

708 Heartland Trail Suite 3000 Madison, WI 53717

608-826-3600 PHONE 608-826-3941 FAX

www.TRCsolutions.com

August 10, 2018

Victor R. Ouimette and Joan Mueller-Ouimette 6814 N. Catherine Rd. Mercer, WI 54547

Subject: Vapor Monitoring Results – Second Sampling Event

313, 315, 317, and 321 E. Front Street, Minocqua, WI 54548

WisDOT ID #0656-50-31 WDNR BRRTS #02-44-000517

Dear Mr. Ouimette and Ms. Mueller-Ouimette:

Our client, the Wisconsin Department of Transportation (WisDOT), has been cooperating with the Wisconsin Department of Natural Resources (WDNR) to evaluate and, if necessary, to remediate residual compounds in the groundwater potentially originating from the former Northwoods Laundry property (405 Front Street, Minocqua, WI). Historic dry cleaning activities at the former Northwoods Laundry property contaminated site soil and groundwater with chlorinated volatile organic compounds, primarily trichloroethene and tetrachloroethene. Information about this site is available in the WDNR's Bureau for Remediation and Redevelopment Tracking System (BRRTS) online, as site #02-44-000517. The WisDOT became responsible for the environmental liability at the property when it acquired a portion of the site for USH 51 construction activities. TRC sent you a letter on November 22, 2017, which contained additional background information and contained an access agreement that you completed prior to the January 31, 2018 property walk-through. TRC performed the first round of sampling at your property on March 21 and 22, 2018, and the results were provided to you in a letter dated April 23, 2018.

Pursuant to a WDNR-approved Work Plan and on behalf of the WisDOT, TRC collected samples of air from beneath the building slab and from indoor air within the lower level of your buildings located at 315, 317, and 321 E Front Street. An indoor air sample was collected from the property at 313 E Front Street; however, due to the presence of sub-slab water, TRC was not able to collect a sub-slab vapor sample from this property. TRC attempted to collect a sample on July 11 and July 24, 2018 as well; however, water remained below the sub-slab and no sample could be collected. An ambient (outdoor) sample was collected in conjunction with the sub-slab and indoor air samples during the June 2018 sampling event; however, due to issues with the laboratory analysis of the sample, the June

Victor R. Ouimette and Joan Mueller-Ouimette August 10, 2018 Page 2

2018 laboratory data was disregarded, and the outdoor air was resampled on July 23 and 24, 2018.

The purpose of this sampling is to determine whether vapors from the identified groundwater contaminants are present beneath and/or inside of your building and, if so, at what levels. Data from the air samples and groundwater quality in the area is being used to assess your property's risk of vapor intrusion.

None of the indoor air or sub-slab vapor samples collected at your property during the June 2018 sampling event exceeded WDNR indoor vapor action levels or sub-slab vapor screening levels, respectively. It is important to understand that detections in the indoor air may not necessarily originate from the groundwater impacts and could be caused by items stored in the building and/or the outdoor air quality. This is why the indoor and ambient air samples are collected.

The attached Figure 1 indicates the location of each air sample collected at your property. The laboratory analytical reports are included in Attachment 1 for your records, and the analytical data are summarized and compared to WDNR screening levels in Table 1.

Based on the analytical results from the March, June, and July vapor sampling events, the WDNR will determine if an additional sampling event is required. At that point, TRC will contact you to coordinate either an additional sampling event or abandonment of the onsite sampling equipment.

If you have any questions, please feel free to contact Ted O'Connell with TRC at (608) 826-3648, Carrie Stoltz (715) 365-8942 with the WDNR, or Sharlene TeBeest with the WisDOT at (608) 266-1476 or 4822 Madison Yards Way, Madison, WI 53705.

Sincerely,

TRC Environmental Corporation

To Olovel

Ted O'Connell Project Manager

cc: Sharlene TeBeest, WisDOT Carrie Stoltz, WDNR Andrew M. Stehn Project Engineer, PE

andrew M. Stel



Victor R. Ouimette and Joan Mueller-Ouimette August 10, 2018 Page 3

Attachments: Figure 1 – Air Sampling Locations

Table 1 – Air Sampling Results Table Attachment 1 – Laboratory Report



# Figure 1 Air Sampling Locations



# Table 1 Air Sampling Results Table

#### Table 1 Vapor Sampling Results Former Northwoods Laundry - Minocqua, Oneida County, WI BRRTS #02-44-000517, WisDOT #0656-50-31

					Leak Check	st = .(4)	н	elium Shroud Te	est			Vapor Sampling		
Map ID	Address	Sample Type	Sample ID	Date	Water Dam <sup>(3)</sup>	Shut-In Test	Background <sup>(5)</sup>	Inside Shroud <sup>(6)</sup>	Sample Port <sup>(7)</sup>	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chlorine
					-	-	%	%	%	μg/m3	μg/m3	μg/m3	μg/m3	μg/m3
		Outdoor		3/21/18 - 3/22/2018	-	-	-	-	-	16.7	< 0.39	<0.49	<0.42	<0.18
-	-	Outdoor	Outdoor - 1	6/26/2018 - 6/27/2018 <sup>(9)</sup>	-	-	-	-	-			See Footnote 10		
		Outdoor		7/23/2018 - 7/24/2018	-	-	-	-	-	0.91 J	<0.42	<0.53	<0.46	<0.20
		Indoor Air	321-IA	3/21/2018 - 3/22/2018	-	-	-	-	=	< 0.43	< 0.40	<0.51	<0.44	<0.19
7	321 E Front St., Minocqua, WI 54548	Indoor Air	321-IA	6/26/2018 - 6/27/2018	-	-	-	-	=	< 0.41	< 0.39	<0.49	<0.42	<0.18
,	321 E FIORE St., Willocqua, WI 54546	Sub-Slab	321-SS	3/22/2018	Pass	Pass	0	43.2	0	8.5	< 0.43	<0.55	<0.47	<0.20
		Sub-Slab	321-33	6/27/2018	Pass	Pass	0	30	0	16.1	< 0.45	<0.57	<0.50	<0.21
	317 E Front St., Minocqua, WI 54548	Indoor Air	317-IA	3/21/2018 - 3/22/2018	-	-	-	-	-	0.48J	< 0.39	<0.49	<0.42	<0.18
		Indoor Air	317-IA	6/26/2018 - 6/27/2018	-	=	=	-	=	< 0.43	< 0.40	<0.51	<0.44	< 0.19
		Sub-Slab	317-SS	3/22/2018	Pass	Pass	0	54	0	41.9	< 0.49	<0.62	<0.54	<0.23
		Sub-Slab	317 33	6/27/2018	Pass	Pass	0	40.6	0	61.0	< 0.46	<0.58	<0.50	<0.22
	Inc	Indoor Air	315-IA	3/21/2018 - 3/22/2018	-	-	-	-	-	< 0.43	< 0.40	<0.51	<0.44	<0.19
	315 E Front St., Minocqua, WI 54548	Indoor Air	313 IA	6/26/2018 - 6/27/2018	-	-	-	-	-	< 0.43	< 0.40	<0.51	<0.44	<0.19
8	313 E Tront St., Willocqua, Wr 54546	Sub-Slab	315-SS	3/22/2018	Pass	Pass	0	23.1	0	2.7	< 0.42	<0.54	<0.47	<0.20
8		Sub-Slab	313 33	6/27/2018	Pass	Pass	0	30	0	<0.48	<0.45	<0.57	<0.50	<0.21
		Indoor Air	313-IA	3/21/2018 - 3/22/2018	-	-	-	-	-	0.93J	< 0.42	<0.53	<0.46	<0.20
		Indoor Air	313 IA	6/26/2018 - 6/27/2018	-	-	-	=	=	<0.44	<0.41	<0.52	<0.45	<0.19
	313 E Front St., Minocqua, WI 54548	Sub-Slab		3/22/2018	Pass	Pass	0	46.4	0	2.4	<0.43	<0.55	<0.47	<0.20
	313 E FIORE St., Willocqua, WI 34346	Sub-Slab	313-SS	6/27/2018	NS <sup>(8)</sup>	NS <sup>(8)</sup>	NS <sup>(8)</sup>	NS <sup>(8)</sup>	NS <sup>(8)</sup>	NS <sup>(8)</sup>	NS <sup>(8)</sup>	NS <sup>(8)</sup>	NS <sup>(8)</sup>	NS <sup>(8)</sup>
		Sub-Slab	313-33	7/11/2018	NS <sup>(8)</sup>	NS <sup>(8)</sup>	NS <sup>(8)</sup>	NS <sup>(8)</sup>	NS <sup>(8)</sup>	NS <sup>(8)</sup>	NS <sup>(8)</sup>	NS <sup>(8)</sup>	NS <sup>(8)</sup>	NS <sup>(8)</sup>
	Sub-Slab 7/24/2018						NS <sup>(8)</sup>	NS <sup>(8)</sup>	NS <sup>(8)</sup>	NS <sup>(8)</sup>	NS <sup>(8)</sup>	NS <sup>(8)</sup>	NS <sup>(8)</sup>	NS <sup>(8)</sup>
								(1)				I	1	
	Small Con	nmercial			Indoor Vapor Action Level <sup>(1)</sup>				180	8.8			28	
			Sub-Slab Vapor Screening Level <sup>(2)</sup>				6,000	290		-	930			

Notes:

VAL = Vapor Action Level

VSL - Vapor Screening Level

- = not applicable

-- = no standard developed for this parameter

Bold text indicates an exceedance of an Indoor Vapor Action Level or Sub-Slab Vapor Screening Level

#### Footnotes:

- (1) Vapor Action Levels for Indoor Air from Regional Screening Tables: https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-november-2017. Uses a 1-in-100,000 excess lifetime cancer risk and HI=1 for screening indoor air.
- (2) An attenuation factor of 0.03 (dilution factor of 33) is applied to the Indoor Vapor Action Levels to determine the Vapor Screening Levels for Sub-Slab Vapor for residential/small commercial buildings.
- (3) Water dam was created by pouring water around the Cox-Colvin Vapor Pin<sup>TM</sup> sample port following installation. If water maintained constant head, then tight seal was verified at the port.
- (4) A vacuum was applied to the sample train and allowed to sit for at least 5 minutes. If there was no noticeable change in the vacuum, the shut-in test passed. (5) A helium meter was connected to the vapor probe and the sub-slab vapors were tested to obtain a background concentration prior to the helium test being completed.
- (6) A shroud was installed around the vapor pin and filled with helium at a concentration between 20% and 50% by volume.
- (7) While helium at a concentration between 20% and 50% by volume was maintained in the shroud, sub-slab vapors were retested using the helium meter. If the concentration was less than 5% by volume, the helium test passed and a sample was collected.
- (8) TRC attempted to collect a sub-slab sample from 313 E. Front Street on multiple occasions, but the presence of sub-slab water prevented a vapor sample collection.
- (9) Due to data validation issues, the June 2018 laboratory data was disregarded and the outdoor air sample was recollected in July 2018.

