DRAFT

TABLE 1. PASSIVE SUB-SLAB VENTILATION VAPOR ANALYTICAL RESULTS

733 N 12TH ST
(FORMERLY 1201-1221 W WELLS ST)
MILWAUKEE, WISCONSIN
RAMBOLL PROJECT NO. 1690005255-001

Parameters		Residential		Small Commercial		Large Commercial / Industrial		North (Sub-Slab)	South (Sub-Slab)
Analyte (µg/m^3)	CAS No.	Indoor Air VAL[(1)]	Sub-Slab Vapor VRSL[(1)]	Indoor Air VAL[(1)]	Sub-Slab Vapor VRSL[(1)]	Indoor Air VAL[(1)]	Sub-Slab Vapor VRSL[(1)]	8/17/2021	8/17/2021
Benzene	71-43-2	3.6	120	16	530	16	1,600	0.75	1.1
Naphthalene	91-20-3	0.83	28	3.6	120	3.6	360	<4.4	<4.4
Tetrachloroethylene	127-18-4	42	1,400	180	6,000	180	18,000	<0.59	6.5
Toluene	108-88-3	5,200	170,000	22,000	730,000	22,000	2,200,000	4.0	2.7
Trichloroethylene	79-01-6	2.1	70	8.8	290	8.8	880	4.7	2.0

Notes:

Standards based on May 2021 USEPA Regional Screening Level (RSL) Tables.

Samples analyzed using USEPA Method TO-15. Only the 5 VOC shown were analyzed and reported based on historic results.

