

## Vang, Duabchi L - DNR

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**From:** Vang, Duabchi L - DNR  
**Sent:** Wednesday, January 22, 2020 10:51 AM  
**To:** 'Jason Powell'  
**Subject:** RE: Arlene's Inn - second set of SSVS results - Willard, WI (03-10-196577)

Jason,

Thank you for the update. I apologize, I thought I had given the file to our EPA to be scanned in. They are out of the office today, but will be back tomorrow. I'll let you know when those reports get uploaded to BOTW. Thank you for your patience.

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### Duabchi (Dee) Vang

Hydrogeologist  
Remediation and Redevelopment  
Wisconsin Department of Natural Resources  
Phone: (715)-839-3779  
[duabchi.vang@wisconsin.gov](mailto:duabchi.vang@wisconsin.gov)



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**From:** Jason Powell <jasonp@metcohq.com>  
**Sent:** Wednesday, January 22, 2020 10:38 AM  
**To:** Vang, Duabchi L - DNR <duabchi.vang@wisconsin.gov>  
**Cc:** Ron Anderson <rona@metcohq.com>  
**Subject:** Arlene's Inn - second set of SSVS results - Willard, WI (03-10-196577)

Good morning Duabchi, attached are the data table, field notes, and laboratory report for the second SSVS event conducted on 1/8/2020.

The results are similar to the 9/24/19 sampling event, but the elevated levels of Hexanes and Pentanes remain but were at much lower levels with the dilution factor being almost half of what it was in the first sampling event.

At this point we are planning to prepare the Closure Request. However, back on 11/6/19 you had noted that the hardcopy of the file for Arlene's Inn would be scanned in within the next couple of days and as of today it appears that the reports including SIR, RAOR, and other update/status reports have not been uploaded. We will need these uploaded or we will have to get a cost estimate from the copy shop to copy the entire file and submit the estimate for PECFA approval.

Any questions let me know.

Thanks,



**Jason Powell**

**METCO - Staff Scientist**

[jasonp@metcohq.com](mailto:jasonp@metcohq.com) / 608.781.8879

709 Gillette Street - Suite 3, La Crosse WI 54603

[www.metcohq.com](http://www.metcohq.com)

A.4 Vapor Analytical Table  
 Sub-Slab Sampling Data Table for Arlene's Inn  
 BY METCO

Sub-Slab Sampling conducted on:	9/24/2019	9/24/2019	9/24/2019	1/8/2020	1/8/2020	1/8/2020	WDNR Small Commercial Sub-Slab Vapor Action Levels for Various VOCs  Quick Look-Up Table Updated November, 2017  (ug/m <sup>3</sup> )
	SS-1	SS-2	SS-3*	SS-1	SS-2	SS-3*	

Sample ID	SS-1	SS-2	SS-3*	SS-1	SS-2	SS-3*	(ug/m <sup>3</sup> )	
Benzene – ug/m <sup>3</sup>	0.71	<0.28	<1500	<0.22	<0.22	<893	530	c
Carbon Tetrachloride – ug/m <sup>3</sup>	NS	NS	NS	NS	NS	NS	670	c
Chloroform – ug/m <sup>3</sup>	NS	NS	NS	NS	NS	NS	180	c
Chloromethane – ug/m <sup>3</sup>	NS	NS	NS	NS	NS	NS	13000	n
Dichlorodifluoromethane – ug/m <sup>3</sup>	NS	NS	NS	NS	NS	NS	15000	n
1,1-Dichloroethane (1,1-DCA) – ug/m <sup>3</sup>	NS	NS	NS	NS	NS	NS	2600	c
1,2-Dichloroethane (1,2-DCA) – ug/m <sup>3</sup>	<0.26	<0.27	<1470	<0.22	<0.22	<876	160	c
1,1-Dichloroethylene (1,1-DCE) – ug/m <sup>3</sup>	NS	NS	NS	NS	NS	NS	29000	n
1,2-Dichloroethylene (cis and trans) - ug/m <sup>3</sup>	NS	NS	NS	NS	NS	NS	NA	-
Ethylbenzene – ug/m <sup>3</sup>	<0.53	<0.56	<3000	<0.45	<0.45	<1780	1600	c
Methylene chloride – ug/m <sup>3</sup>	NS	NS	NS	NS	NS	NS	87000	n
Methyl Tert-Butyl Ether (MTBE) – ug/m <sup>3</sup>	<1.2	<1.2	<6520	<0.97	<0.97	<3870	16000	c
Naphthalene – ug/m <sup>3</sup>	<2.3	<2.4	<12900	<1.9	<1.9	<7650	120	c
Tetrachloroethylene -ug/m <sup>3</sup>	NS	NS	NS	NS	NS	NS	6000	n
Toluene – ug/m <sup>3</sup>	<0.61	<0.64	<3450	2.2	2.9	<2050	730000	n
1,1,1-Trichloroethane – ug/m <sup>3</sup>	NS	NS	NS	NS	NS	NS	730000	n
Trichloroethylene – ug/m <sup>3</sup>	NS	NS	NS	NS	NS	NS	290	n
Trichlorofluoromethane (Halcarbon 11) – ug/m <sup>3</sup>	NS	NS	NS	NS	NS	NS	NA	-
Trimethylbenzene (1,2,4) – ug/m <sup>3</sup>	<0.79	<0.83	<4440	<0.66	<0.66	<2640	8700	n
Trimethylbenzene (1,3,5) – ug/m <sup>3</sup>	<0.70	<0.73	<3920	<0.58	<0.58	<2330	8700	n
Vinyl chloride – ug/m <sup>3</sup>	NS	NS	NS	NS	NS	NS	930	c
Xylene (total) -ug/m <sup>3</sup>	<1.80	<1.93	<10250	<1.50	<1.50	<6090	15000	n