Prepared by: T. Perkins 3/31/2018 Checked by: A. Schroeder 4/4/2018 Updated by: A. Stehn 4/16/2018 Checked by: A. Schroeder 4/16/2018 Checked by: L. Auner 8/7/2018

# Attachment 1

**Laboratory Report** 





July 06, 2018

Andrew Stehn TRC 708 Heartland Trail Madison, WI 53717

RE: Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437964

# Dear Andrew Stehn:

Enclosed are the analytical results for sample(s) received by the laboratory on July 02, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Carolynne That

Carolynne Trout carolynne.trout@pacelabs.com 1(612)607-6351 Project Manager

Enclosures

cc: Theodore O'Connell, TRC Peggy Popp, TRC Solutions







#### **CERTIFICATIONS**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437964

**Minnesota Certification IDs** 

1700 Elm Street SE, Minneapolis, MN 55414-2485

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 CNMI Saipan Certification #: MP0003 Colorado Certification #: MN00064

Connecticut Certification #: PH-0256

EPA Region 8+Wyoming DW Certification #: via MN 027-

053-137

Florida Certification #: E87605 Georgia Certification #: 959

Guam EPA Certification #: MN00064
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 #: 03086

Maine Certification #: MN00064 Maryland Certification #: 322

Massachusetts Certification #: M-MN064

Louisiana DW Certification #: MN00064

Michigan Certification #: 9909

Minnesota Certification #: 027-053-137

Minnesota Dept of Ag Certification #: via MN 027-053-137

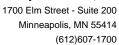
Minnesota Petrofund Certification #: 1240
Mississippi Certification #: MN00064
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647

North Carolina DW Certification #: 27700 North Carolina WW Certification #: 530 North Dakota Certification #: R-036 Ohio DW Certification #: 41244 Ohio VAP Certification #: CL101

Oklahoma Certification #: 9507
Oregon NwTPH 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
Virginia Certification #: 460163

Washington Certification #: C486 West Virginia DW Certification #: 9952 C West Virginia DEP Certification #: 382 Wisconsin Certification #: 999407970

Wyoming UST Certification #: 2926.01 via A2LA





# **SAMPLE SUMMARY**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437964

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10437964001	321-IA	Air	06/27/18 10:35	07/02/18 13:25
10437964002	317-IA	Air	06/27/18 09:57	07/02/18 13:25
10437964003	315-IA	Air	06/27/18 09:57	07/02/18 13:25
10437964004	313-IA	Air	06/27/18 11:27	07/02/18 13:25
10437964005	321-SS	Air	06/27/18 11:32	07/02/18 13:25
10437964006	317-SS	Air	06/27/18 11:07	07/02/18 13:25
10437964007	315-SS	Air	06/27/18 10:58	07/02/18 13:25
10437964008	Unused Can #1526	Air		07/02/18 13:25





# **SAMPLE ANALYTE COUNT**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437964

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10437964001	321-IA	TO-15	CH1	5
10437964002	317-IA	TO-15	CH1	5
10437964003	315-IA	TO-15	CH1	5
10437964004	313-IA	TO-15	CH1	5
10437964005	321-SS	TO-15	CH1	5
10437964006	317-SS	TO-15	CH1	5
10437964007	315-SS	TO-15	CH1	5





#### **PROJECT NARRATIVE**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437964

Method: TO-15

Description: TO15 MSV AIR
Client: TRC-WI
Date: July 06, 2018

#### **General Information:**

7 samples were analyzed for TO-15. 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.

#### Method Blank:

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

# **Laboratory Control Spike:**

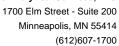
All laboratory control spike compounds were within QC limits with any exceptions noted below.

#### **Duplicate Sample:**

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

#### **Additional Comments:**

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



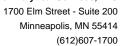


Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437964

Date: 07/06/2018 03:10 PM

Sample: 321-IA	Lab ID: 10437964001		Collected: 06/27/18 10:35			Received: 07	07/02/18 13:25 Matrix: Air			
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual	
TO15 MSV AIR	Analytical	Method: TO-15								
cis-1,2-Dichloroethene	<0.49	ug/m3	1.2	0.49	1.44		07/03/18 11:37	156-59-2		
trans-1,2-Dichloroethene	<0.42	ug/m3	1.2	0.42	1.44		07/03/18 11:37	156-60-5		
Tetrachloroethene	<0.41	ug/m3	0.99	0.41	1.44		07/03/18 11:37	127-18-4		
Trichloroethene	< 0.39	ug/m3	0.79	0.39	1.44		07/03/18 11:37	79-01-6		
Vinyl chloride	<0.18	ug/m3	0.37	0.18	1.44		07/03/18 11:37	75-01-4		





Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437964

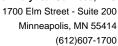
Date: 07/06/2018 03:10 PM

Sample: 317-IA	Lab ID: 10437964002		Collecte	Collected: 06/27/18 09:57			Received: 07/02/18 13:25 Matrix: Air			
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual	
TO15 MSV AIR	Analytical	Method: TO-15	i							
cis-1,2-Dichloroethene	<0.51	ug/m3	1.2	0.51	1.49		07/03/18 12:49	156-59-2		
trans-1,2-Dichloroethene	<0.44	ug/m3	1.2	0.44	1.49		07/03/18 12:49	156-60-5		
Tetrachloroethene	<0.43	ug/m3	1.0	0.43	1.49		07/03/18 12:49	127-18-4		
Trichloroethene	<0.40	ug/m3	0.81	0.40	1.49		07/03/18 12:49	79-01-6		
Vinyl chloride	<0.19	ug/m3	0.39	0.19	1.49		07/03/18 12:49	75-01-4		

07/03/18 13:25 156-60-5

07/03/18 13:25 127-18-4

07/03/18 13:25 79-01-6 07/03/18 13:25 75-01-4





# **ANALYTICAL RESULTS**

Project: 298526 Northwoods/WisDOT

<0.44

<0.43

<0.40

<0.19

ug/m3

ug/m3

ug/m3

ug/m3

Pace Project No.: 10437964

trans-1,2-Dichloroethene

Date: 07/06/2018 03:10 PM

Tetrachloroethene

Trichloroethene

Vinyl chloride

Sample: 315-IA	Lab ID:	10437964003	Collecte	d: 06/27/1	8 09:57	Received: 07/	/02/18 13:25 Ma		
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
cis-1,2-Dichloroethene	<0.51	ug/m3	1.2	0.51	1.49		07/03/18 13:25	156-59-2	

0.44

0.43

0.40

0.19

1.49

1.49

1.49

1.49

1.2

1.0

0.81

0.39



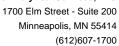


Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437964

Date: 07/06/2018 03:10 PM

Sample: 313-IA	Lab ID: 10437964004		A Lab ID: 10437964004 Collected: 06/27/18 11:27		Collected: 06/27/18 11:27			Received: 07/02/18 13:25 Matrix: Air			
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual		
TO15 MSV AIR	Analytical	Method: TO-15									
cis-1,2-Dichloroethene	<0.52	ug/m3	1.2	0.52	1.52		07/03/18 14:01	156-59-2			
trans-1,2-Dichloroethene	<0.45	ug/m3	1.2	0.45	1.52		07/03/18 14:01	156-60-5			
Tetrachloroethene	<0.44	ug/m3	1.0	0.44	1.52		07/03/18 14:01	127-18-4			
Trichloroethene	<0.41	ug/m3	0.83	0.41	1.52		07/03/18 14:01	79-01-6			
Vinyl chloride	<0.19	ug/m3	0.40	0.19	1.52		07/03/18 14:01	75-01-4			





Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437964

Date: 07/06/2018 03:10 PM

Sample: 321-SS

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
•									

Lab ID: 10437964005

Collected: 06/27/18 11:32 Received: 07/02/18 13:25 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF_	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical	Method: TO-15							
cis-1,2-Dichloroethene	<0.57	ug/m3	1.4	0.57	1.68		07/03/18 15:14	156-59-2	
trans-1,2-Dichloroethene	<0.50	ug/m3	1.4	0.50	1.68		07/03/18 15:14	156-60-5	
Tetrachloroethene	16.1	ug/m3	1.2	0.48	1.68		07/03/18 15:14	127-18-4	
Trichloroethene	<0.45	ug/m3	0.92	0.45	1.68		07/03/18 15:14	79-01-6	
Vinyl chloride	<0.21	ug/m3	0.44	0.21	1.68		07/03/18 15:14	75-01-4	

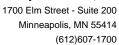


Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437964

Date: 07/06/2018 03:10 PM

Sample: 317-SS	Lab ID: 10437964006		Collected: 06/27/18 11:07			Received: 07	Received: 07/02/18 13:25 Matrix: Air			
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual	
TO15 MSV AIR	Analytical	Method: TO-15								
cis-1,2-Dichloroethene	<0.58	ug/m3	1.4	0.58	1.71		07/03/18 15:50	156-59-2		
trans-1,2-Dichloroethene	<0.50	ug/m3	1.4	0.50	1.71		07/03/18 15:50	156-60-5		
Tetrachloroethene	61.0	ug/m3	1.2	0.49	1.71		07/03/18 15:50	127-18-4		
Trichloroethene	<0.46	ug/m3	0.93	0.46	1.71		07/03/18 15:50	79-01-6		
Vinyl chloride	<0.22	ug/m3	0.44	0.22	1.71		07/03/18 15:50	75-01-4		





Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437964

Date: 07/06/2018 03:10 PM

Sample: 315-SS	Lab ID:	Collected: 06/27/18 10:58			Received: 07	Received: 07/02/18 13:25 Matrix: Air			
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical	Method: TO-15							
cis-1,2-Dichloroethene	<0.57	ug/m3	1.4	0.57	1.68		07/03/18 16:26	156-59-2	
trans-1,2-Dichloroethene	<0.50	ug/m3	1.4	0.50	1.68		07/03/18 16:26	156-60-5	
Tetrachloroethene	<0.48	ug/m3	1.2	0.48	1.68		07/03/18 16:26	127-18-4	
Trichloroethene	<0.45	ug/m3	0.92	0.45	1.68		07/03/18 16:26	79-01-6	
Vinyl chloride	<0.21	ug/m3	0.44	0.21	1.68		07/03/18 16:26	75-01-4	



#### **QUALITY CONTROL DATA**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437964

Date: 07/06/2018 03:10 PM

QC Batch: 548385 Analysis Method: TO-15

QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level

Associated Lab Samples: 10437964001, 10437964002, 10437964003, 10437964004, 10437964005, 10437964006, 10437964007

METHOD BLANK: 2981010 Matrix: Air

Associated Lab Samples: 10437964001, 10437964002, 10437964003, 10437964004, 10437964005, 10437964006, 10437964007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/m3	<0.34	0.81	07/03/18 11:01	
Tetrachloroethene	ug/m3	<0.29	0.69	07/03/18 11:01	
trans-1,2-Dichloroethene	ug/m3	< 0.30	0.81	07/03/18 11:01	
Trichloroethene	ug/m3	<0.27	0.55	07/03/18 11:01	
Vinvl chloride	ug/m3	<0.13	0.26	07/03/18 11:01	

LABORATORY CONTROL SAMPLE:	2981011	Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
cis-1,2-Dichloroethene	ug/m3	40.3	40.1	100	70-136	
Tetrachloroethene	ug/m3	68.9	67.7	98	70-133	
trans-1,2-Dichloroethene	ug/m3	40.3	39.3	97	70-132	
Trichloroethene	ug/m3	54.6	49.7	91	70-135	
Vinyl chloride	ug/m3	26	22.9	88	70-141	

		10437964001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
cis-1,2-Dichloroethene	ug/m3	<0.49	<0.49		25	-
Tetrachloroethene	ug/m3	<0.41	<0.41		25	
rans-1,2-Dichloroethene	ug/m3	< 0.42	< 0.42		25	
Trichloroethene	ug/m3	< 0.39	< 0.39		25	
Vinyl chloride	ug/m3	<0.18	<0.18		25	

SAMPLE DUPLICATE: 2982379						
		10437964004	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
cis-1,2-Dichloroethene	ug/m3	<0.52	<0.52		25	
Tetrachloroethene	ug/m3	< 0.44	< 0.44		25	
trans-1,2-Dichloroethene	ug/m3	< 0.45	< 0.45		25	
Trichloroethene	ug/m3	< 0.41	< 0.41		25	
Vinyl chloride	ug/m3	<0.19	<0.19		25	

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.



Minneapolis, MN 55414 (612)607-1700

#### **QUALIFIERS**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437964

#### **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 and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

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

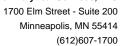
U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

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.

Date: 07/06/2018 03:10 PM





# **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437964

Date: 07/06/2018 03:10 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10437964001	321-IA	TO-15	548385		
10437964002	317-IA	TO-15	548385		
10437964003	315-IA	TO-15	548385		
10437964004	313-IA	TO-15	548385		
10437964005	321-SS	TO-15	548385		
10437964006	317-SS	TO-15	548385		
10437964007	315-SS	TO-15	548385		



AIR: CHAIN-OF-CUSTODY / A The Chain-of-Custody is a LEGAL DOCUMENT. All relevant

WO#: 10437964 

32453 Section A Section B Section C Page: of Required Project Information: Required Client Information: Invoice Information Program Theodore O'Connell 708 Heartland Trail TUST Superfund Emissions Clean Air Act Suite 3000, Modison, W 53717 letrosclutions, con Same as Section A Email To: aste kin Cotresolutions, cap Reporting Units 120030 Location of ma/m 3 Pace Project Manager/Sales Rep. PPMV \_\_\_\_ Sampling by State Phone 26 3665 Fax Requested Due Date/TAT: Project Number: 29 85 2 Pace Profile #: Report Level 111.\_\_\_ (V.\_\_ Canister Pressure (Initial Field - in Hg) Canister Pressure (Final Fleld - in Hg) Section D Required Client Information PID Reading (Client only) COLLECTED Method: 386 **MEDIA** CODE Tedlar Bag AIR SAMPLE ID Commant 120.78 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 Flow Summa 1 Liter Summa Can 1LC 6 Liter Summa Can 6LC Sample IDs MUST BE UNIQUE Can Control Low Volume Puff LVP MEDIA CODE 70.15 Full 1 High Volume Puff HVP Number Number COMPOSITE START ITEM TIME TIME Pace Lab ID 321-IA 001 0459 10:17 275 4 317 -IA 002 003 10:12 315-IA 004 6/27/18 10:58 305 -27-6 06 00(2 007 SS - pulled water no sample collected AES comments: Analyze for PCE, TCE, cis-12-DCE, trans-12-DCE, and VC SAMPLE CONDITIONS RELINQUISHED BY / AFFILIATION DATE ACCEPTED BY / AFFILIATION DATE TIME (A) 7-2-18- 1325 Χ Ϋ́ Ϋ́ ΧX Ϋ́ ¥ Custody Sealed Cooler Samples Intact SAMPLER NAME AND SIGNATURE Received o Temp in ° Page 16 PRINT Name of SAMPLER ORIGINAL SIGNATURE of SAMPLERS DATE Signed (MM / DD / YY)

# Pace Analytical

# Document Name: Air Sample Condition Upon Receipt Document No.: F-MN-A-106-rev.15

Document Revised: 02May2018
Page 1 of 1
Issuing Authority:
Pace Minnesota Quality Office

Air Sample Condition C Upon Receipt	lient Name:	C		Project	#: WO#:		3796		8
	ed Ex	UPS	Speede	e Client		TRC-WI	ac bave.	017 207 2	
Tracking Number: 5	Commercial	LCEPH	Other:	26 <u>8</u> 4600	cont.				, ř.,
Custody Seal on Cooler/E	lox Present?	Yes	QNo s	Seals Intact?	Yes No	Optional: Pro	. Due Date: F	Proj. Name:	
Packing Material: Bu	bble Wrap	☐Bubble Bag	gs <b>A</b> Foam	None	Tin Can Other:		Temn Bi	lank rec:	Ves XINO
ED SPECK 450 PM AssessMed State County PM AssessMed SPECK 450 PM AssessMed SPECK 500 A SPE			/	Spinore, 1		77	, , , ,		
Temp. (TO17 and TO13 sample) Temp should be above freez		orrection Factor	Corrected Temp	) (-c):	Thermom. Used: Date & Initials of Pers	on Evamining	Contents:	287A9155/	928/200
Type of ice Received B		. A			Date & Initials of Pers	on Examining	contents,	100	4.0
Abe of the presented 512	oc 🗆 wer	Fried				Cor	nments:		
Chain of Custody Present	?		Yes	□No	1.				
Chain of Custody Filled O			Yes	□No	2.			0.MI	
Chain of Custody Relinqui	shed?		<b>X</b> ves	□No	3.			W W	
Sampler Name and/or Sig	nature on COC	0?	Yes	Mao DN/A	4.				
Samples Arrived within H	old Time?		<b>X</b> Yes	□No	5.				
Short Hold Time Analysis	(<72 hr)?		Yes	XINo	6.				
Rush Turn Around Time I	Requested?		Yes	<b>∑</b> No	7.				
Sufficient Volume?			XYes	□No	8.		11 8/8		
Correct Containers Used?			Yes	□No	9.				
-Pace Containers Used	?		∭Yes	No		ğı.		- Aryan - L	
Containers Intact?	18		Ves	□No	10.				
Media: (Air Can	Airbag	Filter	TDT	Passive	11. Individua	Illy Certified C	ans Y N	(list which sai	mples)
Is sufficient information a to the COC?	vailable to rec	oncile samples	Yes	□No	12.				
Samples Received: 4	imes	11-78	itting	j		Pressure Ga	uge # 10AIR	26	
	Can	isters	/			Ca	nisters		
Sample Number	Can ID	Flow	Initial Pressure	Finai Pressure	Sample Number	Can ID	Flow Controller	initial Pressure	Final Pressure
321			-2	+5					
317			-3	11					
315			-3	И					
313		***	-3,5	п					
321			6	71					
317-55			-6,5	1/					
315-55			- 6	И					
houseel	1526	1114	-28		3				
CLIENT NOTIFICATION/RE	SOLUTION					Field Data	Required? [	Yes No	)
					Date/Time:				
Comments/Resol									
							79		

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



# Document Name: Sample Condition Upon Receipt Form Document No.:

Document Revised: 02May2018
Page 2 of 2

Document No.: F-MN-L-213-rev.23

Issuing Authority: Pace Minnesota Quality Office

**SCUR Exceptions:** 

Workorder #:

Casania ID	
Sample ID	Container Type/#
·	:

pH Adjustment Log for Preserved Samples

un Ac	ajustne	ur rog ioi	rreserveo				
Type of Preservative	pH Upon Receipt	Date Preservation Adjusted	Time Preservation Adjusted	Amount of Additional Preservative Added	Lot # of Preservative Added	pH After Adjustment	Initials
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		,					-
	i i			1	1	1	
	Type of	Type of pH Upon Preservative Receipt	Type of pH Upon Preservation Preservative Receipt Adjusted	Type of Preservative Receipt Date Preservation Adjusted Adjusted	Type of PH Upon Preservation Adjusted Added Added  Receipt Adjusted Adjusted Added	Type of PH Upon Preservation Preservative Adjusted Added	Type of PH Upon Receipt Adjusted Preservation Adjusted Added Added Added Added Added Added Added Adjustment





August 06, 2018

Andrew Stehn TRC 708 Heartland Trail Madison, WI 53717

RE: Project: 298526 Northwoods/WisDOT

Pace Project No.: 10441517

# Dear Andrew Stehn:

Enclosed are the analytical results for sample(s) received by the laboratory on July 31, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Carolynne That

Carolynne Trout carolynne.trout@pacelabs.com 1(612)607-6351 Project Manager This laboratory was report was modified by TRC to only include analytical data collected within the property limits of 313, 315, 317, and 321 Front Street, Minocqua, WI.