µg/m^3 = Microgram per cubic meter

VAL= Indoor Air Vapor Action Level

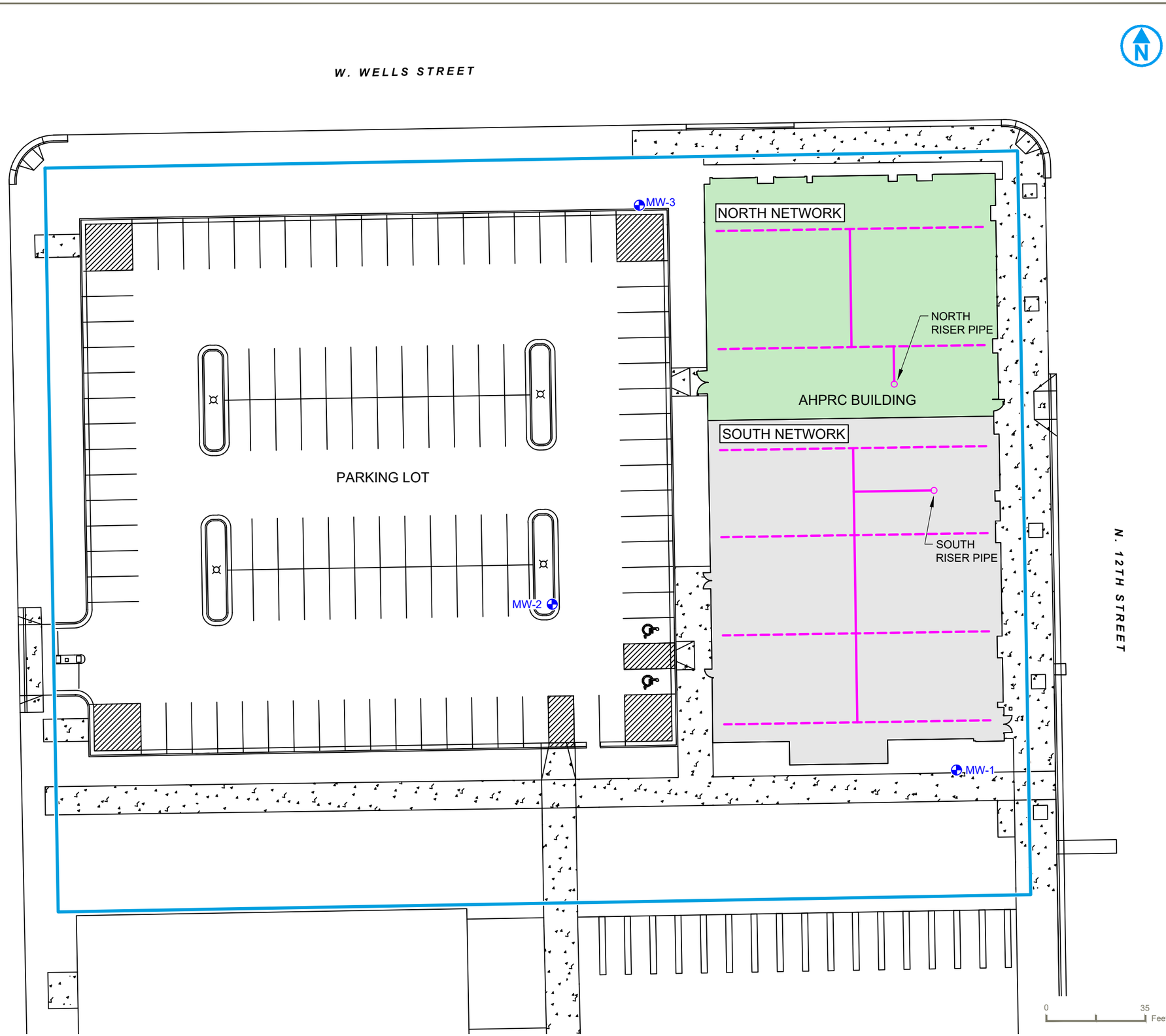
VRSL = Vapor Risk Screening Level

[(1)] Indoor Air VALs and Sub-Slab Vapor VRSLs are based on an USEPA risk level of 1 in 100,000 or a Hazard Index of 1, whichever is more stringent.

A = Exceeds Residential VRSL

B = Exceeds Small Commercial VRSL

C = Exceeds Large Commercial/Industrial VRSL



PROPERTY BOUNDARY (APPROXIMATE)

MONITORING WELL

CONCRETE SLAB ON-GRADE

BASEMENT CONCRETE SLAB

PASSIVE VENTILATION SYSTEM SOLID PIPE

PASSIVE VENTILATION SYSTEM SLOTTED PIPE

VERTICAL RISER PIPE

NOTES

1. ALL INTERIOR FEATURES ARE APPROXIMATE.
2. PASSIVE SUB-SLAB VENTILATION SYSTEM PIPING LAYOUT PROVIDED BY GRAEF-USA AND ARE APPROXIMATE.
3. NORTH VAPOR SAMPLE COLLECTED FROM THE GROUND LEVEL RISER PIPE ACCESS IN DROP-CEILING.
4. SOUTH VAPOR SAMPLE COLLECTED FROM ROOF TOP RISER PIPE.

PASSIVE SUB-SLAB VENTILATION SYSTEM LAYOUT AND VAPOR SAMPLE LOCATIONS

AHPRC
MARQUETTE UNIVERSITY
733 N 12TH STREET
(FORMERLY 1201-1221 W WELLS STREET)
MILWAUKEE, WISCONSIN

DRAFT

FIGURE 6

RAMBOLL US CONSULTING, INC.
A RAMBOLL COMPANY

RAMBOLL

L:\Loop Project Files_CAD\1690005255-001_Marquette University\Acad\2021-09\06_Sub-Slab Ventilation System Layout.dwg

PROJECT: 1690005255-001 DATED: 9/9/2021 DESIGNER: HJW

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

August 26, 2021

Paul Lindquist
Ramboll US Consulting, Inc.
234 West Florida St.
5th floor
Milwaukee, WI 53204

RE: Project: 1690005255 AHPRC
Pace Project No.: 10575439

Dear Paul Lindquist:

Enclosed are the analytical results for sample(s) received by the laboratory on August 20, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Minneapolis

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

Sincerely,

Carolynne Trout

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

Enclosures

cc: Donna Volk, Ramboll US Consulting, Inc.

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

CERTIFICATIONS

Project: 1690005255 AHPRC
Pace Project No.: 10575439

Pace Analytical Services, LLC - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
A2LA Certification #: 2926.01*
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
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 #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification (1700) #: CL101
Ohio VAP Certification (1800) #: CL110*
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563*
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).