ug/m<sup>3</sup> = Micrograms per cubic meter.

< = Less than the reporting limit indicated in parentheses.

**Bold = Sub-Slab Standard Exceedance**

NS = Not sampled

c = Carcinogen

n = Non Carcinogen

J = between Limit of Detection (LOD) and Limit of Quantitation (LOQ)

\* Please note that other VOCs were detected that are not on the WDNR Sub-Slab Vapor Action Levels Quick Look-Up Table.

B = Compound was found in the blank and sample

E = Result exceeded calibration range

Please note that the dilution factor (DF) for sample **SS-3** was 9,830 times, and 5,837 times, respectively, thus giving elevated Limits of Detection (LOD) for the PVOC and Naphthalene compounds. This was due to elevated levels of the tentatively identified Compounds below:

	9/24/2019		1/8/2020	
Pentane, 2,3-dimethyl-	NS	ppbv	183000J	ppbv
Pentane, 2-methyl-	2780000J	ppbv	80600J	ppbv
Pentane, 3-methyl-	1420000J	ppbv	38800J	ppbv
Pentane, 2,4-dimethyl-	870000J	ppbv	NS	ppbv
Cyclopentane, methyl-	1200000J	ppbv	43300J	ppbv
Hexane, 2-methyl-	527000J	ppbv	NS	ppbv
Pentane, 2,3-dimethyl-	970000J	ppbv	NS	ppbv
Hexane, 3-methyl-	686000J	ppbv	82400J	ppbv
Cyclohexane, methyl-	1040000J	ppbv	NS	ppbv
Butane, 2,2,3-trimethyl	NS	ppbv	9880J	ppbv
Pentane, 2,3,3-trimethyl	661000J	ppbv	42300J	ppbv
Pentane, 2,3,4-trimethyl	668000J	ppbv	34600J	ppbv
Heptane, 3-methyl-	336000J	ppbv	NS	ppbv

**Vapor Pin® Installation and Soil Vapor Sampling Form**

Project No.: B1909382.00 Sample ID: 55-1  
Project Name: Arlene's Inn #2 Date: 1-8-2020  
Location: Willard, WI Personnel: David Bradshaw

Radon or VOC mitigation system in building?  Present  Operating

**Equipment**

- Air canister & connectors
- Air Chain-of-Custody form
- Hammer drill and blt(s)
- Extension cord
- Shut-in Test assembly
- Vapor Pin® kit
- Vapor Pin® toolbox
- PID # 0070
- Covers (permanent installation)
- Shop-Vac / broom & dustpan
- Concrete patch

**Vapor Pin® Installation**

Installation Date: 1-8-2020

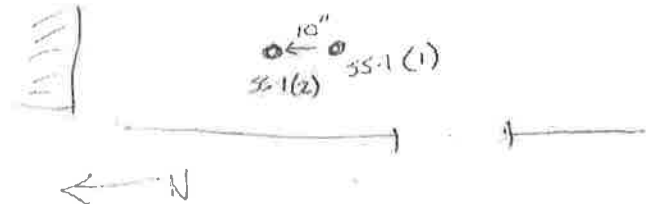
Installation Type:

- Temporary
- Permanent
  - Stainless steel cover
  - Plastic cover

Concrete Thickness (inches): 2.5"

- Concrete patch (if temporary)

Sketch of pin location with measurements to walls:



**Soil Vapor Sampling**

Relative sub-slab pressure (±pascals): 0.0

Water dam test passed

Shut-in test passed

Purged 200 mL air prior to sampling

Sampling Canister ID: 2745  
 1 Liter  6 Liters

Flow Controller ID: FC1168  
 None  200 mL/min

Canister Vacuum on Label ("Hg): -30

Canister Initial Vacuum ("Hg): -30

Do not use the canister if the difference between the label and initial vacuum is >4"Hg or if the initial is <25"Hg.

Collection Start Time: 10:47

The final vacuum must be <5"Hg or at least 20"Hg less than the initial vacuum.

Canister Final Vacuum ("Hg): -3

Collection End Time: 11:29

PID Reading (ppm): 0.0

Notes:

**Vapor Pin® Installation and Soil Vapor Sampling Form**

Project No.: B1909382.00

Sample ID: SS-2

Project Name: Arlene's Inn - #2

Date: 1-8-2020

Location: Willard, WI

Personnel: David Bradshaw

Radon or VOC mitigation system in building?  Present  Operating

**Equipment**

- Air canister & connectors
- Air Chain-of-Custody form
- Hammer drill and bit(s)
- Extension cord

- Shut-in Test assembly
- Vapor Pin® kit
- Vapor Pin® toolbox
- PID # 0070

- Covers (permanent installation)
- Shop-Vac / broom & dustpan
- Concrete patch

**Vapor Pin® Installation**

Installation Date: 1-8-2020

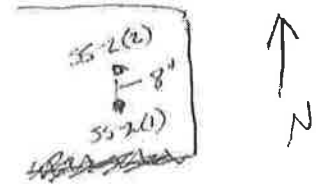
Sketch of pin location with measurements to walls:

Installation Type:

- Temporary
- Permanent
  - Stainless steel cover
  - Plastic cover

Concrete Thickness (inches): 1.5"

Concrete patch (if temporary)



**Soil Vapor Sampling**

Relative sub-slab pressure (±pascals): 0.0

Canister Vacuum on Label ("Hg): -30

Water dam test passed

Canister Initial Vacuum ("Hg): -30

Shut-in test passed

Do not use the canister if the difference between the label and initial vacuum is >4"Hg or if the initial is <25"Hg.

Purged 200 mL air prior to sampling

Collection Start Time: 10:51

Sampling Canister ID: 2135

The final vacuum must be <5"Hg or at least 20"Hg less than the initial vacuum.

- 1 Liter
- 6 Liters

Canister Final Vacuum ("Hg): -3

Flow Controller ID: FC1615

- None
- 200 mL/min

Collection End Time: 11:32

PID Reading (ppm): 0.0

Notes:

**Vapor Pin® Installation and Soil Vapor Sampling Form**

Project No.: B1909382.00

Sample ID: SS-3

Project Name: Arlene's Inn - #2

Date: 1-8-2020

Location: Willard, WI

Personnel: David Bradshaw

Radon or VOC mitigation system in building?  Present  Operating

**Equipment**

- Air canister & connectors
- Air Chain-of-Custody form
- Hammer drill and bit(s)
- Extension cord

- Shut-in Test assembly
- Vapor Pin® kit
- Vapor Pin® toolbox
- PID # 0070

- Covers (permanent installation)
- Shop-Vac / broom & dustpan
- Concrete patch

**Vapor Pin® Installation**

Installation Date: 1-8-2020

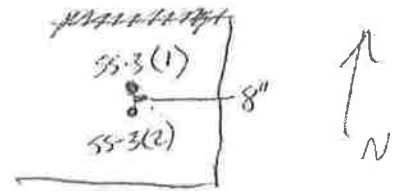
Installation Type:

- Temporary
- Permanent
  - Stainless steel cover
  - Plastic cover

Concrete Thickness (inches): 3"

Concrete patch (if temporary)

Sketch of pin location with measurements to walls:



**Soil Vapor Sampling**

Relative sub-slab pressure ( $\pm$ pascals): 0.0

Water dam test passed

Shut-in test passed

Purged 200 mL air prior to sampling

Sampling Canister ID: 1600

- 1 Liter
- 6 Liters

Flow Controller ID: FC0645

- None
- 200 mL/min

Canister Vacuum on Label ("Hg): -30

Canister Initial Vacuum ("Hg): -30

Do not use the canister if the difference between the label and initial vacuum is  $>4$ "Hg or if the initial is  $<25$ "Hg.