**Enclosures** 

cc: Peggy Popp, TRC Solutions Ken Quinn, TRC







#### **CERTIFICATIONS**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10441517

**Minnesota Certification IDs** 

1700 Elm Street SE, Minneapolis, MN 55414-2485

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 CNMI Saipan Certification #: MP0003 Colorado Certification #: MN00064

Connecticut Certification #: PH-0256

EPA Region 8+Wyoming DW Certification #: via MN 027-

053-137

Florida Certification #: E87605 Georgia Certification #: 959 Guam EPA Certification #: MN00064

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 DW Certification #: MN00064 Maine Certification #: MN00064 Maryland Certification #: 322

Louisiana DEQ Certification #: 03086

Massachusetts Certification #: M-MN064

Michigan Certification #: 9909

Minnesota Certification #: 027-053-137

Minnesota Dept of Ag Certification #: via MN 027-053-137

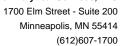
Minnesota Petrofund Certification #: 1240
Mississippi Certification #: MN00064
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647

North Carolina DW Certification #: 27700 North Carolina WW Certification #: 530 North Dakota Certification #: R-036 Ohio DW Certification #: 41244 Ohio VAP Certification #: CL101 Oklahoma Certification #: 9507

Oregon NwTPH 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
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DW Certification #: 9952 C

West Virginia DW Certification #: 9952 West Virginia DEP Certification #: 382 Wisconsin Certification #: 999407970

Wyoming UST Certification #: via A2LA 2926.01





# **SAMPLE SUMMARY**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10441517

Lab ID	Sample ID	Matrix	Date Collected	Date Received	
10441517001	Outdoor-1	Air	07/24/18 09:28	07/31/18 11:00	





# **SAMPLE ANALYTE COUNT**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10441517

Lab ID Sample ID		Method	Analysts	Analytes Reported	
10441517001	Outdoor-1	TO-15	CH1	5	





#### **PROJECT NARRATIVE**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10441517

Method: TO-15

**Description:** TO15 MSV AIR **Client:** TRC-WI

**Date:** August 06, 2018

#### **General Information:**

6 samples were analyzed for TO-15. 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.

#### Method Blank:

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

# **Laboratory Control Spike:**

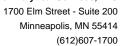
All laboratory control spike compounds were within QC limits with any exceptions noted below.

#### **Duplicate Sample:**

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

#### **Additional Comments:**

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





Project: 298526 Northwoods/WisDOT

Pace Project No.: 10441517

Date: 08/06/2018 02:44 PM

Sample: Outdoor-1	Lab ID:	10441517001	Collected	d: 07/24/1	8 09:28	Received: 07	7/31/18 11:00 M	atrix: Air	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical	Method: TO-15	;						
cis-1,2-Dichloroethene	<0.53	ug/m3	1.2	0.53	1.55		08/01/18 16:14	156-59-2	
trans-1,2-Dichloroethene	<0.46	ug/m3	1.2	0.46	1.55		08/01/18 16:14	156-60-5	
Tetrachloroethene	0.91J	ug/m3	1.1	0.44	1.55		08/01/18 16:14	127-18-4	
Trichloroethene	< 0.42	ug/m3	0.85	0.42	1.55		08/01/18 16:14	79-01-6	
Vinyl chloride	<0.20	ug/m3	0.40	0.20	1.55		08/01/18 16:14	75-01-4	



#### **QUALITY CONTROL DATA**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10441517

Date: 08/06/2018 02:44 PM

QC Batch: 554056 Analysis Method: TO-15

QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 10441517001, 10441517002, 10441517003, 10441517004, 10441517005, 10441517006

METHOD BLANK: 3009622 Matrix: Air

Associated Lab Samples: 10441517001, 10441517002, 10441517003, 10441517004, 10441517005, 10441517006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
cis-1,2-Dichloroethene	 ug/m3	<0.34	0.81	08/01/18 13:21	
Tetrachloroethene	ug/m3	< 0.29	0.69	08/01/18 13:21	
trans-1,2-Dichloroethene	ug/m3	< 0.30	0.81	08/01/18 13:21	
Trichloroethene	ug/m3	< 0.27	0.55	08/01/18 13:21	
Vinyl chloride	ug/m3	<0.13	0.26	08/01/18 13:21	

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
cis-1,2-Dichloroethene	ug/m3	40.3	37.1	92	70-136	
Tetrachloroethene	ug/m3	68.9	60.9	88	70-133	
trans-1,2-Dichloroethene	ug/m3	40.3	35.9	89	70-132	
Trichloroethene	ug/m3	54.6	49.6	91	70-135	
Vinyl chloride	ug/m3	26	21.9	84	70-141	

SAMPLE DUPLICATE: 3010830		40444547004	Divis			
Parameter	Units	10441517001 Result	Dup Result	RPD	Max RPD	Qualifiers
cis-1,2-Dichloroethene	ug/m3	<0.53	<0.53		25	
Tetrachloroethene	ug/m3	0.91J	<0.44		25	
trans-1,2-Dichloroethene	ug/m3	< 0.46	< 0.46		25	
Trichloroethene	ug/m3	< 0.42	< 0.42		25	
Vinyl chloride	ug/m3	<0.20	<0.20		25	

SAMPLE DUPLICATE: 3010831							
		10441409011	Dup		Max		
Parameter	Units	Result	Result	RPD	RPD	Qualifiers	
cis-1,2-Dichloroethene	ug/m3	ND	<0.53		25		
Tetrachloroethene	ug/m3	ND	< 0.44		25	5	
trans-1,2-Dichloroethene	ug/m3	ND	< 0.46		25	5	
Trichloroethene	ug/m3	ND	< 0.42		25	5	
Vinyl chloride	ug/m3	ND	< 0.20		25	5	

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.

(612)607-1700



**QUALIFIERS** 

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10441517

#### **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 and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

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

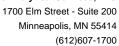
U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

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.

Date: 08/06/2018 02:44 PM





# **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10441517

Date: 08/06/2018 02:44 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10441517001	Outdoor-1	TO-15	554056		



# AIR: CHAIN-OF-CUSTODY /

WO#:10441517

The Chain-of-Custody is a LEGAL DOCUMENT. All relevan

Section A Required Client Information:	Section B Required Project Inform	mation:	Section C Invoice Information:			36	6151 Page: f of f
Company: TRC Enviormetel	Report To: AND N	er Stehn	Attention:	Thodare	-O' Conell	Pı	rogram
Address: 708 Hearthand Trail	Copy To: Theodo	e o'come VI	Company Name:	TRC	:	UST   Superfu	und Emissions Clean Air Act
Sight 3000 Madison wir 5311	tocomelle	to extending	Address:	Sam as	section A	Voluntary Clean Up	Dry Clean RCRA Other
Email To: Asteln@in Solutions.com	Purchase Order No.:	120030	Pace Quote Referen	ce:		Location of	Reporting Units ug/m³mg/m³
Phone: 826 - 365 Fax:	Project Name	eneed S (wis Dot	Pace Project Manage			Sampling by State	PPBV PPMV Other
Requested Due Date/TAT:	Project Number: 2	98526	Pace Profile #:	32	1570	Report Level II.	III IV Other
'Section D Required Client Information AIR SAMPLE ID Sample IDs MUST BE UNIQUE  # WU L	Valid Media Codes  MEDIA Tedlar Bag TB 1 Liter Summa Can 6 Liter Summa Can 6 Liter Summa Can 1LC 6 Liter Summa Can 1LC LVP High Volume Puff LVP Other PM10	MEDIA CODE Reading (Clert only)	COLLECTED  RT COMPINE SNOW  TIME DATE	THE PRESSURE (Initial Field - In Hg)	Summa Flo Can Cont Number Num	rol / 👸 / 🙀	SEE GAMENT
1 Outdoor - 1		6LL 21 7/23/18	0932 7/24/18	0928-28 0	237205	28	X 001
2 Outdoor -2		GL 4 7/73/18	0949712418	0949 -29 75	106303	J   Z	X 002
300 -IA		CLC 4 7/23/18	09557/24/18	6940 -30 -2.S	265408	62	X 003
JIS-IA		GLC 41 7/23/19	1110 72418	1103 -27.5 -2.5	238710	98	X 004
5 300-55		GLC 21 7/24/18	1055 77418	1131 -28.25 -5	3381/6	4 2	K 002
S(S-SS		66 4 724119	12127/24/18	1253-27.25-4.5	169109	74	X 006
7	*****						
8							
o Unused (an As Not	Analyze				3489		
10 Unused Can Cho not	Analyze)				0269		
11 Urusa Con Cla Not:	Analerse \				. 2166		
12	1 2				1		
Comments:	R	ELINQUISHED BY / /		DATE TIME	ACCEPTED BY / AFFILIA		ME SAMPLE CONDITIONS
Analys	- 1	Z		1/2/18 0800	Mag	ZE 7-31-18 11	
TE CS V							
POEI'CE, and	<u></u>	· .			_		N N N
· 102 - DO2 .					 		\(\xi \)
11 Urused (an Cho Mot 12)  Comments: FOR THE COMMENTS: US-1,2-XE  NS-1,2-XE  TOTAL COMMENTS  T	<del>-</del>			NAME AND SIGNATUR	E		d on dy cooler Intact
ORIGI			PRINT Name o		DATE Signer	(MM/DD/YY)	Temp in °C Received on Ice Ice Custody Sealed Cooler Samples Infact
,, ,						-	



