September 22, 2023
Discharge Monitoring Report #239
(117-3005050.200)

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

RE: August 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 August 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: August 8, 2023 at 2:40 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:	August 10, 2023
2. Chloride by EPA Method 300.0:	August 11, 2023

TETRA TECH
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, August 8, 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 August 8, 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)**
August 2023 Discharge Volume (July 31 to August 31, 2023)	5,063,252
Cumulative Total Discharge Volume (October 8, 2003, through August 31, 2023)	1,148,347,395

<u>Hydraulic Barrier System Operation and Maintenance History for the Month of August 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 118 gallons per minute (gpm) in August.

Tetra Tech personnel treated extraction well P-164 with muriatic acid solution August 15th to August 17th 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 30 minutes 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 45 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.

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:

Extraction Wells Pumping Rates for August 2023

- P-128: 30.2 to 32.2 gpm
- P-130: 32.6 to 34.2 gpm
- P-164: 53.8 to 64.6 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, August 1st, Tuesday, August 8th, Tuesday, August 15th, Tuesday, August 22nd, and Tuesday, August 29th. 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.

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

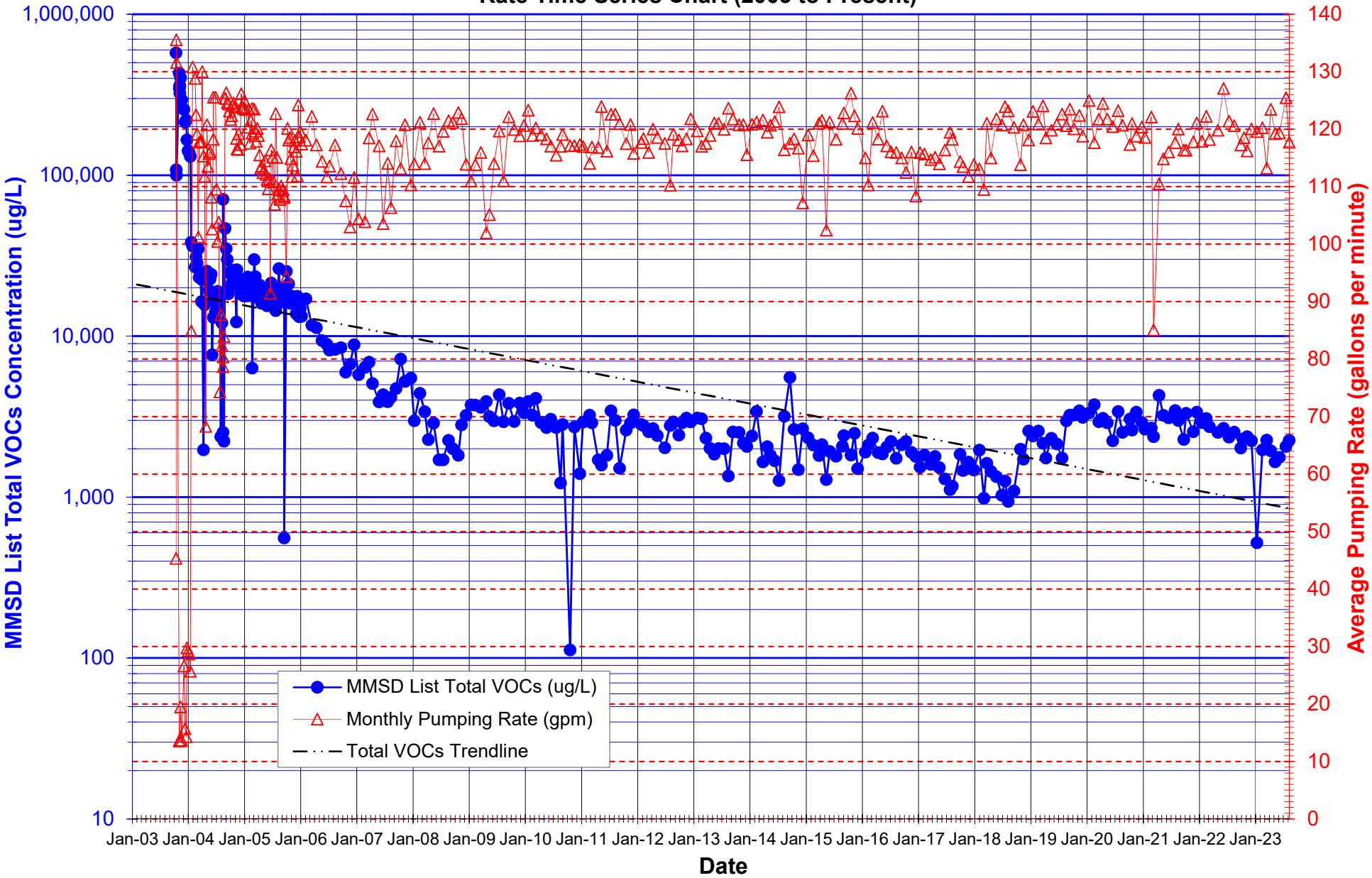
Table 1. Summary of Hydraulic Barrier System Effluent Monitoring VOCs and Chloride Analytical Results, Hydrite Chemical Co., Cottage Grove Facility

