



ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

**VAPOR DATA RESULTS REPORT**

June 29, 2023

Ms. Margaret Brunette  
Wisconsin Department of Natural Resources  
1027 W. St. Paul Avenue  
Milwaukee, WI 53233

VIA E-MAIL

KPRG Project No. 17519

Re: Vapor Data Transmittal  
Milwaukee Solvay Coke & Gas-MGP  
311 E. Greenfield Avenue, Milwaukee, WI  
BRRTS # 02-41-466662

Dear Ms. Brunette:

High-volume sub-slab vapor sampling was performed on May 23, 2023 and May 24, 2023 by KPRG and Associates, Inc. (KPRG). This was the second high-volume sampling event associated with the redevelopment of the subject property and was done to coincide with the time of year when the high groundwater table occurs at the site.

The sampling included all seven high-volume sampling points as well as four standard sub-slab vapor samples, as shown on Figure 1. The standard sub-slab vapor samples were collected prior to the high-volume samples. The standard sub-slab samples were collected using 30-minute flow controllers and 1-Liter summa canisters. The high-volume sampling was conducted in accordance with the High-Volume Sampling Plan, which occurred as described in the following sentences.

A manifold set up was connected to each sampling point that included a sampling port, a pressure gauge and a connection port to the blower. Following setting up the system, a blower was started to allow for approximately 5 minutes of high volume purging during which time a smoke test was completed checking for potential leaks through the surrounding floor slab and sampling components; no leaks were found. The blower was vented approximately 50-feet away from the sampling point. During this initial purging, readings were collected for photoionization detector (PID) and flow. Vacuum readings were collected from the three (3) Radius of Influence (ROI) probes around sampling point HV-1. Following the initial 5-minute purge, the valve on a 1-Liter summa canister that was attached to the sampling point manifold was opened to allow for sample collection. The canister was equipped with a 30-minute flow controller. During the purging and sampling effort, PID readings were recorded at the vapor discharge point. PID readings were collected during testing at each sampling location. Following the 30 minutes of sample collection, the valve on the canister was closed and the blower shut down. This process was repeated for each

sampling point, except for the ROI monitoring because that only occurred at HV-1 in accordance with the sampling plan.

The samples were analyzed for benzene and naphthalene in accordance the High-Volume Sampling Plan. A copy of the laboratory analytical data is included with this transmittal. The May 2023 analytical data is provided in Table 1 along with the data from the February 2023 sampling. An areal extent of the analytical results are also shown on Figure 2. A review of the table shows that the concentrations for the May 2023 sampling points are below the Sub-Slab Vapor Risk Screening Levels (VRSL). The sampling results for the most recent round all decreased from the previous sampling event, except for HV-3, where the results are similar for both rounds of sampling. It should be noted that the HV-7 results in February 2023 were above the VRSL for naphthalene but in this sampling event the results are now below the VRSL for naphthalene. The reduction in the analytical results is because of the influence of the methane system creating a negative vacuum beneath the concrete floor slab.

The noted difference in the results between the high-volume samples and the standard sub-slab samples is thought to result from the difference in how the samples are collected and the presence of in-situ soil stabilization (ISS) material beneath the manufacturing building. The high-volume sampling method creates a larger vacuum beneath the slab in order to have a larger radius of influence compared to standard sub-slab sampling methods. This larger vacuum is thought to extract the benzene and naphthalene vapors from the ISS material beneath the building.

In regards to the Historic Fill Site Exemption requirements associated with the methane system. Observations during the February 2023 and May 2023 sampling events did not indicate deterioration of the concrete slab and no repairs were required at this time and observations of the manometers along the vertical suction pipes indicated that a vacuum was occurring and the fans were operating properly.

In conclusion, the analytical data shows that the risk for vapor intrusion of benzene is minimal, the vapor intrusion risk for naphthalene is decreasing even with the noted naphthalene result in HV-7 in February 2023, and the methane system is assisting in removing any accumulated vapors. At this time, KPRG recommends that no more high-volume sampling occur because of the minimal risk from benzene based on the analytical results and the decreasing naphthalene results but continue monitoring the methane system operations.