# Document Name: Air Sample Condition Upon Receipt Document No.: F-MN-A-106-rev.15

Document Revised: 02May2018
Page 1 of 1
Issuing Authority:
Pace Minnesota Quality Office

Air Sample Condition Upon Receipt	Client Name:	*1		Proje	wct #: WC	#:104	4151	7	
Courier:	Fed Ex	UPS Pace	Speede	ee Client	PM: CLIE		Due Date:	08/07/1	8
Tracking Number:	7476 301	A Company of the Comp	-	17042/7	053	Service Control of the Control	eyer in a	A Section of	ja .
Custody Seal on Cool			No	Seals Intact?	Yes	No Optional: P	roj. Due Date:	Proj. Name:	
Packing Material:	Bubble Wrap	Bubble Ba	gs Foan	n None	☐Tin Can ☐	Other:	Temp E	lank rec:	Yes No
Temp. (TO17 and TO13 s	samples only) (°C):		Corrected Tem	p (°C): 🔀	_ Thermom. Us	ed:		☐G87A91706 ☐G87A91551	
Temp should be above f	reezing to 6°C (	Correction Facto	or:	<u> </u>	Date & Initial	s of Person Examinir	g Contents:	7-31-1	
Type of ice Received [	Blue Wet	None							
						c	omments:		
Chain of Custody Pres	sent?	S.L. Yerk	Ves	□No	1.		1994		
Chain of Custody Fille	d Out?		Yes	□No	2.				
Chain of Custody Reli	nquished?	-	Yes	□No	3.				The same of the sa
Sampler Name and/o	r Signature on CO	C?	Yes	No DN	/A 4.		· ·		
Samples Arrived with	in Hold Time?		Yes	□No	5.				
Short Hold Time Anal	ysis (<72 hr)?		Yes	No	6.		V. Livelle		
Rush Turn Around Tir	ne Requested?		Yes	No	7.		5	CHIANA	
Sufficient Volume?			Yes	□No	8.	17			
Correct Containers Us	sed?		Ves	□No	9.				-
-Pace Containers U	sed?		Yes	□No					
Containers Intact?			Ves	□No	10.				
Media: Air Can	Airbag	Filter	TDT	Passive	11. Ir	ndividually Certified	Cans Y (N	()ist which sa	mples)
Is sufficient information to the COC?	on available to red	concile samples	Yes	□No	12.				10)
Samples Received:	8.					Pressure (	Gauge # 10AIR	26	
Jampies Nece.ved.	Car	nisters					anisters	Miles and	
Sample Number	Can ID	Flow	Initial Pressure	Final Pressure	Sample Num		Flow	initial Pressure	Final Pressure
Outdoor-1			-4	+5	unuseda	an 2166	1251	-27	
-2			-3.5	ìt.					
300-IA			-3	1					
515 - IA			-3	ч					
300-55			-5	is.					
515-55			-5	53					
unusedcan	3489	0986	-28						
11	0269	2006	-29.5	- 224					
CLIENT NOTIFICATION Person Comments/Re	I/RESOLUTION ontacted:		-		Date/Time:	Field Dat	a Required?		
Project Manager Revi	ew: Cara		u t		Dat	e: 8/1/18			

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



708 Heartland Trail Suite 3000 Madison, WI 53717

608-826-3600 PHONE 608-826-3941 FAX

www.TRCsolutions.com

August 10, 2018

Curtis V. Trinko 99 Pond View Dr. Port Washington, NY 11050

Subject: Vapor Monitoring Results – Second Sampling Event

329 E. Front Street and 515 Chippewa Street, Minocqua, WI 54548

WisDOT ID #0656-50-31 WDNR BRRTS #02-44-000517

Dear Mr. Trinko:

Our client, the Wisconsin Department of Transportation (WisDOT), has been cooperating with the Wisconsin Department of Natural Resources (WDNR) to evaluate and, if necessary, to remediate residual compounds in the groundwater potentially originating from the former Northwoods Laundry property (405 Front Street, Minocqua, WI). Historic dry cleaning activities at the former Northwoods Laundry property contaminated site soil and groundwater with chlorinated volatile organic compounds, primarily trichloroethene and tetrachloroethene. Information about this site is available in the WDNR's Bureau for Remediation and Redevelopment Tracking System (BRRTS) online, as site #02-44-000517. The WisDOT became responsible for the environmental liability at the property when it acquired a portion of the site for USH 51 construction activities. TRC sent you a letter on November 22, 2017, which contained additional background information and contained an access agreement that you completed prior to the February 1, 2018 property walk-through. TRC performed the first round of sampling at your property on March 21 and 22, 2018, and the results were provided to you in a letter dated April 23, 2018.

Pursuant to a WDNR-approved Work Plan and on behalf of the WisDOT, TRC collected samples of air from beneath the building slab and from indoor air within your building located at 515 Chippewa Street. A sample was also collected from beneath the building slab of the building located at 329 E. Front Street; however, due to site operations from your tenant's business an indoor air sample was not collected during the second event. The purpose of this sampling is to determine whether vapors from the identified groundwater contaminants are present beneath and/or inside of your building and, if so, at what levels. Data from the air samples and groundwater quality in the area is being used to assess your property's risk of vapor intrusion.

Curtis V. Trinko August 10, 2018 Page 2

Samples were collected from your property on June 26 and 27, 2018. However, due to issues with the laboratory analysis of the samples, the June 2018 laboratory data from your 515 Chippewa Street property was disregarded and that property was resampled on July 23 and 24, 2018. None of the indoor air or sub-slab vapor samples collected at your property during the June/July 2018 sampling event exceeded WDNR indoor vapor action levels or sub-slab vapor screening levels, respectively.

The attached Figure 1 indicates the location of each air sample collected at your property. The laboratory analytical reports are included in Attachment 1 for your records, and the analytical data are summarized and compared to WDNR screening levels in Table 1.

Based on the analytical results from the March and June/July vapor sampling events, the WDNR will determine if an additional sampling event is required. At that point, TRC will contact you to coordinate either an additional sampling event or abandonment of the onsite sampling equipment. We understand that this property may have been sold. If available, please provide us with the contact information that we should use for future property access coordination.

If you have any questions, please feel free to contact Ted O'Connell with TRC at (608) 826-3648, Carrie Stoltz (715) 365-8942 with the WDNR, or Sharlene TeBeest with the WisDOT at (608) 266-1476 or 4822 Madison Yards Way, Madison, WI 53705.

andrew M. Stel

Andrew M. Stehn

Project Engineer, PE

Sincerely,

TRC Environmental Corporation

O Zowel

Ted O'Connell

Project Manager

cc: Sharlene TeBeest, WisDOT

Carrie Stoltz, WDNR

Attachments: Figure 1 – Air Sampling Locations

Table 1 – Air Sampling Results Table Attachment 1 – Laboratory Report



# Figure 1 Air Sampling Locations



# Table 1 Air Sampling Results Table

### Table 1 Vapor Sampling Results Former Northwoods Laundry - Minocqua, Oneida County, WI BRRTS #02-44-000517, WisDOT #0656-50-31

					Leak Check	s (4)	F	lelium Shroud Te	est			Vapor Sampling (8)(9)		
Map ID	Address	Sample Type	Sample ID	Date	Water Dam <sup>(3)</sup>	Shut-In Test <sup>(4)</sup>	Background (5)	Inside Shroud (6)	Sample Port <sup>(7)</sup>	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chlorine
					-	-	%	%	%	μg/m³	μg/m³	μg/m³	μg/m³	μg/m³
		Indoor Air		3/21/2018 - 3/22/2018	-	-	=	-	=	<0.40	<0.38	<0.48	<0.42	<0.18
		Indoor Air		6/26/2018 - 6/27/2018 <sup>(13)</sup>	-	-	=	-	=			See Footnote 10		
<b>∆</b> <sup>(8)(9)</sup>	515 Chippewa St., Minocqua, WI 54548	Indoor Air		7/23/2018 - 7/24/2018	-	-	-	-	-	< 0.43	<0.40	<0.51	<0.44	< 0.19
4	313 Chippewa St., Willocqua, Wi 34346	Sub-Slab		3/22/2018	Pass	Pass	0	36.9	0	<0.48	< 0.45	<0.57	<0.50	<0.21
	Sub-Slab	515-SS	6/27/2018 <sup>(13)</sup>	Pass	Pass	0	36	0	See Footnote 10					
	Sub-Slab		7/24/2018	Pass	Pass	0	49	0	< 0.46	< 0.43	<0.55	<0.47	<0.20	
		Indoor Air	329-IA	3/21/2018 - 3/22/2018	-	-	=	-	=	0.47J	< 0.37	< 0.47	<0.41	<0.18
	329 E Front St., Minocqua, WI 54548	Indoor Air		6/26/2018	-	-	-	-	=	NS <sup>(11)</sup>	NS <sup>(11)</sup>	NS <sup>(11)</sup>	NS <sup>(11)</sup>	NS <sup>(11)</sup>
,	329 E Front St., Willocqua, Wr 34346	Sub-Slab	329-SS	3/22/2018	Pass	Pass	0	31.8	0	11.2	<0.42	<0.53	<0.46	<0.20
		Sub-Slab	329-33	6/27/2018	Pass	Pass	0	50	0	22.2	0.60 J	<0.57	<0.50	<0.21
										-				
	Resider	(8)				Indo	or Vapor Action	Level <sup>(1)</sup>		42	2.1	-	-	1.7
	Resider	itial.				Sub-SI	ab Vapor Screen	ing Level <sup>(2)</sup>		1,400	70		-	57
	Savall Carry	(9)				Indo	or Vapor Action	Level <sup>(1)</sup>		180	8.8	-	-	28
	Small Com	nerciai '				Sub-SI	ab Vapor Screen	ing Level <sup>(2)</sup>		6,000	290	==	-=-	930

Notes:

VAL = Vapor Action Level

VSL - Vapor Screening Level

- = not applicable

-- = no standard developed for this parameter

**Bold** text indicates an exceedance of an Indoor Vapor Action Level or Sub-Slab Vapor Screening Level

#### Footnotes:

- (1) Vapor Action Levels for Indoor Air from Regional Screening Tables: https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-november-2017. Uses a 1-in-100,000 excess lifetime cancer risk and HI=1 for screening indoor air.
- (2) An attenuation factor of 0.03 (dilution factor of 33) is applied to the Indoor Vapor Action Levels to determine the Vapor Screening Levels for Sub-Slab Vapor for residential/small commercial buildings.
- (3) Water dam was created by pouring water around the Cox-Colvin Vapor Pin<sup>TM</sup> sample port following installation. If water maintained constant head, then tight seal was verified at the port.
- (4) A vacuum was applied to the sample train and allowed to sit for at least 5 minutes. If there was no noticeable change in the vacuum, the shut-in test passed.
- (5) A helium meter was connected to the vapor probe and the sub-slab vapors were tested to obtain a background concentration prior to the helium test being completed.