Sample Identification					EFFLUENT	
Lab Sample Identification					40266433001	
Date Sample Collected					08/08/23	
Dilution Factor for VOCs					10	
COMPOUND	Units	Target Detection Limits	NR140 ES	NR140 PAL		
1,1,1-Trichloroethane	ug/L	0.30	200	40	133	
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	1610	
Methylene chloride	ug/L	0.32	5.0	0.5	25.0	J
Tetrachloroethene	ug/L	0.41	5.0	0.5	10.8	
Toluene	ug/L	0.29	1000	200	166	
Trichloroethene	ug/L	0.32	5.0	0.5	33.6	
Vinyl chloride	ug/L	0.17	0.2	0.02	92.1	
Xylenes (total)	ug/L	1.0	10000	1000	179	
TOTAL VOCs	ug/L				2249.5	
Total Chlorinated VOCs	ug/L				1904.5	
Chloride	mg/L	2.0	250	125	45.4	

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.

TETRA TECH

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



P:\Hydrite\Cottage Grove\Barrier system\Monitoring\Spreadsheets\Effluent_Chemistry.xlsx

TETRA TECH

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

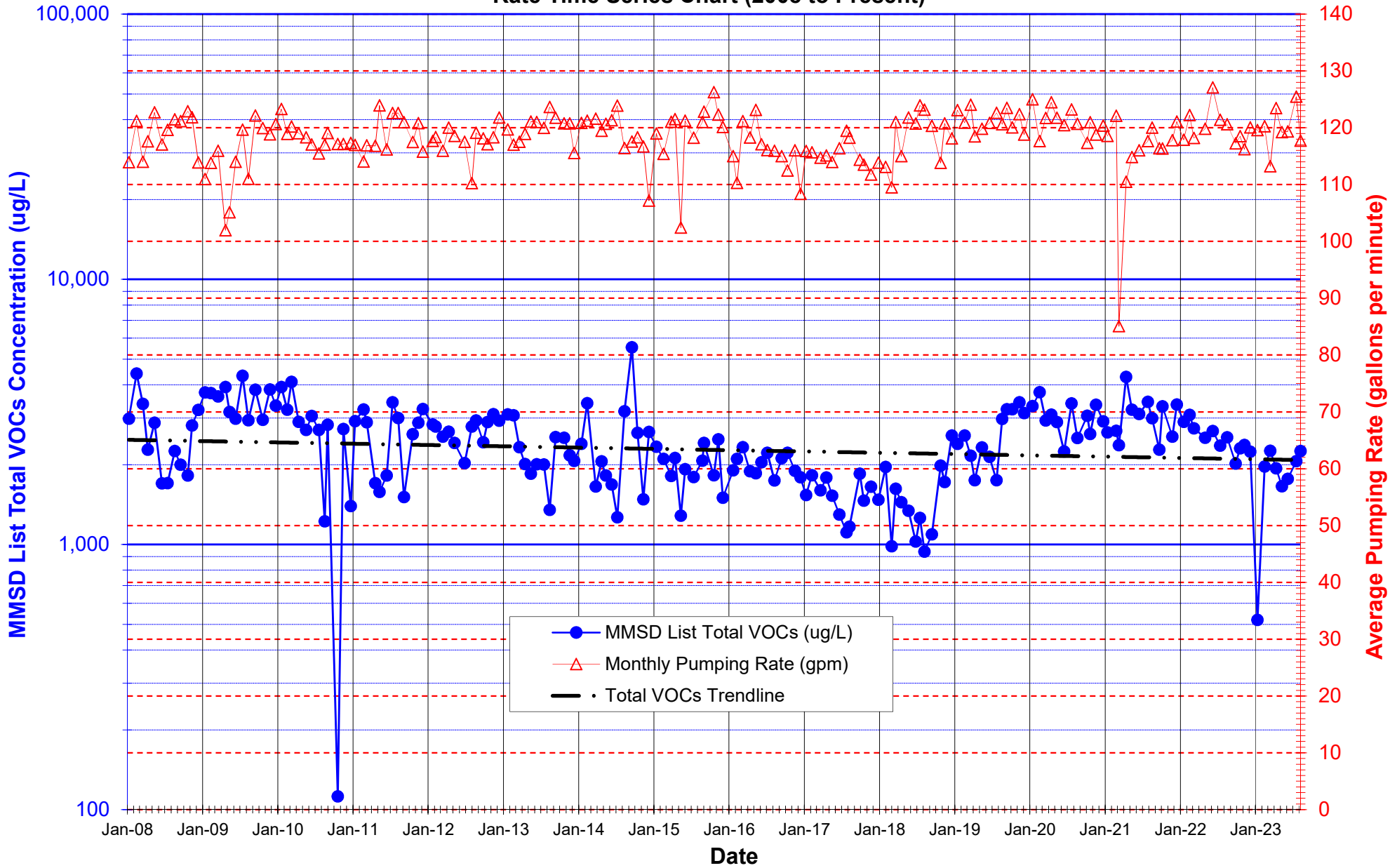


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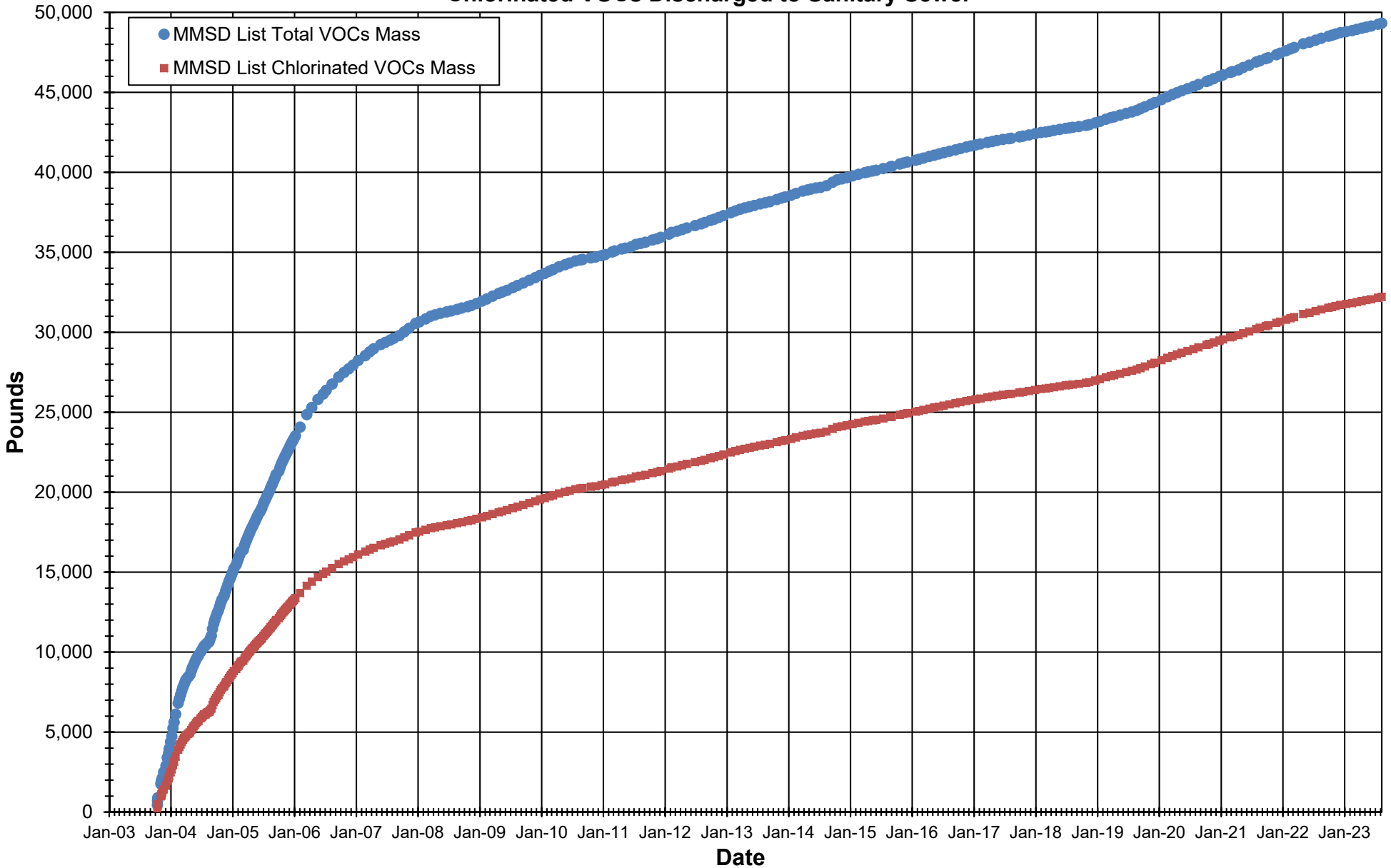
Chart 3. Hydrite Chemical Co. Hydraulic Barrier System Cumulative Mass of MMSD List Total Vocs and Chlorinated VOCs Discharged to Sanitary Sewer



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TETRA TECH

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	LLD	DO	NA

SAMPLE ID	Effluent			
WATER TYPE	Groundwater			
DATE (month/day/year)	8-8-23			
CLOCK TIME (Military)	1440			
FLOW METER READING (gallons)	15198091			
FLOW RATE (gpm)	117.71			
SAMPLING DEVICE	Sample Spigot on 6-inch discharge line			
FIELD TEMPERATURE (°C)	16.05			
pH	7.71			
ELECTRICAL CONDUCTIVITY at 25° C (µS/cm)	794			
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	8/8/23			

TETRA TECH

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

August 17, 2023

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

RE: Project: 117-300SOSO HYDRITE
Pace Project No.: 40266433

Dear Mark Manthey:

Enclosed are the analytical results for sample(s) received by the laboratory on August 09, 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
- Pace Analytical Services - Minneapolis

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: 117-300SOSO HYDRITE
Pace Project No.: 40266433

Pace Analytical Services, LLC - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414
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 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605
Georgia Certification #: 959
GMP+ Certification #: GMP050884
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
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137
Minnesota Dept of Ag Approval: via MN 027-053-137
Minnesota Petrofund Registration #: 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 (A2LA) #: R-036
North Dakota Certification (MN) #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification (1700) #: 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