If there are any questions, please contact me at 262-781-0475.

Sincerely,  
KPRG and Associates, Inc.



Joshua D. Davenport, P.E.  
Senior Engineer

cc: William Stuckey, Komatsu Mining Corp.  
Brenna Bellmer, Komatsu Mining Corp

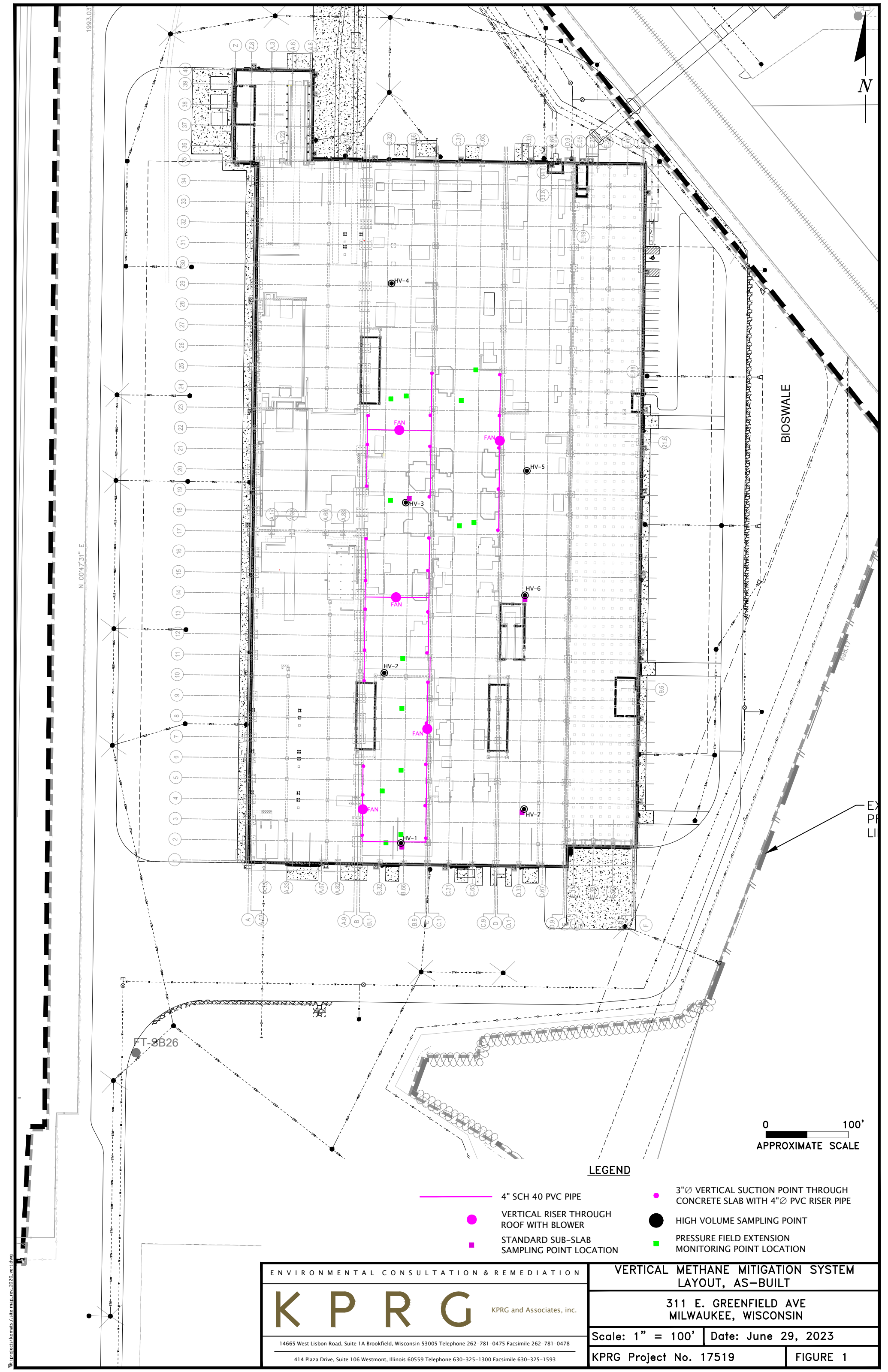
## **TABLE**

Table 1. High-Volume Vapor Sampling Analytical Results, Komatsu Manufacturing Building - 311 E. Greenfield Ave, Milwaukee, WI