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

SAMPLE SUMMARY

Project: 1690005255 AHPRC
Pace Project No.: 10575439

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10575439001	**NORTH**	Air	08/17/21 11:40	08/20/21 11:40
10575439002	**SOUTH**	Air	08/17/21 10:15	08/20/21 11:40
10575439003	**NORTH Cert# 2457**	Air		08/20/21 11:40
10575439004	**SOUTH Cert# 2536**	Air		08/20/21 11:40

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: 1690005255 AHPRC
Pace Project No.: 10575439

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10575439001	**NORTH**	TO-15	AFV	5
10575439002	**SOUTH**	TO-15	AFV	5
10575439003	**NORTH Cert# 2457**	TO-15	MJL	61
10575439004	**SOUTH Cert# 2536**	TO-15	MJL	61

PASI-M = Pace Analytical Services - Minneapolis

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

PROJECT NARRATIVE

Project: 1690005255 AHPRC
Pace Project No.: 10575439

Method: **TO-15**
Description: TO15 MSV AIR
Client: Ramboll Environ- WI AIR
Date: August 26, 2021

General Information:
2 samples were analyzed for TO-15 by Pace Analytical Services Minneapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

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

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

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

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

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:

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

PROJECT NARRATIVE

Project: 1690005255 AHPRC
Pace Project No.: 10575439

Method: **TO-15**
Description: Individual Can Certification
Client: Ramboll Environ- WI AIR
Date: August 26, 2021

General Information:
2 samples were analyzed for TO-15 by Pace Analytical Services Minneapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

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

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

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

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

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.

Additional Comments:

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

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

ANALYTICAL RESULTS

Project: 1690005255 AHPRC
Pace Project No.: 10575439

Sample: NORTH **Lab ID: 10575439001** Collected: 08/17/21 11:40 Received: 08/20/21 11:40 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
Benzene	**0.75**	ug/m3	0.66	0.23	2.02		08/24/21 23:42	71-43-2	
Naphthalene	**<4.4**	ug/m3	5.4	4.4	2.02		08/24/21 23:42	91-20-3	
Tetrachloroethene	**<0.59**	ug/m3	1.4	0.59	2.02		08/24/21 23:42	127-18-4	
Toluene	**4.0**	ug/m3	1.5	0.49	2.02		08/24/21 23:42	108-88-3	
Trichloroethene	**4.7**	ug/m3	1.1	0.40	2.02		08/24/21 23:42	79-01-6	

Sample: SOUTH **Lab ID: 10575439002** Collected: 08/17/21 10:15 Received: 08/20/21 11:40 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
Benzene	**1.1**	ug/m3	0.66	0.23	2.02		08/25/21 00:17	71-43-2	
Naphthalene	**<4.4**	ug/m3	5.4	4.4	2.02		08/25/21 00:17	91-20-3	
Tetrachloroethene	**6.5**	ug/m3	1.4	0.59	2.02		08/25/21 00:17	127-18-4	
Toluene	**2.7**	ug/m3	1.5	0.49	2.02		08/25/21 00:17	108-88-3	
Trichloroethene	**2.0**	ug/m3	1.1	0.40	2.02		08/25/21 00:17	79-01-6	

Sample: NORTH Cert# 2457 **Lab ID: 10575439003** Collected: Received: 08/20/21 11:40 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
Acetone	**<1.8**	ug/m3	6.0	1.8	1		08/10/21 10:01	67-64-1	
Benzene	**<0.11**	ug/m3	0.32	0.11	1		08/10/21 10:01	71-43-2	
Benzyl chloride	**<0.89**	ug/m3	2.6	0.89	1		08/10/21 10:01	100-44-7	
Bromodichloromethane	**<0.24**	ug/m3	1.4	0.24	1		08/10/21 10:01	75-27-4	
Bromoform	**<1.6**	ug/m3	5.2	1.6	1		08/10/21 10:01	75-25-2	
Bromomethane	**<0.15**	ug/m3	0.79	0.15	1		08/10/21 10:01	74-83-9	
1,3-Butadiene	**<0.12**	ug/m3	0.45	0.12	1		08/10/21 10:01	106-99-0	
2-Butanone (MEK)	**<0.46**	ug/m3	3.0	0.46	1		08/10/21 10:01	78-93-3	
Carbon disulfide	**<0.13**	ug/m3	0.63	0.13	1		08/10/21 10:01	75-15-0	
Carbon tetrachloride	**<0.28**	ug/m3	1.3	0.28	1		08/10/21 10:01	56-23-5	
Chlorobenzene	**<0.16**	ug/m3	0.94	0.16	1		08/10/21 10:01	108-90-7	
Chloroethane	**<0.22**	ug/m3	0.54	0.22	1		08/10/21 10:01	75-00-3	
Chloroform	**<0.18**	ug/m3	0.50	0.18	1		08/10/21 10:01	67-66-3	
Chloromethane	**<0.085**	ug/m3	0.42	0.085	1		08/10/21 10:01	74-87-3	
Cyclohexane	**<0.22**	ug/m3	1.8	0.22	1		08/10/21 10:01	110-82-7	
Dibromochloromethane	**<0.52**	ug/m3	1.7	0.52	1		08/10/21 10:01	124-48-1	
1,2-Dibromoethane (EDB)	**<0.30**	ug/m3	0.78	0.30	1		08/10/21 10:01	106-93-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1690005255 AHPRC
Pace Project No.: 10575439