  (6) A shroud was installed around the vapor pin and filled with helium at a concentration between 20% and 50% by volume.
- (7) While helium at a concentration between 20% and 50% by volume was maintained in the shroud, sub-slab vapors were retested using the helium meter. If the concentration was less than 5% by volume, the helium test passed and a sample was collected.
- (8) 515 Chippewa Street is a Residential Home currently used for storage for the adjacent business located at 329 E Front Street. This property was evaluated using the Residential VAL and VSL.
- (9) 329 E Front Street was compared to the WDNR Small Commercial VAL and VSL and 515 Chippewa Street was compared to the residential VAL and VSL.
- $(10) \ Due \ to \ data \ validation \ issues, the \ June \ 2018 \ laboratory \ data \ was \ disregarded \ and \ property \ was \ resampled \ in \ July \ 2018.$
- (11) No indoor air sample was collected from 329 E. Front Street. The business is a bike rental and repair shop and the main garage area doors are open during most of the day for business.

Prepared by: T. Perkins 3/31/2018 Checked by: A. Schroeder 4/4/2018 Updated by: A. Stehn 4/16/2018 Checked by: A. Schroeder 4/16/2018 Updated by: Alia Enright 8/7/2018 Checked by: L. Auner 8/7/2018

### Attachment 1

**Laboratory Report** 



August 06, 2018

Andrew Stehn TRC 708 Heartland Trail Madison, WI 53717

RE: Project: 298526 Northwoods/WisDOT

Pace Project No.: 10441517

### Dear Andrew Stehn:

Enclosed are the analytical results for sample(s) received by the laboratory on July 31, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Carolynne That

Carolynne Trout carolynne.trout@pacelabs.com 1(612)607-6351 Project Manager This laboratory was report was modified by TRC to only include analytical data collected within the property limits 515 Chippewa Street, Minocqua, WI.

**Enclosures** 

cc: Peggy Popp, TRC Solutions Ken Quinn, TRC







### **CERTIFICATIONS**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10441517

**Minnesota Certification IDs** 

1700 Elm Street SE, Minneapolis, MN 55414-2485

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 CNMI Saipan Certification #: MP0003 Colorado Certification #: MN00064

Connecticut Certification #: PH-0256

EPA Region 8+Wyoming DW Certification #: via MN 027-

053-137

Florida Certification #: E87605 Georgia Certification #: 959 Guam EPA Certification #: MN00064

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 DW Certification #: MN00064 Maine Certification #: MN00064 Maryland Certification #: 322

Louisiana DEQ Certification #: 03086

Massachusetts Certification #: M-MN064

Michigan Certification #: 9909

Minnesota Certification #: 027-053-137

Minnesota Dept of Ag Certification #: via MN 027-053-137

Minnesota Petrofund Certification #: 1240
Mississippi Certification #: MN00064
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647

North Carolina DW Certification #: 27700 North Carolina WW Certification #: 530 North Dakota Certification #: R-036 Ohio DW Certification #: 41244 Ohio VAP Certification #: CL101 Oklahoma Certification #: 9507

Oregon NwTPH 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
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DW Certification #: 9952 C

West Virginia DW Certification #: 9952 West Virginia DEP Certification #: 382 Wisconsin Certification #: 999407970

Wyoming UST Certification #: via A2LA 2926.01





### **SAMPLE SUMMARY**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10441517

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10441517004	515-IA	Air	07/24/18 11:03	07/31/18 11:00
10441517006	515-SS	Air	07/24/18 12:53	07/31/18 11:00

(612)607-1700



### **SAMPLE ANALYTE COUNT**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10441517

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10441517004	515-IA	TO-15	CH1	5
10441517006	515-SS	TO-15	CH1	5





### **PROJECT NARRATIVE**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10441517

Method: TO-15

**Description:** TO15 MSV AIR **Client:** TRC-WI

**Date:** August 06, 2018

### **General Information:**

6 samples were analyzed for TO-15. 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.

### Method Blank:

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

### **Laboratory Control Spike:**

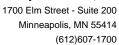
All laboratory control spike compounds were within QC limits with any exceptions noted below.

### **Duplicate Sample:**

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

### **Additional Comments:**

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





### **ANALYTICAL RESULTS**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10441517

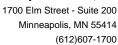
Date: 08/06/2018 02:44 PM

Sample: 515-IA	Lab ID:	10441517004	Collecte	d: 07/24/18	3 11:03	Received: 07	/31/18 11:00 Ma	atrix: Air	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical	Method: TO-15							
cis-1,2-Dichloroethene	<0.51	ug/m3	1.2	0.51	1.49		08/01/18 18:36	156-59-2	
trans-1,2-Dichloroethene	<0.44	ug/m3	1.2	0.44	1.49		08/01/18 18:36	156-60-5	
Tetrachloroethene	<0.43	ug/m3	1.0	0.43	1.49		08/01/18 18:36	127-18-4	
Trichloroethene	<0.40	ug/m3	0.81	0.40	1.49		08/01/18 18:36	79-01-6	
Vinyl chloride	<0.19	ug/m3	0.39	0.19	1.49		08/01/18 18:36	75-01-4	

08/01/18 19:47 127-18-4

08/01/18 19:47 79-01-6

08/01/18 19:47 75-01-4





### **ANALYTICAL RESULTS**

Project: 298526 Northwoods/WisDOT

<0.46

< 0.43

<0.20

ug/m3

ug/m3

ug/m3

Pace Project No.: 10441517

Tetrachloroethene

Date: 08/06/2018 02:44 PM

Trichloroethene

Vinyl chloride

Sample: 515-SS	Lab ID:	10441517006	Collecte	d: 07/24/1	8 12:53	Received: 07	7/31/18 11:00 Ma	atrix: Air	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	TO15 MSV AIR Analytical Method: TO-15								
cis-1,2-Dichloroethene	<0.55	ug/m3	1.3	0.55	1.61		08/01/18 19:47	156-59-2	
trans-1,2-Dichloroethene	<0.47	ug/m3	1.3	0.47	1.61		08/01/18 19:47	156-60-5	

0.46

0.43

0.20

1.61

1.61

1.61

1.1

0.88

0.42



### **QUALITY CONTROL DATA**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10441517

Date: 08/06/2018 02:44 PM

QC Batch: 554056 Analysis Method: TO-15

QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 10441517001, 10441517002, 10441517003, 10441517004, 10441517005, 10441517006

METHOD BLANK: 3009622 Matrix: Air

Associated Lab Samples: 10441517001, 10441517002, 10441517003, 10441517004, 10441517005, 10441517006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
cis-1,2-Dichloroethene	 ug/m3	<0.34	0.81	08/01/18 13:21	
Tetrachloroethene	ug/m3	< 0.29	0.69	08/01/18 13:21	
trans-1,2-Dichloroethene	ug/m3	< 0.30	0.81	08/01/18 13:21	
Trichloroethene	ug/m3	< 0.27	0.55	08/01/18 13:21	
Vinyl chloride	ug/m3	<0.13	0.26	08/01/18 13:21	

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
cis-1,2-Dichloroethene	ug/m3	40.3	37.1	92	70-136	
Tetrachloroethene	ug/m3	68.9	60.9	88	70-133	
trans-1,2-Dichloroethene	ug/m3	40.3	35.9	89	70-132	
Trichloroethene	ug/m3	54.6	49.6	91	70-135	
Vinyl chloride	ug/m3	26	21.9	84	70-141	

SAMPLE DUPLICATE: 3010830		40444547004	Divis			
Parameter	Units	10441517001 Result	Dup Result	RPD	Max RPD	Qualifiers
cis-1,2-Dichloroethene	ug/m3	<0.53	<0.53		25	
Tetrachloroethene	ug/m3	0.91J	<0.44		25	
trans-1,2-Dichloroethene	ug/m3	< 0.46	< 0.46		25	
Trichloroethene	ug/m3	< 0.42	< 0.42		25	
Vinyl chloride	ug/m3	<0.20	<0.20		25	

SAMPLE DUPLICATE: 3010831						
		10441409011	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
cis-1,2-Dichloroethene	ug/m3	ND	<0.53		25	5
Tetrachloroethene	ug/m3	ND	< 0.44		25	5
trans-1,2-Dichloroethene	ug/m3	ND	< 0.46		25	5
Trichloroethene	ug/m3	ND	< 0.42		25	5
Vinyl chloride	ug/m3	ND	< 0.20		25	5

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.

(612)607-1700



**QUALIFIERS** 

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10441517

### **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 and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

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

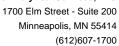
U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

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.