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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(920)469-2436

SAMPLE SUMMARY

Project: 117-300SOSO HYDRITE
Pace Project No.: 40266433

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40266433001	**EFFLUENT**	Water	08/08/23 14:40	08/09/23 09:20
40266433002	**CF-1**	Water	08/08/23 14:10	08/09/23 09:20
40266433003	**DT-1**	Water	08/08/23 14:00	08/09/23 09:20

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SAMPLE ANALYTE COUNT

Project: 117-300SOSO HYDRITE
Pace Project No.: 40266433

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40266433001	**EFFLUENT**	EPA 8260	CXJ	39	PASI-G
		EPA 300.0	HMB	1	PASI-G
40266433002	**CF-1**	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	CXJ	38	PASI-G
40266433003	**DT-1**	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	CXJ	38	PASI-G
		EPA 1664B OG	JL5	1	PASI-M
		SM 2540D	HNT	1	PASI-G

PASI-G = Pace Analytical Services - Green Bay
PASI-M = Pace Analytical Services - Minneapolis

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PROJECT NARRATIVE

Project: 117-300SOSO HYDRITE
Pace Project No.: 40266433

Method: **ASTM 6520 / EPA 8260 (SIM)**
Description: 8260D (SIM) SPME 1,4-Dioxane
Client: Tetra Tech GEO - Brookfield
Date: August 17, 2023

General Information:
2 samples were analyzed for ASTM 6520 / EPA 8260 (SIM) 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: 117-300SOSO HYDRITE
Pace Project No.: 40266433

Method: **EPA 8260**
Description: 8260 MSV
Client: Tetra Tech GEO - Brookfield
Date: August 17, 2023

General Information:
3 samples were 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.

QC Batch: 451960

L1: Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
- LCS (Lab ID: 2597037)
  - Ethylbenzene
  - Styrene

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

QC Batch: 451960

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40266329005

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
- MS (Lab ID: 2597115)
  - Styrene
- MSD (Lab ID: 2597116)
  - Styrene

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 2597115)

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PROJECT NARRATIVE

Project: 117-300SOSO HYDRITE
Pace Project No.: 40266433

Method: **EPA 8260**
Description: 8260 MSV
Client: Tetra Tech GEO - Brookfield
Date: August 17, 2023

QC Batch: 451960

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40266329005

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

- Tetrachloroethene
- Trichloroethene
- cis-1,2-Dichloroethene

- MSD (Lab ID: 2597116)
  - Tetrachloroethene
  - Trichloroethene
  - cis-1,2-Dichloroethene

R1: RPD value was outside control limits.

- MSD (Lab ID: 2597116)
  - Methylene Chloride

Additional Comments:

Analyte Comments:

QC Batch: 451960

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: 2597115)
  - cis-1,2-Dichloroethene
  - Tetrachloroethene
  - Trichloroethene
- MSD (Lab ID: 2597116)
  - cis-1,2-Dichloroethene
  - Tetrachloroethene
  - Trichloroethene

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PROJECT NARRATIVE

Project: 117-300SOSO HYDRITE
Pace Project No.: 40266433

Method: **EPA 1664B OG**
Description: 1664B HEM, Oil and Grease
Client: Tetra Tech GEO - Brookfield
Date: August 17, 2023

General Information:
1 sample was analyzed for EPA 1664B OG 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.

QC Batch: 900641

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10664649001

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

- MS (Lab ID: 4743268)
  - Oil and Grease

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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Green Bay, WI 54302
(920)469-2436

PROJECT NARRATIVE

Project: 117-300SOSO HYDRITE
Pace Project No.: 40266433

Method: **SM 2540D**
Description: 2540D Total Suspended Solids
Client: Tetra Tech GEO - Brookfield
Date: August 17, 2023

General Information:
1 sample was analyzed for SM 2540D 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.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 451986

PP: The mass of dried residue obtained did not meet the test method requirements based on volume used.
- DT-1 (Lab ID: 40266433003)
  - Total Suspended Solids

T3: Insufficient sample received from client to perform the analysis per EPA method requirements.
- DT-1 (Lab ID: 40266433003)
  - Total Suspended Solids

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Green Bay, WI 54302
(920)469-2436

PROJECT NARRATIVE

Project: 117-300SOSO HYDRITE
Pace Project No.: 40266433

Method: **EPA 300.0**
Description: 300.0 IC Anions
Client: Tetra Tech GEO - Brookfield
Date: August 17, 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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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 117-300SOSO HYDRITE
Pace Project No.: 40266433

