 008 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 |
| 009 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 |
| 010 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 |
| 011 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 |
| 012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 |
| 013 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 |
| 014 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 |
| 015 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 |
| 016 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 |
| 017 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 |
| 018 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 |
| 019 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 |
| 020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 |

RA 5-10-23

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other:

Headspace in VOA Vials (>6mm) : ☐Yes ☒No ☐N/A *If yes look in headspace column

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| AG1U | 1 liter amber glass | BP1U | 1 liter plastic unpres | VG9C | 40 mL clear ascorbic w/ HCl | JGFU | 4 oz amber jar unpres |
| BG1U | 1 liter clear glass | BP3U | 250 mL plastic unpres | DG9T | 40 mL amber Na Thio | JG9U | 9 oz amber jar unpres |
| AG1H | 1 liter amber glass HCL | BP3B | 250 mL plastic NaOH | VG9U | 40 mL clear vial unpres | WGFU | 4 oz clear jar unpres |
| AG4S | 125 mL amber glass H2SO4 | BP3N | 250 mL plastic HNO3 | VG9H | 40 mL clear vial HCL | WPFU | 4 oz plastic jar unpres |
| AG5U | 100 mL amber glass unpres | BP3S | 250 mL plastic H2SO4 | VG9M | 40 mL clear vial MeOH | SP5T | 120 mL plastic Na Thiosulfate |
| AG2S | 500 mL amber glass H2SO4 | BP2Z | 500 mL plastic NaOH + Zn | VG9D | 40 mL clear vial DI | ZPLC | ziploc bag |
| BG3U | 250 mL clear glass unpres | | | | | GN 1 | |
| | | | | | | GN 2 | |

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# Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40261907

40261907

**Client Name:** Tetratech

**Courier:** ☒ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco ☐ Client ☐ Pace Other:

**Tracking #:**

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

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

**Packing Material:** ☒ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

**Thermometer Used** SR - 12 **Type of Ice:** Wet Blue Dry None ☐ Meltwater Only

**Cooler Temperature** Uncorr: 1.5 /Corr: 1.0

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

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

**Person examining contents:**
**Date:** 5-10-23 **Initials:** R.H

**Labeled By Initials:** HRC

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

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

Person Contacted: Date/Time:

Comments/ Resolution:

**PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logi**

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# ATTACHMENT B
# MAG METER ACCURACY TEST REPORT

**Invoice #** **4986**

Tetra Tech Inc
175 N Corporate Drive
Suite 100
Brookfield, WI 53045

L-R Meter Testing & Repair Inc.
servicing since 1980
PO Box 71, Germantown, WI 53022
Cell: 414-303-7370 Office: 262-253-7370
Email: office@lrmeter.com

# Meter Test Report

Test Date: Tuesday, May 23, 2023

## Meter Information

***Size and Type:*** 3" Primo

***Serial Number:*** 29327035

***Manufacturer:*** Badger

***Units:*** Gallons

## Site Information

***Location:*** Lift Station - Cottage Grove @ Hydrite

***Bypass:*** No

***Test Location:*** in line

***Pressure:*** N/A

## Register Readings

| | *Before* | *After* |
|---|---|---|
| ***Total/High:*** | 2008706 | 2011443 |
| ***Low:*** | | |

## Test Details

| *Test Flow Rate (gpm)* | *Before Repair [%]* | *After Repair [%]* |
|---|---|---|
| **102** | **98.5** | **99.6** |

***Comments:*** Meter out of adjustment slightly. Adjusted detector factor to correct discrepancy. Detector factor found set at 81.42 was reset to 82.66.

***Work Performed:*** Isolated meter. Tested and exercised meter, adjusted detector factor and retested meter. Restored meter to normal service.

***Parts Used:*** none

**Signed:** Christopher M. Musbach

Christopher M. Musbach
Service Engineer