Sample: NORTH Cert# 2457 **Lab ID: 10575439003** Collected: Received: 08/20/21 11:40 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
1,2-Dichlorobenzene	**<0.40**	ug/m3	3.1	0.40	1		08/10/21 10:01	95-50-1	
1,3-Dichlorobenzene	**<0.51**	ug/m3	3.1	0.51	1		08/10/21 10:01	541-73-1	
1,4-Dichlorobenzene	**<0.88**	ug/m3	3.1	0.88	1		08/10/21 10:01	106-46-7	
Dichlorodifluoromethane	**<0.19**	ug/m3	1.0	0.19	1		08/10/21 10:01	75-71-8	
1,1-Dichloroethane	**<0.16**	ug/m3	0.82	0.16	1		08/10/21 10:01	75-34-3	
1,2-Dichloroethane	**<0.19**	ug/m3	0.82	0.19	1		08/10/21 10:01	107-06-2	
1,1-Dichloroethene	**<0.14**	ug/m3	0.81	0.14	1		08/10/21 10:01	75-35-4	
cis-1,2-Dichloroethene	**<0.20**	ug/m3	0.81	0.20	1		08/10/21 10:01	156-59-2	
trans-1,2-Dichloroethene	**<0.17**	ug/m3	0.81	0.17	1		08/10/21 10:01	156-60-5	
1,2-Dichloropropane	**<0.27**	ug/m3	0.94	0.27	1		08/10/21 10:01	78-87-5	
cis-1,3-Dichloropropene	**<0.26**	ug/m3	2.3	0.26	1		08/10/21 10:01	10061-01-5	
trans-1,3-Dichloropropene	**<0.54**	ug/m3	2.3	0.54	1		08/10/21 10:01	10061-02-6	
Dichlorotetrafluoroethane	**<0.20**	ug/m3	1.4	0.20	1		08/10/21 10:01	76-14-2	
Ethanol	**<0.59**	ug/m3	1.9	0.59	1		08/10/21 10:01	64-17-5	
Ethyl acetate	**<0.13**	ug/m3	0.73	0.13	1		08/10/21 10:01	141-78-6	
Ethylbenzene	**<0.31**	ug/m3	0.88	0.31	1		08/10/21 10:01	100-41-4	
4-Ethyltoluene	**<0.47**	ug/m3	2.5	0.47	1		08/10/21 10:01	622-96-8	
n-Heptane	**<0.18**	ug/m3	0.83	0.18	1		08/10/21 10:01	142-82-5	
Hexachloro-1,3-butadiene	**<1.2**	ug/m3	5.4	1.2	1		08/10/21 10:01	87-68-3	
n-Hexane	**<0.19**	ug/m3	0.72	0.19	1		08/10/21 10:01	110-54-3	
2-Hexanone	**<0.44**	ug/m3	4.2	0.44	1		08/10/21 10:01	591-78-6	
Methylene Chloride	**<0.59**	ug/m3	3.5	0.59	1		08/10/21 10:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<0.32**	ug/m3	4.2	0.32	1		08/10/21 10:01	108-10-1	
Methyl-tert-butyl ether	**<0.13**	ug/m3	3.7	0.13	1		08/10/21 10:01	1634-04-4	
Naphthalene	**<2.2**	ug/m3	2.7	2.2	1		08/10/21 10:01	91-20-3	
2-Propanol	**<0.51**	ug/m3	2.5	0.51	1		08/10/21 10:01	67-63-0	
Propylene	**<0.13**	ug/m3	0.88	0.13	1		08/10/21 10:01	115-07-1	
Styrene	**<0.38**	ug/m3	0.87	0.38	1		08/10/21 10:01	100-42-5	
1,1,2,2-Tetrachloroethane	**<0.37**	ug/m3	1.4	0.37	1		08/10/21 10:01	79-34-5	
Tetrachloroethene	**<0.29**	ug/m3	0.69	0.29	1		08/10/21 10:01	127-18-4	
Tetrahydrofuran	**<0.18**	ug/m3	0.60	0.18	1		08/10/21 10:01	109-99-9	
Toluene	**<0.24**	ug/m3	0.77	0.24	1		08/10/21 10:01	108-88-3	
1,2,4-Trichlorobenzene	**<4.9**	ug/m3	7.5	4.9	1		08/10/21 10:01	120-82-1	
1,1,1-Trichloroethane	**<0.19**	ug/m3	1.1	0.19	1		08/10/21 10:01	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/m3	0.56	0.20	1		08/10/21 10:01	79-00-5	
Trichloroethene	**<0.20**	ug/m3	0.55	0.20	1		08/10/21 10:01	79-01-6	
Trichlorofluoromethane	**<0.23**	ug/m3	1.1	0.23	1		08/10/21 10:01	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<0.29**	ug/m3	1.6	0.29	1		08/10/21 10:01	76-13-1	
1,2,4-Trimethylbenzene	**<0.35**	ug/m3	1.0	0.35	1		08/10/21 10:01	95-63-6	
1,3,5-Trimethylbenzene	**<0.29**	ug/m3	1.0	0.29	1		08/10/21 10:01	108-67-8	
Vinyl acetate	**<0.21**	ug/m3	0.72	0.21	1		08/10/21 10:01	108-05-4	
Vinyl chloride	**<0.087**	ug/m3	0.26	0.087	1		08/10/21 10:01	75-01-4	
m&p-Xylene	**<0.64**	ug/m3	1.8	0.64	1		08/10/21 10:01	179601-23-1	
o-Xylene	**<0.27**	ug/m3	0.88	0.27	1		08/10/21 10:01	95-47-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1690005255 AHPRC
Pace Project No.: 10575439