Sample: EFFLUENT **Lab ID: 40266433001** Collected: 08/08/23 14:40 Received: 08/09/23 09:20 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		08/10/23 15:52	67-64-1	
Benzene	**<3.0**	ug/L	10.0	3.0	10		08/10/23 15:52	71-43-2	
Bromodichloromethane	**<4.2**	ug/L	10.0	4.2	10		08/10/23 15:52	75-27-4	
Bromoform	**<4.3**	ug/L	10.0	4.3	10		08/10/23 15:52	75-25-2	
Bromomethane	**<11.9**	ug/L	50.0	11.9	10		08/10/23 15:52	74-83-9	
2-Butanone (MEK)	**<65.2**	ug/L	250	65.2	10		08/10/23 15:52	78-93-3	
Carbon disulfide	**<6.5**	ug/L	10.0	6.5	10		08/10/23 15:52	75-15-0	
Carbon tetrachloride	**<3.7**	ug/L	10.0	3.7	10		08/10/23 15:52	56-23-5	
Chlorobenzene	**<8.6**	ug/L	10.0	8.6	10		08/10/23 15:52	108-90-7	
Chloroethane	**332**	ug/L	50.0	13.8	10		08/10/23 15:52	75-00-3	
Chloroform	**<5.0**	ug/L	50.0	5.0	10		08/10/23 15:52	67-66-3	
Chloromethane	**<16.4**	ug/L	50.0	16.4	10		08/10/23 15:52	74-87-3	
Dibromochloromethane	**<26.4**	ug/L	50.0	26.4	10		08/10/23 15:52	124-48-1	
1,1-Dichloroethane	**435**	ug/L	10.0	3.0	10		08/10/23 15:52	75-34-3	
1,2-Dichloroethane	**3.7J**	ug/L	10.0	2.9	10		08/10/23 15:52	107-06-2	
1,1-Dichloroethene	**95.6**	ug/L	10.0	5.8	10		08/10/23 15:52	75-35-4	
cis-1,2-Dichloroethene	**1610**	ug/L	10.0	4.7	10		08/10/23 15:52	156-59-2	
trans-1,2-Dichloroethene	**13.0**	ug/L	10.0	5.3	10		08/10/23 15:52	156-60-5	
1,2-Dichloropropane	**<4.5**	ug/L	10.0	4.5	10		08/10/23 15:52	78-87-5	
cis-1,3-Dichloropropene	**<2.4**	ug/L	10.0	2.4	10		08/10/23 15:52	10061-01-5	
trans-1,3-Dichloropropene	**<2.7**	ug/L	10.0	2.7	10		08/10/23 15:52	10061-02-6	
Ethylbenzene	**28.1**	ug/L	10.0	3.3	10		08/10/23 15:52	100-41-4	L1
2-Hexanone	**<62.8**	ug/L	250	62.8	10		08/10/23 15:52	591-78-6	
Methylene Chloride	**25.0J**	ug/L	50.0	3.2	10		08/10/23 15:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<59.5**	ug/L	250	59.5	10		08/10/23 15:52	108-10-1	
Methyl-tert-butyl ether	**<11.3**	ug/L	50.0	11.3	10		08/10/23 15:52	1634-04-4	
Styrene	**<3.6**	ug/L	10.0	3.6	10		08/10/23 15:52	100-42-5	L1
1,1,2,2-Tetrachloroethane	**<3.8**	ug/L	10.0	3.8	10		08/10/23 15:52	79-34-5	
Tetrachloroethene	**10.8**	ug/L	10.0	4.1	10		08/10/23 15:52	127-18-4	
Toluene	**166**	ug/L	10.0	2.9	10		08/10/23 15:52	108-88-3	
1,1,1-Trichloroethane	**133**	ug/L	10.0	3.0	10		08/10/23 15:52	71-55-6	
1,1,2-Trichloroethane	**<3.4**	ug/L	10.0	3.4	10		08/10/23 15:52	79-00-5	
Trichloroethene	**33.6**	ug/L	10.0	3.2	10		08/10/23 15:52	79-01-6	
Vinyl acetate	**<13.3**	ug/L	50.0	13.3	10		08/10/23 15:52	108-05-4	
Vinyl chloride	**92.1**	ug/L	10.0	1.7	10		08/10/23 15:52	75-01-4	
Xylene (Total)	**179**	ug/L	30.0	10.5	10		08/10/23 15:52	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	70-130		10		08/10/23 15:52	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		10		08/10/23 15:52	2199-69-1	
Toluene-d8 (S)	105	%	70-130		10		08/10/23 15:52	2037-26-5	
300.0 IC Anions	Analytical Method: EPA 300.0								
	Pace Analytical Services - Green Bay								
Chloride	**45.4**	mg/L	2.0	0.43	1		08/11/23 18:26	16887-00-6	

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QUALITY CONTROL DATA

Project: 117-300SOSO HYDRITE
Pace Project No.: 40266433

QC Batch: 452380
QC Batch Method: ASTM 6520 / EPA 8260 (SIM)
Analysis Method: ASTM 6520 / EPA 8260 (SIM)
Analysis Description: 8260D (SIM) SPME 1,4-Dioxane
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40266433002, 40266433003

METHOD BLANK: 2598827 Matrix: Water
Associated Lab Samples: 40266433002, 40266433003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<0.057	0.20	08/16/23 07:36	
1,3-Dioxane (S)	%	107	70-130	08/16/23 07:36	

LABORATORY CONTROL SAMPLE: 2598828

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	25	23.7	95	70-130	
1,3-Dioxane (S)	%			105	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2598829 2598830