Date: 08/06/2018 02:44 PM





### **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10441517

Date: 08/06/2018 02:44 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10441517004	515-IA	TO-15	554056		
10441517006	515-SS	TO-15	554056		



### AIR: CHAIN-OF-CUSTODY /

WO#:10441517

The Chain-of-Custody is a LEGAL DOCUMENT. All relevan

Section A Section B Required Client Information: Required Project Info	rmation:	Section C Invoice Information:			361	51 Page: of
Company: TRC Environmental Report To: AND	w Stehn	Attention:	Loodere	O'Gnell	Program	1 .
According to the there is the copy to the copy	re o'Come V	Сотрапу Nате:	TRC		UST Superfund	Emissions Clean Air Act
Set 300 Madison we soll to conside	interpretation	Address:	Sum as	Section A	Voluntary Clean Up Di	ry Clean RCRA Other
Email To: AStehn @ in Solutions com Purchase Order No.:	120030	Pace Quote Reference:	:		Location of	Reporting Units ug/m³mg/m³
Phone: 826 - 36CS Fax: Project Name: Use A	wood Sluis Dot	Pace Project Manager/Sal			Sampling by State	PPBV PPMV Other
Requested Due Date/TAT: Project Number: 2	98526	Pace Profile #:		510	Report Level II III	IV Other
Sample IDs MUST BE UNIQUE  Sample IDs MUST BE UNIQUE  Sample IDs MUST BE UNIQUE  Wall Media Codes MEDIA Tedlar Bag 1 Liter Summa Can 6 Liter Summa Can 6 Liter Summa Can 6 Liter Summa Can 6 Liter Summa Can 7 Liter Summa Can 8 Liter Summa Can 9 Liter Summa Can 1 Lit	MEDIA CODE PID Reading (Client only)	COLLECTED  RY COMPOSITE-END/GRAG		Summa Flow Can Control Number Number	Method:	SEE GAMENT
1 Outdoor - 1	6LL 1 7/23/18	0932 7/24/4 097	28 -28 0	2372052	8	100
2 Outdoor -2	GL 4 1/23/18	09497/24/18/09	49 -29 7.5	1063033	4	002
3 300 -IA	CLC 4 172318	0955 7/24/18 694	40-30 -2.5	2654085	ر ا ا ا ا ا م	003
SIS-IA	GL 4 7/23/19	1110 72418 110	3 -27.5 -2.5	2387109	8	004
5 300-55	6th 1 7 24 18	1055 77418 113	31-285-5	3381164	2	002
6 212-22	66 4 7 24118	12127/4/18 125	53-27.25-4.5	1691097	4 )	006
7						
8					400 A A A A A A A A A A A A A A A A A A	
o Unused (an (Do Not Analyze)				3489		
10 Unused Can (Do not Analyze)				0269		
11 Upused (on (Do Not Analyse)				2166		
12						
Comments:	RELINQUISHED BY / A			ACCEPTED BY / AFFILIATION		SAMPLE CONDITIONS
Analys	Z	<u> </u>	is 0800	Chapar	E 7-31-18 1100	J & K
TOE COSTON UC						
POEI CE, and	<u> </u>					* * * *
11 Unused (an (Do Not Analyse)  12  Comments:  Analyse for XE,  CIS-1,2-XE,  PCE, TCE, and  NS-1,2-XCE, and						* * *
м <sup>-3</sup>			ME AND SIGNATURE			in °C ed on ed ordy Cooler s Infact
ORIGINAL		PRINT Name of SAMP		DATE Signed (MM	1/DD/YY)	Temp in °C Received on Ice Custody Sealed Cooler Samples Infact



# Document Name: Air Sample Condition Upon Receipt Document No.: F-MN-A-106-rev.15

Document Revised: 02May2018
Page 1 of 1
Issuing Authority:
Pace Minnesota Quality Office

Air Sample Condition Upon Receipt	Client Name:	*1		Proje	wct #: WC	#:104	4151	7	
Courier:	Fed Ex	UPS Pace	Speede	ee Client	PM: CLIE		Due Date:	08/07/1	8
Tracking Number:	7476 301	A Company of the Comp	-	17042/7	053	Service Control of the Control	eyer in a	A Section of	ja .
Custody Seal on Cool			No	Seals Intact?	Yes	No Optional: P	roj. Due Date:	Proj. Name:	
Packing Material:	Bubble Wrap	Bubble Ba	gs Foan	n None	☐Tin Can ☐	Other:	Temp E	lank rec:	Yes No
Temp. (TO17 and TO13 s	samples only) (°C):		Corrected Tem	p (°C): 🔀	_ Thermom. Us	ed:		☐G87A91706 ☐G87A91551	
Temp should be above f	reezing to 6°C (	Correction Facto	or:	<u> </u>	Date & Initial	s of Person Examinir	g Contents:	7-31-1	
Type of ice Received [	Blue Wet	None							
						c	omments:		
Chain of Custody Pres	sent?	S.L. Yerk	Ves	□No	1.		1994		
Chain of Custody Fille	d Out?		Yes	□No	2.				
Chain of Custody Reli	nquished?	-	Yes	□No	3.				The same of the sa
Sampler Name and/o	r Signature on CO	C?	Yes	No DN	/A 4.				
Samples Arrived with	in Hold Time?		Yes	□No	5.				
Short Hold Time Anal	ysis (<72 hr)?		Yes	No	6.		V. Livelle		
Rush Turn Around Tir	ne Requested?		Yes	No	7.		5	CHIANA	
Sufficient Volume?			Yes □No 8.						
Correct Containers Us	sed?		Ves	□No	9.				-
-Pace Containers U	sed?		Yes	□No					
Containers Intact?			Ves	□No	10.				
Media: Air Can	Airbag	Filter	TDT	Passive	11. Ir	ndividually Certified	Cans Y (N	()ist which sa	mples)
Is sufficient information to the COC?	on available to red	concile samples	Yes	□No	12.				10)
Samples Received:	8.					Pressure (	Gauge # 10AIR	26	
Jampies Nece.ved.	Car	nisters					anisters	Marin-	
Sample Number	Can ID	Flow	Initial Pressure	Final Pressure	Sample Num		Flow	initial Pressure	Final Pressure
Outdoor-1			-4	+5	unuseda	an 2166	1251	-27	
-2			-3.5	ìt.					
300-IA			-3	1					
515 - IA			-3	ч					
300-55			-5	is.					
515-55			-5	53					
unusedcan	3489	0986	-28						
11	0269	2006	-29.5	- 224					
CLIENT NOTIFICATION Person Comments/Re	I/RESOLUTION ontacted:		-		Date/Time:	Field Dat	a Required?		
Project Manager Revi	ew: Cara		u t		Dat	e: 8/1/18			

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





July 10, 2018

Andrew Stehn TRC 708 Heartland Trail Madison, WI 53717

RE: Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437972

### Dear Andrew Stehn:

Enclosed are the analytical results for sample(s) received by the laboratory on July 02, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Carolynne That

Carolynne Trout carolynne.trout@pacelabs.com 1(612)607-6351 Project Manager

**Enclosures** 

cc: Theodore O'Connell, TRC Peggy Popp, TRC Solutions This laboratory report contained a sub-slab and indoor air sample from 515 Chippewa Street, Minocqua, WI. However, due to data validation issues, these samples were disregarded and the data was removed from the report by TRC. The locations were re-sampled on July 23 and 24, 2018. See Pace Analytical Laboratory Report Project Number 10441517.







### **CERTIFICATIONS**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437972

Minnesota Certification IDs

1700 Elm Street SE, Minneapolis, MN 55414-2485

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 CNMI Saipan Certification #: MP0003 Colorado Certification #: MN00064

Connecticut Certification #: PH-0256

EPA Region 8+Wyoming DW Certification #: via MN 027-

053-137

Florida Certification #: E87605 Georgia Certification #: 959

Guam EPA Certification #: MN00064
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 #: 03086

Louisiana DW Certification #: MN00064 Maine Certification #: MN00064 Maryland Certification #: 322

Massachusetts Certification #: M-MN064

Michigan Certification #: 9909

Minnesota Certification #: 027-053-137

Minnesota Dept of Ag Certification #: via MN 027-053-137

Minnesota Petrofund Certification #: 1240
Mississippi Certification #: MN00064
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647

North Carolina DW Certification #: 27700 North Carolina WW Certification #: 530 North Dakota Certification #: R-036 Ohio DW Certification #: 41244 Ohio VAP Certification #: CL101

Oklahoma Certification #: 9507
Oregon NwTPH 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
Virginia Certification #: 460163
Washington Certification #: C486

West Virginia DW Certification #: 9952 C West Virginia DEP Certification #: 382 Wisconsin Certification #: 999407970

Wyoming UST Certification #: 2926.01 via A2LA



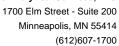


### **SAMPLE SUMMARY**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437972

Lab ID	Sample ID	Matrix	Date Collected	Date Received	
10437972001	515-IA	Air	06/27/18 13:32	07/02/18 13:25	
10437972002	515-SS	Air	06/27/18 14:33	07/02/18 13:25	
10437972003	329-SS	Air	06/27/18 14:02	07/02/18 13:25	





### **SAMPLE ANALYTE COUNT**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437972

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10437972001	515-IA	TO-15	AFV	5
10437972002	515-SS	TO-15	AFV	5
10437972003	329-SS	TO-15	AFV	5





### **PROJECT NARRATIVE**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437972

Method: TO-15

Description: TO15 MSV AIR
Client: TRC-WI
Date: July 10, 2018

### **General Information:**

3 samples were analyzed for TO-15. 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.

### Method Blank:

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

### **Laboratory Control Spike:**

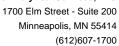
All laboratory control spike compounds were within QC limits with any exceptions noted below.