Parameter	Sample	HV-1		HV-1 ET-1		HV-2		HV-3		HV-3 ET-1		HV-4		HV-5		HV-6		HV-6 ET-1		HV-7		HV-7 ET-1	
	Sub-Slab VRSL	2/8/2023	5/23/2023	2/8/2023	5/23/2023	2/9/2023	5/23/2023	2/9/2023	5/24/2023	2/8/2023	5/24/2023	2/8/2023	5/24/2023	2/9/2023	5/24/2023	2/9/2023	5/24/2023	2/8/2023	5/24/2023	2/8/2023	5/23/2023	2/8/2023	5/23/2023
Benzene	1,600	7.0	<0.760	56.5	4.50	27.9	19.9	50.4	57.5	18.5	8.5	52.9	<0.760	108	<0.760	28.3	<0.760	16.5	6.64	389	318	75.7	46.6
Naphthalene	360	12.6	<6.13	5.3	<6.13	154	<6.13	207	246	<6.0	<6.13	25.2	<6.13	60.9	<6.13	8.3	<6.13	13.2	<6.13	699	281	1.1	<6.13

All units are in  $\mu\text{g}/\text{m}^3$

## **FIGURES**



1993.03  
N 00°47'31" E

N

BIOSWALE

EX PL

0 100'  
APPROXIMATE SCALE

**LEGEND**

- 4" SCH 40 PVC PIPE
- 3" Ø VERTICAL SUCTION POINT THROUGH CONCRETE SLAB WITH 4" Ø PVC RISER PIPE
- VERTICAL RISER THROUGH ROOF WITH BLOWER
- HIGH VOLUME SAMPLING POINT
- STANDARD SUB-SLAB SAMPLING POINT LOCATION
- PRESSURE FIELD EXTENSION MONITORING POINT LOCATION

ENVIRONMENTAL CONSULTATION & REMEDIATION

**K P R G**

KPRG and Associates, Inc.

14665 West Lisbon Road, Suite 1A Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

**VERTICAL METHANE MITIGATION SYSTEM LAYOUT, AS-BUILT**

311 E. GREENFIELD AVE  
MILWAUKEE, WISCONSIN

Scale: 1" = 100'

Date: June 29, 2023

KPRG Project No. 17519

FIGURE 1

W:\projects\komsusu\site map\_rev\_2020\_vert.dwg



HV-4		
Parameter	2/8/2023	5/24/2023
Benzene	52.9	<0.760
Naphthalene	25.2	<6.13

HV-3 ET-1		
Parameter	2/8/2023	5/24/2023
Benzene	18.5	8.5
Naphthalene	<6.0	<6.13

HV-3		
Parameter	2/9/2023	5/24/2023
Benzene	50.4	57.5
Naphthalene	207	246

HV-5		
Parameter	2/9/2023	5/24/2023
Benzene	108	<0.760
Naphthalene	60.9	<6.13

HV-6		
Parameter	2/9/2023	5/24/2023
Benzene	28.3	<0.760
Naphthalene	8.3	<6.13

HV-6 ET-1		
Parameter	2/8/2023	5/24/2023
Benzene	16.5	6.64
Naphthalene	13.2	<6.13