Parameter	Units	40266457003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/L	0.90U	25	25	23.1	23.3	92	93	70-130	1	20	
1,3-Dioxane (S)	%						106	107	70-130			

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QUALITY CONTROL DATA

Project: 117-300SOSO HYDRITE
Pace Project No.: 40266433

QC Batch: 451960
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40266433001, 40266433002, 40266433003

METHOD BLANK: 2597036
Matrix: Water
Associated Lab Samples: 40266433001, 40266433002, 40266433003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.30	1.0	08/10/23 07:34	
1,1,2,2-Tetrachloroethane	ug/L	<0.38	1.0	08/10/23 07:34	
1,1,2-Trichloroethane	ug/L	<0.34	1.0	08/10/23 07:34	
1,1-Dichloroethane	ug/L	<0.30	1.0	08/10/23 07:34	
1,1-Dichloroethene	ug/L	<0.58	1.0	08/10/23 07:34	
1,2-Dichloroethane	ug/L	<0.29	1.0	08/10/23 07:34	
1,2-Dichloropropane	ug/L	<0.45	1.0	08/10/23 07:34	
2-Butanone (MEK)	ug/L	<6.5	25.0	08/10/23 07:34	
2-Hexanone	ug/L	<6.3	25.0	08/10/23 07:34	
4-Methyl-2-pentanone (MIBK)	ug/L	<6.0	25.0	08/10/23 07:34	
Acetone	ug/L	<8.6	25.0	08/10/23 07:34	
Benzene	ug/L	<0.30	1.0	08/10/23 07:34	
Bromodichloromethane	ug/L	<0.42	1.0	08/10/23 07:34	
Bromoform	ug/L	<0.43	1.0	08/10/23 07:34	
Bromomethane	ug/L	<1.2	5.0	08/10/23 07:34	
Carbon disulfide	ug/L	<0.65	1.0	08/10/23 07:34	
Carbon tetrachloride	ug/L	<0.37	1.0	08/10/23 07:34	
Chlorobenzene	ug/L	<0.86	1.0	08/10/23 07:34	
Chloroethane	ug/L	<1.4	5.0	08/10/23 07:34	
Chloroform	ug/L	<0.50	5.0	08/10/23 07:34	
Chloromethane	ug/L	<1.6	5.0	08/10/23 07:34	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	08/10/23 07:34	
cis-1,3-Dichloropropene	ug/L	<0.24	1.0	08/10/23 07:34	
Dibromochloromethane	ug/L	<2.6	5.0	08/10/23 07:34	
Ethylbenzene	ug/L	<0.33	1.0	08/10/23 07:34	
Methyl-tert-butyl ether	ug/L	<1.1	5.0	08/10/23 07:34	
Methylene Chloride	ug/L	<0.32	5.0	08/10/23 07:34	
Styrene	ug/L	<0.36	1.0	08/10/23 07:34	
Tetrachloroethene	ug/L	<0.41	1.0	08/10/23 07:34	
Toluene	ug/L	<0.29	1.0	08/10/23 07:34	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	08/10/23 07:34	
trans-1,3-Dichloropropene	ug/L	<0.27	1.0	08/10/23 07:34	
Trichloroethene	ug/L	<0.32	1.0	08/10/23 07:34	
Vinyl acetate	ug/L	<1.3	5.0	08/10/23 07:34	
Vinyl chloride	ug/L	<0.17	1.0	08/10/23 07:34	
Xylene (Total)	ug/L	<1.0	3.0	08/10/23 07:34	
1,2-Dichlorobenzene-d4 (S)	%	102	70-130	08/10/23 07:34	
4-Bromofluorobenzene (S)	%	102	70-130	08/10/23 07:34	
Toluene-d8 (S)	%	106	70-130	08/10/23 07:34	

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QUALITY CONTROL DATA

Project: 117-300SOSO HYDRITE
Pace Project No.: 40266433

LABORATORY CONTROL SAMPLE: 2597037

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	52.5	105	70-134	
1,1,2,2-Tetrachloroethane	ug/L	50	63.2	126	69-130	
1,1,2-Trichloroethane	ug/L	50	58.7	117	70-130	
1,1-Dichloroethane	ug/L	50	58.1	116	70-130	
1,1-Dichloroethene	ug/L	50	57.9	116	74-131	
1,2-Dichloroethane	ug/L	50	56.2	112	70-137	
1,2-Dichloropropane	ug/L	50	56.7	113	80-121	
Benzene	ug/L	50	56.7	113	70-130	
Bromodichloromethane	ug/L	50	58.3	117	70-130	
Bromoform	ug/L	50	48.8	98	70-130	
Bromomethane	ug/L	50	47.1	94	21-147	
Carbon disulfide	ug/L	50	49.4	99	70-130	
Carbon tetrachloride	ug/L	50	48.2	96	80-146	
Chlorobenzene	ug/L	50	56.7	113	70-130	
Chloroethane	ug/L	50	52.3	105	52-165	
Chloroform	ug/L	50	56.8	114	80-123	
Chloromethane	ug/L	50	43.6	87	51-122	
cis-1,2-Dichloroethene	ug/L	50	53.2	106	70-130	
cis-1,3-Dichloropropene	ug/L	50	54.9	110	70-130	
Dibromochloromethane	ug/L	50	50.5	101	70-130	
Ethylbenzene	ug/L	50	60.3	121	80-120	L1
Methyl-tert-butyl ether	ug/L	50	51.1	102	70-130	
Methylene Chloride	ug/L	50	44.1	88	70-130	
Styrene	ug/L	50	70.3	141	70-130	L1
Tetrachloroethene	ug/L	50	51.4	103	70-130	
Toluene	ug/L	50	57.4	115	80-120	
trans-1,2-Dichloroethene	ug/L	50	54.7	109	70-130	
trans-1,3-Dichloropropene	ug/L	50	53.2	106	70-130	
Trichloroethene	ug/L	50	54.1	108	70-130	
Vinyl chloride	ug/L	50	46.9	94	63-134	
Xylene (Total)	ug/L	150	177	118	70-130	
1,2-Dichlorobenzene-d4 (S)	%			100	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Toluene-d8 (S)	%			104	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2597115 2597116