Collection Start Time: 10:56

The final vacuum must be  $<5$ "Hg or at least 20"Hg less than the initial vacuum.

Canister Final Vacuum ("Hg): -4

Collection End Time: 11:35

PID Reading (ppm): 323.2

Notes:



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

January 15, 2020

Nicholas Stingl  
Braun Intertec  
2309 Palace Sreet  
La Crosse, WI 54603

RE: Project: B1909382.00 Arlene's Inn  
Pace Project No.: 10505002

Dear Nicholas Stingl:

Enclosed are the analytical results for sample(s) received by the laboratory on January 10, 2020. 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,

Bob Michels  
bob.michels@pacelabs.com  
(612)709-5046  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: B1909382.00 Arlene's Inn  
Pace Project No.: 10505002

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### Pace Analytical Services Minneapolis

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  
Massachusetts DWP Certification #: via MN 027-053-137  
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  
Missouri Certification #: 10100  
Montana Certification #: CERT0092  
Nebraska Certification #: NE-OS-18-06  
Nevada Certification #: MN00064  
New Hampshire Certification #: 2081  
New Jersey Certification #: MN002  
New York Certification #: 11647  
North Carolina DW Certification #: 27700  
North Carolina WW Certification #: 530  
North Dakota Certification #: R-036  
Ohio DW Certification #: 41244  
Ohio VAP Certification #: CL101  
Oklahoma Certification #: 9507  
Oregon Primary Certification #: MN300001  
Oregon Secondary Certification #: MN200001  
Pennsylvania Certification #: 68-00563  
Puerto Rico Certification #: MN00064  
South Carolina Certification #:74003001  
Tennessee Certification #: TN02818  
Texas Certification #: T104704192  
Utah Certification #: MN00064  
Vermont Certification #: VT-027053137  
Virginia Certification #: 460163  
Washington Certification #: C486  
West Virginia DEP Certification #: 382  
West Virginia DW Certification #: 9952 C  
Wisconsin Certification #: 999407970  
Wyoming UST Certification #: via A2LA 2926.01

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### SAMPLE SUMMARY

Project: B1909382.00 Arlene's Inn  
Pace Project No.: 10505002

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10505002001	SS-1	Air	01/08/20 11:29	01/10/20 09:40
10505002002	SS-2	Air	01/08/20 11:32	01/10/20 09:40
10505002003	SS-3	Air	01/08/20 11:35	01/10/20 09:40
10505002004	Unused Can 0505	Air		01/10/20 09:40

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### SAMPLE ANALYTE COUNT

Project: B1909382.00 Arlene's Inn  
Pace Project No.: 10505002

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Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10505002001	SS-1	TO-15	MJL	10	PASI-M
10505002002	SS-2	TO-15	MJL	11	PASI-M
10505002003	SS-3	TO-15	MJL	18	PASI-M

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**SUMMARY OF DETECTION**

Project: B1909382.00 Arlene's Inn  
 Pace Project No.: 10505002

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>10505002001</b>	<b>SS-1</b>					
TO-15	Toluene	2.2	ug/m3	1.1	01/13/20 19:14	
<b>10505002002</b>	<b>SS-2</b>					
TO-15	Toluene	2.9	ug/m3	1.1	01/13/20 19:41	
TO-15	3.035:Ethane, 1-chloro-1,1-dif	17.5J	ppbv		01/13/20 19:41	N
<b>10505002003</b>	<b>SS-3</b>					
TO-15	5.267:Pentane, 2,3-dimethyl-	18300J	ppbv		01/14/20 11:27	N
TO-15	5.321:Hexane, 3-methyl-	82400J	ppbv		01/14/20 11:27	N
TO-15	6.575:Pentane, 2,3,4-trimethyl	34600J	ppbv		01/14/20 11:27	N
TO-15	6.730:Pentane, 2,3,3-trimethyl	42300J	ppbv		01/14/20 11:27	N
TO-15	6.897:Butane, 2,2,3-trimethyl-	9880J	ppbv		01/14/20 11:27	N
TO-15	4.064:Pentane, 2-methyl-	80600J	ppbv		01/14/20 11:27	N
TO-15	4.212:Pentane, 3-methyl-	38800J	ppbv		01/14/20 11:27	N
TO-15	4.781:Cyclopentane, methyl-	43300J	ppbv		01/14/20 11:27	N