HV-2		
Parameter	2/9/2023	5/23/2023
Benzene	27.9	19.9
Naphthalene	154	<6.13

HV-7		
Parameter	2/8/2023	5/23/2023
Benzene	389	318
Naphthalene	699	281

HV-1		
Parameter	2/8/2023	5/23/2023
Benzene	7.0	<0.760
Naphthalene	12.6	<6.13

HV-1 ET-1		
Parameter	2/8/2023	5/23/2023
Benzene	56.5	4.50
Naphthalene	5.3	<6.13

HV-7 ET-1		
Parameter	2/8/2023	5/23/2023
Benzene	75.7	46.6
Naphthalene	1.1	<6.13

**LEGEND**

- 4" SCH 40 PVC PIPE
- 3" Ø VERTICAL SUCTION POINT THROUGH CONCRETE SLAB WITH 4" Ø PVC RISER PIPE
- VERTICAL RISER THROUGH ROOF WITH BLOWER FAN
- HIGH VOLUME SAMPLING POINT
- STANDARD SUB-SLAB SAMPLING POINT LOCATION
- PRESSURE FIELD EXTENSION MONITORING POINT LOCATION

0 60'  
APPROXIMATE SCALE

**NOTES:**

ALL VALUES ARE IN MICROGRAMS PER CUBIC METER ( $\mu\text{g}/\text{m}^3$ )

BENZENE VRSL =  $1,600 \mu\text{g}/\text{m}^3$   
NAPHTHALENE VRSL =  $360 \mu\text{g}/\text{m}^3$

ENVIRONMENTAL CONSULTATION & REMEDIATION

**K P R G**

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414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

**HIGH VOLUME SAMPLING RESULTS – MAY 2023**

311 E. GREENFIELD AVE  
MILWAUKEE, WISCONSIN

Scale: 1" = 60'

Date: June 1, 2023

KPRG Project No. 17519

FIGURE 2

**ATTACHMENT 1**  
**Analytical Data Package**



## KPRG and Associates, Inc.

Sample Delivery Group: L1620605  
Samples Received: 05/26/2023  
Project Number: 17519  
Description:

Report To: Joshua D. Davenport  
14665 West Lisbon Road, Suite 2B  
Brookfield, WI 53005

Entire Report Reviewed By:



John Hawkins  
Project Manager

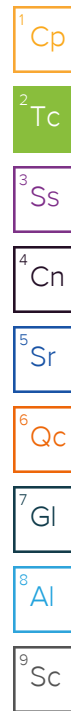
Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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# SAMPLE SUMMARY

## HV-1 ET-1 L1620605-01 Air

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2069125	1	05/31/23 15:50	05/31/23 15:50	SDS	Mt. Juliet, TN

Collected by J/K      Collected date/time 05/23/23 10:27      Received date/time 05/26/23 09:00

1 Cp

2 Tc

## HV-1 L1620605-02 Air

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2069125	1	05/31/23 16:32	05/31/23 16:32	MBF	Mt. Juliet, TN

Collected by J/K      Collected date/time 05/23/23 00:00      Received date/time 05/26/23 09:00

3 Ss

4 Cn

5 Sr

## HV-2 L1620605-03 Air

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2069125	1	05/31/23 17:14	05/31/23 17:14	SDS	Mt. Juliet, TN

Collected by J/K      Collected date/time 05/23/23 14:49      Received date/time 05/26/23 09:00

6 Qc

7 Gl

8 Al

## HV-3 L1620605-04 Air

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2069125	1	05/31/23 17:56	05/31/23 17:56	SDS	Mt. Juliet, TN

Collected by J/K      Collected date/time 05/24/23 00:00      Received date/time 05/26/23 09:00

9 Sc

## HV-3 ET-1 L1620605-05 Air

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2069125	1	05/31/23 18:37	05/31/23 18:37	SDS	Mt. Juliet, TN

Collected by J/K      Collected date/time 05/24/23 13:00      Received date/time 05/26/23 09:00

## HV-4 L1620605-06 Air

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2069125	1	05/31/23 19:19	05/31/23 19:19	SDS	Mt. Juliet, TN

Collected by J/K      Collected date/time 05/24/23 11:50      Received date/time 05/26/23 09:00

## HV-5 L1620605-07 Air

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2069125	1	05/31/23 20:01	05/31/23 20:01	SDS	Mt. Juliet, TN