Parameter	Units	40266329005 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	53.3	54.7	107	109	70-134	3	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.38	50	50	61.4	63.5	123	127	61-135	3	20	
1,1,2-Trichloroethane	ug/L	<0.34	50	50	59.2	59.9	118	120	70-130	1	20	
1,1-Dichloroethane	ug/L	<0.30	50	50	57.5	57.8	115	116	70-130	1	20	
1,1-Dichloroethene	ug/L	2.9	50	50	57.0	59.1	108	112	71-130	4	20	
1,2-Dichloroethane	ug/L	<0.29	50	50	55.3	56.8	111	114	70-137	3	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 117-300SOSO HYDRITE
Pace Project No.: 40266433

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2597115 2597116

Parameter	Units	40266329005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloropropane	ug/L	<0.45	50	50	58.5	57.8	117	116	80-121	1	20	
Benzene	ug/L	<0.30	50	50	56.6	57.2	113	114	70-130	1	20	
Bromodichloromethane	ug/L	<0.42	50	50	59.0	61.1	118	122	70-130	3	20	
Bromoform	ug/L	<0.43	50	50	51.4	53.3	103	107	70-133	4	20	
Bromomethane	ug/L	<1.2	50	50	50.8	52.2	102	104	21-149	3	22	
Carbon disulfide	ug/L	<0.65	50	50	47.1	48.5	94	97	70-130	3	20	
Carbon tetrachloride	ug/L	<0.37	50	50	48.8	51.5	98	103	80-146	5	20	
Chlorobenzene	ug/L	<0.86	50	50	57.1	57.7	114	115	70-130	1	20	
Chloroethane	ug/L	<1.4	50	50	45.0	50.1	90	100	52-165	11	20	
Chloroform	ug/L	<0.50	50	50	55.7	56.3	111	113	80-123	1	20	
Chloromethane	ug/L	<1.6	50	50	40.3	43.7	81	87	42-125	8	20	
cis-1,2-Dichloroethene	ug/L	936	50	50	1240	1170	617	476	70-130	6	20	E,M1
cis-1,3-Dichloropropene	ug/L	<0.24	50	50	57.0	57.6	114	115	70-130	1	20	
Dibromochloromethane	ug/L	<2.6	50	50	54.8	55.4	110	111	70-130	1	20	
Ethylbenzene	ug/L	<0.33	50	50	60.1	60.5	120	121	80-121	1	20	
Methyl-tert-butyl ether	ug/L	<1.1	50	50	49.8	54.2	100	108	70-130	8	20	
Methylene Chloride	ug/L	<0.32	50	50	58.0	44.9	116	90	70-130	25	20	R1
Styrene	ug/L	<0.36	50	50	70.2	69.2	140	138	70-132	1	20	M0
Tetrachloroethene	ug/L	2400	50	50	2590	2470	373	133	70-130	5	20	E,M1
Toluene	ug/L	<0.29	50	50	57.0	57.8	114	116	80-120	1	20	
trans-1,2-Dichloroethene	ug/L	1.6	50	50	57.3	58.2	112	113	70-130	2	20	
trans-1,3-Dichloropropene	ug/L	<0.27	50	50	55.9	58.1	112	116	70-130	4	20	
Trichloroethene	ug/L	420	50	50	640	603	440	366	70-130	6	20	E,M1
Vinyl chloride	ug/L	0.27J	50	50	45.1	46.0	90	92	60-137	2	20	
Xylene (Total)	ug/L	<1.0	150	150	175	177	117	118	70-130	1	20	
1,2-Dichlorobenzene-d4 (S)	%						100	99	70-130			
4-Bromofluorobenzene (S)	%						102	103	70-130			
Toluene-d8 (S)	%						103	104	70-130			

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QUALITY CONTROL DATA

Project: 117-300SOSO HYDRITE
Pace Project No.: 40266433

QC Batch: 900641
QC Batch Method: EPA 1664B OG
Analysis Method: EPA 1664B OG
Analysis Description: 1664B HEM, Oil and Grease
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 40266433003

METHOD BLANK: 4743266
Matrix: Water
Associated Lab Samples: 40266433003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Oil and Grease	mg/L	<1.4	5.0	08/17/23 08:30	