**REPORT OF LABORATORY ANALYSIS**

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## PROJECT NARRATIVE

Project: B1909382.00 Arlene's Inn  
Pace Project No.: 10505002

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**Method:** TO-15  
**Description:** TO15 MSV AIR (TICS)  
**Client:** Braun Intertec Corporation  
**Date:** January 15, 2020

**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:**

Analyte Comments:

QC Batch: 654478

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- SS-3 (Lab ID: 10505002003)
- 1,2-Dichloroethane

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

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**ANALYTICAL RESULTS**

Project: B1909382.00 Arlene's Inn  
 Pace Project No.: 10505002

Sample: SS-1 Lab ID: 10505002001 Collected: 01/08/20 11:29 Received: 01/10/20 09:40 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR (TICS)</b>		Analytical Method: TO-15							
Benzene	ND	ug/m3	0.47	0.22	1.46		01/13/20 19:14	71-43-2	
1,2-Dichloroethane	ND	ug/m3	0.60	0.22	1.46		01/13/20 19:14	107-06-2	
Ethylbenzene	ND	ug/m3	1.3	0.45	1.46		01/13/20 19:14	100-41-4	
Methyl-tert-butyl ether	ND	ug/m3	5.3	0.97	1.46		01/13/20 19:14	1634-04-4	
Naphthalene	ND	ug/m3	3.9	1.9	1.46		01/13/20 19:14	91-20-3	
Toluene	2.2	ug/m3	1.1	0.51	1.46		01/13/20 19:14	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/m3	1.5	0.66	1.46		01/13/20 19:14	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	1.5	0.58	1.46		01/13/20 19:14	108-67-8	
m&p-Xylene	ND	ug/m3	2.6	1.0	1.46		01/13/20 19:14	179601-23-1	
o-Xylene	ND	ug/m3	1.3	0.50	1.46		01/13/20 19:14	95-47-6	

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**ANALYTICAL RESULTS**

Project: B1909382.00 Arlene's Inn  
 Pace Project No.: 10505002

Sample: SS-2 Lab ID: 10505002002 Collected: 01/08/20 11:32 Received: 01/10/20 09:40 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR (TICS)</b>		Analytical Method: TO-15							
Benzene	ND	ug/m3	0.47	0.22	1.46		01/13/20 19:41	71-43-2	
1,2-Dichloroethane	ND	ug/m3	0.60	0.22	1.46		01/13/20 19:41	107-06-2	
Ethylbenzene	ND	ug/m3	1.3	0.45	1.46		01/13/20 19:41	100-41-4	
Methyl-tert-butyl ether	ND	ug/m3	5.3	0.97	1.46		01/13/20 19:41	1634-04-4	
Naphthalene	ND	ug/m3	3.9	1.9	1.46		01/13/20 19:41	91-20-3	
Toluene	2.9	ug/m3	1.1	0.51	1.46		01/13/20 19:41	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/m3	1.5	0.66	1.46		01/13/20 19:41	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	1.5	0.58	1.46		01/13/20 19:41	108-67-8	
m&p-Xylene	ND	ug/m3	2.6	1.0	1.46		01/13/20 19:41	179601-23-1	
o-Xylene	ND	ug/m3	1.3	0.50	1.46		01/13/20 19:41	95-47-6	
<b>Tentatively Identified Compounds</b>									
Ethane, 1-chloro-1,1-dif	17.5J	ppbv			1.46		01/13/20 19:41	75-68-3	N