Sample: SOUTH Cert# 2536 **Lab ID: 10575439004** Collected: Received: 08/20/21 11:40 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
Acetone	**<1.8**	ug/m3	6.0	1.8	1		08/10/21 08:51	67-64-1	
Benzene	**<0.11**	ug/m3	0.32	0.11	1		08/10/21 08:51	71-43-2	
Benzyl chloride	**<0.89**	ug/m3	2.6	0.89	1		08/10/21 08:51	100-44-7	
Bromodichloromethane	**<0.24**	ug/m3	1.4	0.24	1		08/10/21 08:51	75-27-4	
Bromoform	**<1.6**	ug/m3	5.2	1.6	1		08/10/21 08:51	75-25-2	
Bromomethane	**<0.15**	ug/m3	0.79	0.15	1		08/10/21 08:51	74-83-9	
1,3-Butadiene	**<0.12**	ug/m3	0.45	0.12	1		08/10/21 08:51	106-99-0	
2-Butanone (MEK)	**<0.46**	ug/m3	3.0	0.46	1		08/10/21 08:51	78-93-3	
Carbon disulfide	**<0.13**	ug/m3	0.63	0.13	1		08/10/21 08:51	75-15-0	
Carbon tetrachloride	**<0.28**	ug/m3	1.3	0.28	1		08/10/21 08:51	56-23-5	
Chlorobenzene	**<0.16**	ug/m3	0.94	0.16	1		08/10/21 08:51	108-90-7	
Chloroethane	**<0.22**	ug/m3	0.54	0.22	1		08/10/21 08:51	75-00-3	
Chloroform	**<0.18**	ug/m3	0.50	0.18	1		08/10/21 08:51	67-66-3	
Chloromethane	**<0.085**	ug/m3	0.42	0.085	1		08/10/21 08:51	74-87-3	
Cyclohexane	**<0.22**	ug/m3	1.8	0.22	1		08/10/21 08:51	110-82-7	
Dibromochloromethane	**<0.52**	ug/m3	1.7	0.52	1		08/10/21 08:51	124-48-1	
1,2-Dibromoethane (EDB)	**<0.30**	ug/m3	0.78	0.30	1		08/10/21 08:51	106-93-4	
1,2-Dichlorobenzene	**<0.40**	ug/m3	3.1	0.40	1		08/10/21 08:51	95-50-1	
1,3-Dichlorobenzene	**<0.51**	ug/m3	3.1	0.51	1		08/10/21 08:51	541-73-1	
1,4-Dichlorobenzene	**<0.88**	ug/m3	3.1	0.88	1		08/10/21 08:51	106-46-7	
Dichlorodifluoromethane	**<0.19**	ug/m3	1.0	0.19	1		08/10/21 08:51	75-71-8	
1,1-Dichloroethane	**<0.16**	ug/m3	0.82	0.16	1		08/10/21 08:51	75-34-3	
1,2-Dichloroethane	**<0.19**	ug/m3	0.82	0.19	1		08/10/21 08:51	107-06-2	
1,1-Dichloroethene	**<0.14**	ug/m3	0.81	0.14	1		08/10/21 08:51	75-35-4	
cis-1,2-Dichloroethene	**<0.20**	ug/m3	0.81	0.20	1		08/10/21 08:51	156-59-2	
trans-1,2-Dichloroethene	**<0.17**	ug/m3	0.81	0.17	1		08/10/21 08:51	156-60-5	
1,2-Dichloropropane	**<0.27**	ug/m3	0.94	0.27	1		08/10/21 08:51	78-87-5	
cis-1,3-Dichloropropene	**<0.26**	ug/m3	2.3	0.26	1		08/10/21 08:51	10061-01-5	
trans-1,3-Dichloropropene	**<0.54**	ug/m3	2.3	0.54	1		08/10/21 08:51	10061-02-6	
Dichlorotetrafluoroethane	**<0.20**	ug/m3	1.4	0.20	1		08/10/21 08:51	76-14-2	
Ethanol	**<0.59**	ug/m3	1.9	0.59	1		08/10/21 08:51	64-17-5	
Ethyl acetate	**<0.13**	ug/m3	0.73	0.13	1		08/10/21 08:51	141-78-6	
Ethylbenzene	**<0.31**	ug/m3	0.88	0.31	1		08/10/21 08:51	100-41-4	
4-Ethyltoluene	**<0.47**	ug/m3	2.5	0.47	1		08/10/21 08:51	622-96-8	
n-Heptane	**<0.18**	ug/m3	0.83	0.18	1		08/10/21 08:51	142-82-5	
Hexachloro-1,3-butadiene	**1.3J**	ug/m3	5.4	1.2	1		08/10/21 08:51	87-68-3	
n-Hexane	**<0.19**	ug/m3	0.72	0.19	1		08/10/21 08:51	110-54-3	
2-Hexanone	**<0.44**	ug/m3	4.2	0.44	1		08/10/21 08:51	591-78-6	
Methylene Chloride	**<0.59**	ug/m3	3.5	0.59	1		08/10/21 08:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<0.32**	ug/m3	4.2	0.32	1		08/10/21 08:51	108-10-1	
Methyl-tert-butyl ether	**<0.13**	ug/m3	3.7	0.13	1		08/10/21 08:51	1634-04-4	
Naphthalene	**<2.2**	ug/m3	2.7	2.2	1		08/10/21 08:51	91-20-3	
2-Propanol	**<0.51**	ug/m3	2.5	0.51	1		08/10/21 08:51	67-63-0	
Propylene	**<0.13**	ug/m3	0.88	0.13	1		08/10/21 08:51	115-07-1	
Styrene	**<0.38**	ug/m3	0.87	0.38	1		08/10/21 08:51	100-42-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1690005255 AHPRC
Pace Project No.: 10575439