Collected by J/K      Collected date/time 05/24/23 14:26      Received date/time 05/26/23 09:00

## HV-6 L1620605-08 Air

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2069125	1	05/31/23 20:43	05/31/23 20:43	SDS	Mt. Juliet, TN

Collected by J/K      Collected date/time 05/24/23 12:44      Received date/time 05/26/23 09:00

# SAMPLE SUMMARY

## HV-6 ET-1 L1620605-09 Air

Collected by J/K      Collected date/time 05/24/23 11:43      Received date/time 05/26/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2069125	1	05/31/23 21:25	05/31/23 21:25	SDS	Mt. Juliet, TN

<sup>1</sup> Cp

<sup>2</sup> Tc

## HV-7 L1620605-10 Air

Collected by J/K      Collected date/time 05/23/23 14:00      Received date/time 05/26/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2069125	1	05/31/23 22:06	05/31/23 22:06	SDS	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2073831	10	06/08/23 16:45	06/08/23 16:45	MBF	Mt. Juliet, TN

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

## HV-7 ET-1 L1620605-11 Air

Collected by J/K      Collected date/time 05/23/23 12:52      Received date/time 05/26/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2069125	1	05/31/23 22:48	05/31/23 22:48	SDS	Mt. Juliet, TN

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

# CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



John Hawkins  
Project Manager

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppbv	ug/m3	ppbv	ug/m3			
Benzene	71-43-2	78.10	0.238	0.760	1.41	4.50		1	<a href="#">WG2069125</a>
Naphthalene	91-20-3	128	1.17	6.13	ND	ND		1	<a href="#">WG2069125</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.4				<a href="#">WG2069125</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppbv	ug/m3	ppbv	ug/m3			
Benzene	71-43-2	78.10	0.238	0.760	ND	ND		1	<a href="#">WG2069125</a>
Naphthalene	91-20-3	128	1.17	6.13	ND	ND		1	<a href="#">WG2069125</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		94.0				<a href="#">WG2069125</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppbv	ug/m3	ppbv	ug/m3			
Benzene	71-43-2	78.10	0.238	0.760	6.24	19.9		1	<a href="#">WG2069125</a>
Naphthalene	91-20-3	128	1.17	6.13	ND	ND		1	<a href="#">WG2069125</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.7				<a href="#">WG2069125</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppbv	ug/m3	ppbv	ug/m3			
Benzene	71-43-2	78.10	0.238	0.760	18.0	57.5		1	<a href="#">WG2069125</a>
Naphthalene	91-20-3	128	1.17	6.13	47.0	246		1	<a href="#">WG2069125</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.4				<a href="#">WG2069125</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppbv	ug/m3	ppbv	ug/m3			
Benzene	71-43-2	78.10	0.238	0.760	2.66	8.50		1	<a href="#">WG2069125</a>
Naphthalene	91-20-3	128	1.17	6.13	ND	ND		1	<a href="#">WG2069125</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.9				<a href="#">WG2069125</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
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- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.238	0.760	ND	ND		1	<a href="#">WG2069125</a>
Naphthalene	91-20-3	128	1.17	6.13	ND	ND		1	<a href="#">WG2069125</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		93.7				<a href="#">WG2069125</a>

- 1 Cp
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Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.238	0.760	ND	ND		1	<a href="#">WG2069125</a>
Naphthalene	91-20-3	128	1.17	6.13	ND	ND		1	<a href="#">WG2069125</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.2				<a href="#">WG2069125</a>

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Benzene	71-43-2	78.10	0.238	0.760	ND	ND		1	<a href="#">WG2069125</a>
Naphthalene	91-20-3	128	1.17	6.13	ND	ND		1	<a href="#">WG2069125</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.8				<a href="#">WG2069125</a>

- 1 Cp
- 2 Tc
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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppbv	ug/m3	ppbv	ug/m3			
Benzene	71-43-2	78.10	0.238	0.760	2.08	6.64		1	<a href="#">WG2069125</a>
Naphthalene	91-20-3	128	1.17	6.13	ND	ND		1	<a href="#">WG2069125</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.2				<a href="#">WG2069125</a>