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**ANALYTICAL RESULTS**

Project: B1909382.00 Arlene's Inn  
 Pace Project No.: 10505002

Sample: SS-3 Lab ID: 10505002003 Collected: 01/08/20 11:35 Received: 01/10/20 09:40 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>TO15 MSV AIR (TICS)</b>		<b>Analytical Method: TO-15</b>							
Benzene	ND	ug/m3	1900	893	5837		01/14/20 11:27	71-43-2	
1,2-Dichloroethane	ND	ug/m3	2400	876	5837		01/14/20 11:27	107-06-2	D3
Ethylbenzene	ND	ug/m3	5150	1780	5837		01/14/20 11:27	100-41-4	
Methyl-tert-butyl ether	ND	ug/m3	21400	3870	5837		01/14/20 11:27	1634-04-4	
Naphthalene	ND	ug/m3	15500	7650	5837		01/14/20 11:27	91-20-3	
Toluene	ND	ug/m3	4470	2050	5837		01/14/20 11:27	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/m3	5830	2640	5837		01/14/20 11:27	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	5830	2330	5837		01/14/20 11:27	108-67-8	
m&p-Xylene	ND	ug/m3	10300	4080	5837		01/14/20 11:27	179601-23-1	
o-Xylene	ND	ug/m3	5150	2010	5837		01/14/20 11:27	95-47-6	
<b>Tentatively Identified Compounds</b>									
Pentane, 2,3-dimethyl-	183000J	ppbv			5837		01/14/20 11:27	565-59-3	N
Hexane, 3-methyl-	82400J	ppbv			5837		01/14/20 11:27	589-34-4	N
Pentane, 2,3,4-trimethyl	34600J	ppbv			5837		01/14/20 11:27	565-75-3	N
Pentane, 2,3,3-trimethyl	42300J	ppbv			5837		01/14/20 11:27	560-21-4	N
Butane, 2,2,3-trimethyl-	9880J	ppbv			5837		01/14/20 11:27	464-06-2	N
Pentane, 2-methyl-	80600J	ppbv			5837		01/14/20 11:27	107-83-5	N
Pentane, 3-methyl-	38800J	ppbv			5837		01/14/20 11:27	96-14-0	N
Cyclopentane, methyl-	43300J	ppbv			5837		01/14/20 11:27	96-37-7	N

**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: B1909382.00 Arlene's Inn  
 Pace Project No.: 10505002

QC Batch: 654235 Analysis Method: TO-15  
 QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level  
 Associated Lab Samples: 10505002001, 10505002002

METHOD BLANK: 3517055 Matrix: Air  
 Associated Lab Samples: 10505002001, 10505002002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/m3	ND	1.0	01/13/20 08:36	
1,2-Dichloroethane	ug/m3	ND	0.41	01/13/20 08:36	
1,3,5-Trimethylbenzene	ug/m3	ND	1.0	01/13/20 08:36	
Benzene	ug/m3	ND	0.32	01/13/20 08:36	
Ethylbenzene	ug/m3	ND	0.88	01/13/20 08:36	
m&p-Xylene	ug/m3	ND	1.8	01/13/20 08:36	
Methyl-tert-butyl ether	ug/m3	ND	3.7	01/13/20 08:36	
Naphthalene	ug/m3	ND	2.7	01/13/20 08:36	
o-Xylene	ug/m3	ND	0.88	01/13/20 08:36	
Toluene	ug/m3	ND	0.77	01/13/20 08:36	

LABORATORY CONTROL SAMPLE: 3517056

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/m3	50	58.8	118	70-137	
1,2-Dichloroethane	ug/m3	41.1	39.2	95	70-130	
1,3,5-Trimethylbenzene	ug/m3	50	58.0	116	70-136	
Benzene	ug/m3	32.5	34.2	105	70-133	
Ethylbenzene	ug/m3	44.1	49.3	112	70-142	
m&p-Xylene	ug/m3	88.3	100	113	70-141	
Methyl-tert-butyl ether	ug/m3	36.6	37.7	103	70-131	
Naphthalene	ug/m3	53.3	54.9	103	63-130	
o-Xylene	ug/m3	44.1	48.0	109	70-135	
Toluene	ug/m3	38.3	41.7	109	70-136	

SAMPLE DUPLICATE: 3518012

Parameter	Units	10505110008 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/m3	ND	ND		25	
1,2-Dichloroethane	ug/m3	ND	ND		25	
1,3,5-Trimethylbenzene	ug/m3	ND	ND		25	
Benzene	ug/m3	ND	.23J		25	
Ethylbenzene	ug/m3	ND	ND		25	
m&p-Xylene	ug/m3	ND	ND		25	
Methyl-tert-butyl ether	ug/m3	ND	ND		25	
Naphthalene	ug/m3	ND	ND		25	
o-Xylene	ug/m3	ND	ND		25	
Toluene	ug/m3	ND	ND		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.