Sample: SOUTH Cert# 2536 **Lab ID: 10575439004** Collected: Received: 08/20/21 11:40 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Individual Can Certification	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
1,1,2,2-Tetrachloroethane	**<0.37**	ug/m3	1.4	0.37	1		08/10/21 08:51	79-34-5	
Tetrachloroethene	**<0.29**	ug/m3	0.69	0.29	1		08/10/21 08:51	127-18-4	
Tetrahydrofuran	**<0.18**	ug/m3	0.60	0.18	1		08/10/21 08:51	109-99-9	
Toluene	**<0.24**	ug/m3	0.77	0.24	1		08/10/21 08:51	108-88-3	
1,2,4-Trichlorobenzene	**5.1J**	ug/m3	7.5	4.9	1		08/10/21 08:51	120-82-1	
1,1,1-Trichloroethane	**<0.19**	ug/m3	1.1	0.19	1		08/10/21 08:51	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/m3	0.56	0.20	1		08/10/21 08:51	79-00-5	
Trichloroethene	**<0.20**	ug/m3	0.55	0.20	1		08/10/21 08:51	79-01-6	
Trichlorofluoromethane	**<0.23**	ug/m3	1.1	0.23	1		08/10/21 08:51	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<0.29**	ug/m3	1.6	0.29	1		08/10/21 08:51	76-13-1	
1,2,4-Trimethylbenzene	**<0.35**	ug/m3	1.0	0.35	1		08/10/21 08:51	95-63-6	
1,3,5-Trimethylbenzene	**<0.29**	ug/m3	1.0	0.29	1		08/10/21 08:51	108-67-8	
Vinyl acetate	**<0.21**	ug/m3	0.72	0.21	1		08/10/21 08:51	108-05-4	
Vinyl chloride	**<0.087**	ug/m3	0.26	0.087	1		08/10/21 08:51	75-01-4	
m&p-Xylene	**<0.64**	ug/m3	1.8	0.64	1		08/10/21 08:51	179601-23-1	
o-Xylene	**<0.27**	ug/m3	0.88	0.27	1		08/10/21 08:51	95-47-6	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1690005255 AHPRC
Pace Project No.: 10575439