LABORATORY CONTROL SAMPLE: 4743267

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Oil and Grease	mg/L	40	34.8	87	78-114	

MATRIX SPIKE SAMPLE: 4743268

Parameter	Units	10664649001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Oil and Grease	mg/L	1.4J	43.5	26.5	58	78-114	M1

SAMPLE DUPLICATE: 4743269

Parameter	Units	10664649002 Result	Dup Result	RPD	Max RPD	Qualifiers
Oil and Grease	mg/L	2.8J	1.6J		18	

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QUALITY CONTROL DATA

Project: 117-300SOSO HYDRITE
Pace Project No.: 40266433

QC Batch: 451986
QC Batch Method: SM 2540D
Analysis Method: SM 2540D
Analysis Description: 2540D Total Suspended Solids
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40266433003

METHOD BLANK: 2597132
Matrix: Water
Associated Lab Samples: 40266433003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Suspended Solids	mg/L	<0.48	1.0	08/10/23 12:01	

LABORATORY CONTROL SAMPLE: 2597133

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Suspended Solids	mg/L	100	104	104	80-120	

SAMPLE DUPLICATE: 2597134

Parameter	Units	40266389001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	82.0	88.0	7	10	

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QUALITY CONTROL DATA

Project: 117-300SOSO HYDRITE
Pace Project No.: 40266433

QC Batch: 452040
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: 40266433001

METHOD BLANK: 2597475 Matrix: Water
Associated Lab Samples: 40266433001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<0.43	2.0	08/11/23 11:57	

LABORATORY CONTROL SAMPLE: 2597476

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.2	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2597477 2597478

Parameter	Units	40266527001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	87.6	100	100	185	181	98	93	90-110	2	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2597479 2597480

Parameter	Units	40266450002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	225	400	400	635	632	102	102	90-110	0	15	

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.

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

QUALIFIERS

Project: 117-300SOSO HYDRITE
Pace Project No.: 40266433

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.

BATCH QUALIFIERS

Batch: 900641

[BE]	Batch extracted by solid phase extraction (SPE).

ANALYTE QUALIFIERS

E	Analyte concentration exceeded the calibration range. The reported result is estimated.
L1	Analyte recovery in the laboratory control sample (LCS) 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.
PP	The mass of dried residue obtained did not meet the test method requirements based on volume used.
R1	RPD value was outside control limits.
T3	Insufficient sample received from client to perform the analysis per EPA method requirements.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 117-300SOSO HYDRITE
Pace Project No.: 40266433

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40266433002	**CF-1**	ASTM 6520 / EPA 8260 (SIM)	452380		
40266433003	**DT-1**	ASTM 6520 / EPA 8260 (SIM)	452380		
40266433001	**EFFLUENT**	EPA 8260	451960		
40266433002	**CF-1**	EPA 8260	451960		
40266433003	**DT-1**	EPA 8260	451960		
40266433003	**DT-1**	EPA 1664B OG	900641		
40266433003	**DT-1**	SM 2540D	451986		
40266433001	**EFFLUENT**	EPA 300.0	452040		

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CHAIN-OF-CUSTODY Analytical Request Document

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 40266433

ALL SHADED AREAS are for LAB USE ONLY

Company: Tetra Tech

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

Address:

Report To: Mark Manthey

Email To: mark.manthey@tetratech.com

Copy To:

Site Collection Info/Address:

Customer Project Name/Number: Hydrite 117-300 5050

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:
[ ] 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 **: 3 U 3 3 U U

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 _____

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:

* 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	TCL VOCs (SW846 8260B)	Chloride (300)	TCL VOCs (SW846 8260B) HYTBE	1,4 dioxane (8260)	Oil and Grease (1664B OG)	TSS (SM 2540D)	Lab Sample # / Comments
Effluent	GW	G	8-8	1440					3	1					001
CF-1	GW	G	8-8	1410							3	3			002
DT-1	GW	G	8-8	1400							3	3	1	1	003

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used: (1)

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

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

Lab Tracking #: 2891265

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:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Laura Dykstra	8/8/23 1700		
CS Logistics	8-9-23 0920	Rodrum Pace	8-9-23 0920

MTJL LAB USE ONLY
Table #: (1)
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Client Name: Tetra Tech

Sample Preservation Receipt Form

Project # 402666433

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																	6																	2.5 / 5
003			1					1									6																	2.5 / 5
004																																		2.5 / 5
005																																		2.5 / 5
006																																		2.5 / 5
007																																		2.5 / 5
008																																		2.5 / 5
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018																																		2.5 / 5
019																																		2.5 / 5
020																																		2.5 / 5

RA 8-9-23

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# : 40266433

40266433

Client Name: Tetra Tech

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 - 120 **Type of Ice:** Wet Blue Dry None ☒ Meltwater Only

Cooler Temperature Uncorr: 5.0 /Corr: 5.0

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: 8-9-23 Initials: CA

Labeled By Initials: GN

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:	☒Yes ☐No	9.
Correct Type: (Pace Green Bay), Pace IR, Non-Pace		
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

Page 2 of 2