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**QUALITY CONTROL DATA**

Project: B1909382.00 Arlene's Inn  
Pace Project No.: 10505002

SAMPLE DUPLICATE: 3518013

Parameter	Units	10505110009 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/m3	ND	1.1J		25	
1,2-Dichloroethane	ug/m3	ND	ND		25	
1,3,5-Trimethylbenzene	ug/m3	ND	ND		25	
Benzene	ug/m3	ND	ND		25	
Ethylbenzene	ug/m3	1.9	1.9	1	25	
m&p-Xylene	ug/m3	5.9	6.2	4	25	
Methyl-tert-butyl ether	ug/m3	ND	ND		25	
Naphthalene	ug/m3	ND	2.2J		25	
o-Xylene	ug/m3	2.8	2.8	2	25	
Toluene	ug/m3	6.5	6.6	1	25	

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### QUALITY CONTROL DATA

Project: B1909382.00 Arlene's Inn  
Pace Project No.: 10505002

QC Batch: 654478 Analysis Method: TO-15  
QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level  
Associated Lab Samples: 10505002003

METHOD BLANK: 3518368 Matrix: Air  
Associated Lab Samples: 10505002003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/m3	ND	1.0	01/14/20 08:48	
1,2-Dichloroethane	ug/m3	ND	0.41	01/14/20 08:48	
1,3,5-Trimethylbenzene	ug/m3	ND	1.0	01/14/20 08:48	
Benzene	ug/m3	ND	0.32	01/14/20 08:48	
Ethylbenzene	ug/m3	ND	0.88	01/14/20 08:48	
m&p-Xylene	ug/m3	ND	1.8	01/14/20 08:48	
Methyl-tert-butyl ether	ug/m3	ND	3.7	01/14/20 08:48	
Naphthalene	ug/m3	ND	2.7	01/14/20 08:48	
o-Xylene	ug/m3	ND	0.88	01/14/20 08:48	
Toluene	ug/m3	ND	0.77	01/14/20 08:48	

LABORATORY CONTROL SAMPLE: 3518369

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/m3	50	55.6	111	70-137	
1,2-Dichloroethane	ug/m3	41.1	34.3	83	70-130	
1,3,5-Trimethylbenzene	ug/m3	50	55.3	111	70-136	
Benzene	ug/m3	32.5	32.3	100	70-133	
Ethylbenzene	ug/m3	44.1	46.7	106	70-142	
m&p-Xylene	ug/m3	88.3	93.6	106	70-141	
Methyl-tert-butyl ether	ug/m3	36.6	35.9	98	70-131	
Naphthalene	ug/m3	53.3	55.1	103	63-130	
o-Xylene	ug/m3	44.1	44.7	101	70-135	
Toluene	ug/m3	38.3	40.5	106	70-136	

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

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## QUALIFIERS

Project: B1909382.00 Arlene's Inn  
Pace Project No.: 10505002

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### 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.

### LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

### ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.  
N The reported TIC has an 85% or higher match on a mass spectral library search.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: B1909382.00 Arlene's Inn  
Pace Project No.: 10505002

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10505002001	SS-1	TO-15	654235		
10505002002	SS-2	TO-15	654235		
10505002003	SS-3	TO-15	654478		