QC Batch: 765729
QC Batch Method: TO-15
Analysis Method: TO-15
Analysis Description: TO15 MSV AIR Low Level
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10575439001, 10575439002

METHOD BLANK: 4081073 Matrix: Air
Associated Lab Samples: 10575439001, 10575439002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/m3	<0.11	0.32	08/24/21 10:26	
Naphthalene	ug/m3	<2.2	2.7	08/24/21 10:26	
Tetrachloroethene	ug/m3	<0.29	0.69	08/24/21 10:26	
Toluene	ug/m3	<0.24	0.77	08/24/21 10:26	
Trichloroethene	ug/m3	<0.20	0.55	08/24/21 10:26	

LABORATORY CONTROL SAMPLE: 4081074

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/m3	34.8	40.0	115	70-131	
Naphthalene	ug/m3	65.2	71.1	109	67-132	
Tetrachloroethene	ug/m3	73.4	76.6	104	70-130	
Toluene	ug/m3	41.6	46.9	113	70-138	
Trichloroethene	ug/m3	58.4	64.8	111	70-130	

SAMPLE DUPLICATE: 4082284

Parameter	Units	10574763005 Result	Dup Result	RPD	Max RPD	Qualifiers
Benzene	ug/m3	ND	<27.6		25	
Naphthalene	ug/m3	ND	<526		25	
Tetrachloroethene	ug/m3	457	470	3	25	
Toluene	ug/m3	ND	91.4J		25	
Trichloroethene	ug/m3	ND	<47.5		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.

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: 1690005255 AHPRC
Pace Project No.: 10575439

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.

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 1690005255 AHPRC
Pace Project No.: 10575439

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10575439001	**NORTH**	TO-15	765729		
10575439002	**SOUTH**	TO-15	765729		
10575439003	**NORTH Cert# 2457**	TO-15	765664		
10575439004	**SOUTH Cert# 2536**	TO-15	765664		

Pace Analytical®
www.pacelabs.com

AIR: CHAIN-OF-CUSTODY / A

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

WO# : 10575439

10575439

51172

Page: 1 of 1

Section A Required Client Information:

Company: RAMBOLL
Address: 234 W FLORIDA ST
MKE, WI 53024
Email To: SPETROFSKE@RAMBOLL.com
Phone: Fax:
Requested Due Date/TAT: STANDARD

Section B Required Project Information:

Report To: SUSAN PETROFSKE
Copy To: PAUL LINDQUIST
Purchase Order No.: 1690005255
Project Name: AHPRC
Project Number: 1690005255

Section C Invoice Information:

Attention:
Company Name: RAMBOLL
Address:
Pace Quote Reference:
Pace Project Manager/Sales Rep.: CAROLYNNE TROUT
Pace Profile #: 40343 #1

Program
☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act
☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other

Location of Sampling by State: WI

Reporting Units: ug/m³ X mg/m³ PPBV PPMV Other

Report Level II. III. IV. Other

'Section D Required Client Information

AIR SAMPLE ID
Sample IDs MUST BE UNIQUE

Valid Media Codes

MEDIA	CODE
Tedlar Bag	TB
1 Liter Summa Can	1LC
6 Liter Summa Can	6LC
Low Volume Puff	LVP
High Volume Puff	HVP
Other	PM10

ITEM #	AIR SAMPLE ID	MEDIA CODE	PID Reading (Client only)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	Canister Pressure (Initial Field - in Hg)	Canister Pressure (Final Field - in Hg)	Summa Can Number	Flow Control Number	Method: PM10	3C - Fixed Gas (%)	TO-3 BTEX	TO-3M (Methane)	TO-14	TO-15 Full List VOCs	TO-15 Short List BTEX	TO-15 Short List Chlorinated	TO-15 Short List (other)	Pace Lab ID
1	NORTH	1LC				8/17/21	1140	29	4	2457	1282							X			001 003
2	SOUTH	1LC				8/17/21	1015	28	5	2536	2795							X			002 004
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

Comments :

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
PAUL LINDQUIST RAMBOLL	8/17/21	1600	FEDEX	8/17/21	1600
			Pace	82021	1140

SAMPLE CONDITIONS

	Y/N	Y/N	Y/N
✓	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: PAUL LINDQUIST

SIGNATURE of SAMPLER: Paul Lindquist DATE Signed (MM / DD / YY): 08/17/21

ORIGINAL

Pace Analytical®	Document Name: **Sample Condition Upon Receipt (SCUR) - Air**	Document Revised: 24Mar2020 **Page 1 of 1**
	Document No.: **ENV-FRM-MIN4-0113 Re...**	Pace Analytical Services - **Minneapolis**

WO#: 10575439
PM: CT1 Due Date: 08/27/21
CLIENT: Ramboll-WI

Air Sample Condition Upon Receipt

Client Name: Ramboll **Project #:**

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

Tracking Number: 9753 8444 9029

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No **Seals Intact?** ☐ Yes ☒ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Tin Can ☐ Other:______ **Temp Blank rec:** ☐ Yes ☒ No

Temp. (TO17 and TO13 samples only) (°C): — **Corrected Temp (°C):** — **Thermometer Used:** ☐ G87A9170600254 ☐ G87A9155100842

Temp should be above freezing to 6°C **Correction Factor:** — **Date & Initials of Person Examining Contents:** 8/20/21 MS

Type of ice Received ☐ Blue ☐ Wet ☒ None

				Comments:
Chain of Custody Present?	☒ Yes	☐ No		1.
Chain of Custody Filled Out?	☒ Yes	☐ No		2.
Chain of Custody Relinquished?	☒ Yes	☐ No		3.
Sampler Name and/or Signature on COC?	☒ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☒ Yes	☐ No		5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No		6.
Rush Turn Around Time Requested?	☐ Yes	☒ No		7.
Sufficient Volume?	☒ Yes	☐ No		8.
Correct Containers Used? **(Tedlar bags not acceptable container for TO-14, TO-15 or APH)** -Pace Containers Used?	☒ Yes ☒ Yes	☐ No ☐ No		9.
Containers Intact? **(visual inspection/no leaks when pressurized)**	☒ Yes	☐ No		10.
Media: (Air Can) Airbag Filter TDT Passive				11. Individually Certified Cans (Y) N (list which samples)
Is sufficient information available to reconcile samples to the COC?	☒ Yes	☐ No		12.
Do cans need to be pressurized? **(DO NOT PRESSURIZE 3C or ASTM 1946!!!)**	☒ Yes	☐ No		13.

Gauge # ☐ 10AIR26 ☒ 10AIR34 ☐ 10AIR35 ☐ 4097

Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure	Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure
North	2536	2795	-5	10					
South	2457	1282	-5	10					

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

Person Contacted: ______ Date/Time: ______

Comments/Resolution: ______

Project Manager Review: [signature] **Date:** 08/20/21

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)