### **Duplicate Sample:**

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

### **Additional Comments:**

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





### **ANALYTICAL RESULTS**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437972

Date: 07/10/2018 10:17 AM

Sample: 329-SS	Lab ID:	10437972003	Collected	d: 06/27/18	3 14:02	Received: 07	/02/18 13:25 Ma	atrix: Air	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical	Method: TO-15							
cis-1,2-Dichloroethene	<0.57	ug/m3	1.4	0.57	1.68		07/06/18 00:15	156-59-2	
trans-1,2-Dichloroethene	<0.50	ug/m3	1.4	0.50	1.68		07/06/18 00:15	156-60-5	
Tetrachloroethene	22.2	ug/m3	1.2	0.48	1.68		07/06/18 00:15	127-18-4	
Trichloroethene	0.60J	ug/m3	0.92	0.45	1.68		07/06/18 00:15	79-01-6	
Vinyl chloride	<0.21	ug/m3	0.44	0.21	1.68		07/06/18 00:15	75-01-4	



### **QUALITY CONTROL DATA**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437972

Date: 07/10/2018 10:17 AM

QC Batch: 548724 Analysis Method: TO-15

QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level

Associated Lab Samples: 10437972001, 10437972002, 10437972003

METHOD BLANK: 2982932 Matrix: Air

Associated Lab Samples: 10437972001, 10437972002, 10437972003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/m3	0.42J	0.81	07/05/18 13:26	
Tetrachloroethene	ug/m3	< 0.29	0.69	07/05/18 13:26	
trans-1,2-Dichloroethene	ug/m3	< 0.30	0.81	07/05/18 13:26	
Trichloroethene	ug/m3	0.48J	0.55	07/05/18 13:26	
Vinyl chloride	ug/m3	<0.13	0.26	07/05/18 13:26	

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
cis-1,2-Dichloroethene	ug/m3	40.3	49.7	123	70-136	
Tetrachloroethene	ug/m3	68.9	74.6	108	70-133	
trans-1,2-Dichloroethene	ug/m3	40.3	43.7	109	70-132	
Trichloroethene	ug/m3	54.6	67.8	124	70-135	
Vinyl chloride	ug/m3	26	29.5	114	70-141	

		10437970001	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
cis-1,2-Dichloroethene	ug/m3	2.3	2.3	2	25	
Tetrachloroethene	ug/m3	27.7	31.4	12	25	
trans-1,2-Dichloroethene	ug/m3	< 0.47	< 0.47		25	
Trichloroethene	ug/m3	10.8	11.4	5	25	
Vinyl chloride	ug/m3	< 0.20	< 0.20		25	

SAMPLE DUPLICATE: 2984088						
		10437970002	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
cis-1,2-Dichloroethene	ug/m3	1.5	1.5	2	25	
Tetrachloroethene	ug/m3	28.0	30.0	7	25	
trans-1,2-Dichloroethene	ug/m3	< 0.47	< 0.47		25	
Trichloroethene	ug/m3	9.4	10	6	25	
Vinyl chloride	ug/m3	<0.20	<0.20		25	

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.

(612)607-1700



QUALIFIERS

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437972

### **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 and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

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

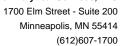
U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

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.

Date: 07/10/2018 10:17 AM





### **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: 298526 Northwoods/WisDOT

Pace Project No.: 10437972

Date: 07/10/2018 10:17 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10437972001	515-IA	TO-15	548724		
10437972002	515-SS	TO-15	548724		
10437972003	329-SS	TO-15	548724		



# AIR: CHAIN-OF-CUSTODY / A The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fi

WO#:10437972

Section A Section B Required Client Information: Required Project In	formation:	Section C Invoice Information:						31925	Page: of
Required Client Information:  Company: TRC  Address: Heartland Tail, Suite this Copy To: The Modison, WIS3717  Email To: ha Connell Purchase Order Name; To Copy To: To Copy To: The Modison WIS3717  Email To: ha Copy To: The Modison WIS3717  Project Name; To Copy To	drew Stehn	Attention: TW	eadore	O'Ces	nn all			Program	
Address: Heaveland Tail, Suite & Sopy To: The	dore O' Cornell	Company Name:	TRC				F UST F	Superfund F Emiss	sions Clean Air Act
Medison, WI 53717 Inconnell	Stresolutions.co	Address: Sam	re as	seet	tion A		Voluntary Cl	ean Up Tory Clean	RCRA Other
astehn@trcsolutions.com	30	Pace Quote Reference	<u></u>		· mana^		Location of	WI	Reporting Units ug/m³ mg/m³ PPBV PPMV
Project Name:  Requested Due Date/TAT: Standard Project Number:	1000/WISDOT 298526	Pace Project Manage	ensales Rep.	(2 ) (S)	_ 71.<		Sampling by S		Other
Valid Media Codes	298526	<u> </u>	<u> </u>	5000	-34S	70 <u> </u>	Report Level Method:	# # IV / / / / / /	
AIR SAMPLE ID  Sample IDs MUST BE UNIQUE  Low Volume Puff LVF High Volume Puff HV	CODE ading (Client of	COLLECTED  RT COMPIEND/C		(Initial Field - in Hg) Canister Pressure (Final Field - in Hg)	Summa Can Number	Flow Control Number		\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Comment
Other PM	7.0	TIME DATE	THE				7 2/2/2/2	/&/&/&/&/&	Pace Lab ID
1 515-IA 2 S15-SS	6CC 6/26/18		15:32 3	0-5	1 199	0533	3		
	6/27/18		14:33-3	30 - 5 18 -6	0738	0 / 2 -	7		003
3 329 - 55	90118	13. LD V	14,02-1	8-6	1 3 02	1 6 6	<del>'</del>		003
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Comments:	RELINQUISHED BY / A		DATE   6/28/19 1 -	TIME 2:	ACCEPTED BY		<u>'</u>		AMPLE CONDITIONS
Analyze for PCE, TCE, is-1,2DCE, trans-1,2DCE	ACIANINA	eary IKS		5.75	<i>CE</i>	a pare	7-2-18	1325 -	A'N
15-12DCE trans-12DCC					<del></del>				N N N N N N N N N N N N N N N N N N N
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Page		PRINT Name of	SAMPLER:					Temp in °	Received on Ice Custody Sealed Cooler Samples Intact
Page ORIGINAL ORIGINAL of		SIGNATURE of	SAMPLER;			DATE Signed (MM / DI	D/YY)	Tet Tet	Receiv los Custo Sealed o
of 14								1	

### Pace Analytical

### Document Name: Air Sample Condition Upon Receipt Document No.:

Document Revised: 02May2018 Page 1 of 1 Issuing Authority:

Document No.: Issuing Authority:
F-MN-A-106-rev.15 Pace Minnesota Quality Office

Air Sample Condition ( Upon Receipt	lient Name:	C :		Projec	**: WO#	: 1043	3797	2	material and a second
į	Fed Ex Commercial	□UPS □Pace	Speede		PM: CT1 CLIENT:		ue Date:	07/10/18	
Tracking Number:	ree e	LCEP N	ons	# # 	I				
Custody Seal on Cooler/	Box Present?	□Yes	No	Seals Intact?	Yes No	Optional: Pro	, Due Date:	Proj. Name:	17-2
Packing Material: Bu	abble Wrap	Bubble Ba	gs 🆄 Foam	None [	Tin Can Othe	r:	Temp B	lank rec: 🔲	Yes <b>X</b> No
Temp. (TO17 and TO13 sam	ples only) (°C):	(	Corrected Temp	o (°C):	Thermom, Used:		3k	G87A917060	
Temp should be above free	zing to 6°C C	orrection Facto	Madesen ET	EIR.	Date & Initials of P	erson Examining	Contents:	687A91551	2718
Type of ice Received 🔲 B	lue	None		<del></del>				# - 1	
	****	<i>'</i>	***			Cor	nments:		
Chain of Custody Present	?		₩Yes	□No	1.	••			
Chain of Custody Filled O	ut?	1.	<b>1</b> Yes	□No	2.				
Chain of Custody Relinqu	ished?		Ves	□No	3.		©	(0	
Sampler Name and/or Sig	gnature on COC	<b>-</b>	Yes	ZÃNO DN/	A 4.	33.20			
Samples Arrived within H	old Time?		Yes	□No	5.				
Short Hold Time Analysis	s (<72 hr)?		☐Yes	No	6.				***
Rush Turn Around Time	Requested?		Yes	No	7.				****
Sufficient Volume?		N. B. L. L.	XYes	□No	8.	10 99			
Correct Containers Used	?		Yes	□No	9.		14		
-Pace Containers Used	1?	or orders deposit	Yes	□No					
Containers Intact?	-		Yes	□No	10.			-	
Media: (Air Can)	Airbag	Filter	TDT	Passive	11. Individ	lually Certified C	ans Y N	dist which sar	mples)
Is sufficient information a to the COC?	available to rec	oncile samples	XVes	∏No	12.				
121	r	1 1000					10AID	36	
Samples Received: [ [	inves	1-13	ittlag	<u> </u>		Pressure Ga	uge # 10AIR	26	
	Can	isters Flow	Initial	Final		Ca	nisters Flow	Initial	Final
Sample Number	Can ID	Controller	Pressure	Pressure	Sample Number	Can ID	Controller	Pressure	Pressure
515 FA			-4	+5	1		A C ( )		
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Comments/Reso							2400.3		
Commence, Neson								2.0	
		25,822-1							
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Project Manager Review	: (awl	yme h	ant		Date: 7	/2/18			

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

	Document Name:	Document Re	
Pace Analytical*	Sample Condition Upon Receipt Form	Page	
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	F-MN-L-213-rev.23	Pace Minnesot	

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Issuing Authority:
Pace Minnesota Quality Office

**SCUR Exceptions:** 

Workorder #:

Issue	Sample ID	Container Type/#			
7476 3008 0353					
0390	:				
03-16					
0346 0335					
0379					
0380					
0380 0405 0368					
0368					

pH Adjustment Log for Preserved Samples

pri Adjustifient Log for Fleserved Samples									
			Date	Time	Amount of Additional	Lot#of			
	Type of	pH Upon	Preservation	Preservation	Preservative	Preservative	pH After		
Sample ID	Preservative	Receipt	Adjusted	Adjusted	Added	Added	Adjustment	Initials	
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