### REPORT OF LABORATORY ANALYSIS

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WO#: 10505002



**AIR: CHAIN-OF-CUSTODY**  
The Chain-of-Custody is a LEGAL DOCUMENT.



<b>Section A</b> Required Client Information: Company: <u>Brown Intertec</u> Address: <u>2309 Palace St.</u> Email To: <u>lacrosse, WI 54603</u> Phone: <u>608-781-7277</u> Requested Due Date/TAT: <u>STD</u>		<b>Section B</b> Required Project Information: Report To: <u>Nick Stengl</u> Copy To: Purchase Order No.: <u>81909382.00</u> Project Name: <u>Artemis Inn</u> Project Number: <u>81909382.00</u>		<b>Section C</b> Invoice Information: Attention: Company Name: Address: Pace Quote Reference: Pace Project Manager/Sales Rep. Pace Profile #:		Page: <u>1</u> of <u>1</u> 43240 Program <input type="checkbox"/> UST <input type="checkbox"/> Superfund <input type="checkbox"/> Emissions <input type="checkbox"/> Clean Air Act <input type="checkbox"/> Voluntary Clean Up <input type="checkbox"/> Dry Clean <input type="checkbox"/> RCRA <input type="checkbox"/> Other Location of Sampling by State <u>WI</u> Reporting Units: <u>mg/m<sup>3</sup></u> <input type="checkbox"/> ug/m <sup>3</sup> <input type="checkbox"/> mg/m <input type="checkbox"/> PPMV <input type="checkbox"/> Other Report Level: <u>II</u> <u>III</u> <u>IV</u> <u>V</u> <u>Other</u>							
<b>Section D</b> Required Client Information <b>AIR SAMPLE ID</b> Sample IDs MUST BE UNIQUE		<b>COLLECTED</b> MEDIA CODE PID Reading (Client only) Valid Media Codes: MEDIA CODE Tedlar Bag TB 1 Liter Summa Can ILC 6 Liter Summa Can SLC Low Volume Puff LVP High Volume Puff HVP Other PM10		(Initial Field - In Hg) Canister Pressure (Final Field - In Hg) Canister Pressure Summa Can Number Flow Control Number		Method: PM10 3C - Fixed Gas (%) TO-3 BTEX TO-3M (Methane) TO-15 Full Lmk VOCs TO-15 Short Lmk BTEX TO-15 Short Lmk (Others) P10C Naphthalene 1,2 DCA Pace Lab ID							
ITEM #	1	2	3	4	5	6	7	8	9	10	11	12	
	SS-1	SS-2	SS-3										
	6LC 00	010	323.2	1-8-20	10:47	11:29	-30	-3	2745	1168			
					10:57	11:32	-30	-3	2135	1615			
					10:56	11:35	-30	-4	1600	0645			
Comments: SS-3, PID at 323.2 ppm P10C, Naphthalene, 1,2-DCA		RELINQUISHED BY / AFFILIATION D. Bendshaw/Brown		DATE 1-8-20		TIME 17:00		ACCEPTED BY / AFFILIATION Nick Stengl/Pace		DATE 11/10/2020		TIME 0940	
												SAMPLE CONDITIONS Received on Ice Y/N Custody Sealed Cooler Y/N Samples Intact Y/N	
												SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: <u>D. Bendshaw</u> SIGNATURE of SAMPLER: <u>[Signature]</u> DATE Signed (MM/DD/YYYY): <u>1-8-2020</u>	



Document Name:  
Air Sample Condition Upon Receipt  
Document No.:  
F-MN-A-106-rev.19

Document Revised: 14Oct2019  
Page 1 of 1  
Issuing Authority:

Air Sample Condition Upon Receipt

Client Name:  
Braun Intertec

Project #:

**WO#: 10505002**

PM: BM2

Due Date: 01/17/20

CLIENT: Braun-BLM

Courier:  Fed Ex  UPS  USPS  Client  
 Pace  Speedee  Commercial See Exception

Tracking Number: 1083 0283 5869

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: CEG 1/10/20

Type of Ice Received  Blue  Wet  None

Comments:

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Chain of Custody Relinquished?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.
Sampler Name and/or Signature on COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Media: <u>Air Can</u> Airbag Filter TDT Passive		11. Individually Certified Cans Y <u>(N)</u> (list which samples)
Is sufficient information available to reconcile samples to the COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12.
Do cans need to be pressurized? (DO NOT PRESSURIZE 3C or ASTM 1946!!!)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13.

Gauge # <input checked="" type="checkbox"/> 10AIR26 <input type="checkbox"/> 10AIR34 <input type="checkbox"/> 10AIR35 <input type="checkbox"/> 4097									
Canisters					Canisters				
Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure	Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure
<u>SS-1</u>	<u>2745</u>	<u>1168</u>	<u>-2.5</u>	<u>5</u>					
<u>SS-2</u>	<u>2135</u>	<u>1615</u>	<u>-2.5</u>	<u>5</u>					
<u>SS-3</u>	<u>1600</u>	<u>0645</u>	<u>-3.5</u>	<u>5</u>					
<u>Unused</u>	<u>0505</u>	<u>0824</u>	<u>-28.5</u>	<u>-</u>					

CLIENT NOTIFICATION/RESOLUTION

Field Data Required?  Yes  No

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/Resolution: \_\_\_\_\_

Project Manager Review: BAW

Date: 1/10/2020

Note: When ever 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)