- 1 Cp
- 2 Tc
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- 5 Sr
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- 8 Al
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Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppbv	ug/m3	ppbv	ug/m3			
Benzene	71-43-2	78.10	2.38	7.60	99.5	318		10	<a href="#">WG2073831</a>
Naphthalene	91-20-3	128	1.17	6.13	53.6	281		1	<a href="#">WG2069125</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		168		J1		<a href="#">WG2069125</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		120				<a href="#">WG2073831</a>

Sample Narrative:

L1620605-10 WG2069125: Surrogate failure due to matrix interference.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppbv	ug/m3	ppbv	ug/m3			
Benzene	71-43-2	78.10	0.238	0.760	14.6	46.6		1	<a href="#">WG2069125</a>
Naphthalene	91-20-3	128	1.17	6.13	ND	ND		1	<a href="#">WG2069125</a>
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		102				<a href="#">WG2069125</a>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Method Blank (MB)

(MB) R3933777-2 05/31/23 10:29

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Benzene	U		0.0715	0.238
Naphthalene	U		0.350	1.17
<i>(S) 1,4-Bromofluorobenzene</i>	93.2			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3933777-1 05/31/23 09:48 • (LCSD) R3933777-3 05/31/23 11:30

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Benzene	3.75	3.82	3.78	102	101	70.0-130			1.05	25
Naphthalene	3.75	3.10	3.09	82.7	82.4	70.0-159			0.323	25
<i>(S) 1,4-Bromofluorobenzene</i>				94.5	94.6	60.0-140				

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3934731-3 06/08/23 11:56

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Benzene	U		0.0715	0.238
(S) 1,4-Bromofluorobenzene	99.5			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3934731-1 06/08/23 08:53 • (LCSD) R3934731-2 06/08/23 09:36

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Benzene	3.75	3.60	3.61	96.0	96.3	70.0-130			0.277	25
(S) 1,4-Bromofluorobenzene				102	102	60.0-140				

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

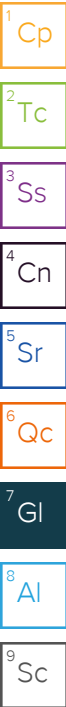
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

### Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

### Qualifier Description

J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
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# ACCREDITATIONS & LOCATIONS

## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky <sup>1,6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Company Name/Address: **KPRG and Associates, Inc.**  
 14665 West Lisbon Road, Suite 2B  
 Brookfield, WI 53005

Billing Information:  
 Attn: Accounts Payable  
 414 Plaza Dr., Ste. 106  
 Westmont, IL 60559

Analysis

Chain of Custody Page 1 of 2

Sample Receipt Checklist  
 COC Seal Present/Intact:  Y  N If Applicable  
 COC Signed/Accurate:  Y  N VOA Zero Headspace:  Y  N  
 Bottles arrive intact:  Y  N Pres. Correct/Check:  Y  N  
 Correct bottles used:  Y  N  
 Sufficient volume sent:  Y  N  
 RAD Screen <0.5 mR/hr:  Y  N

**3ace**  
 JPLE ADVANCING SCIENCE  
 JULIET, TN  
 10 Road Mt Juliet, TN 37122  
 Phone: 615-758-5858 Alt: 800-767-5859  
 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <https://info.pacelabs.com/hubs/pas-standard-terms.pdf>

Report To: **Joshua D. Davenport**

Email To: **JoshuaD@KPRGINC.COM**

Project Description: **KOMATSU**

City/State Collected: **MILWAUKEE, WI**

Please Circle: PT MT **CT** ET

Phone: **262-781-0475**

Client Project #: **17519**

Lab Project #: **KRPGBWI-17519**

Collected by (print): **JOSH + KALEYN**

Site/Facility ID #

P.O. #: **17519**

Collected by (signature): *[Signature]*

**Rush?** (Lab MUST Be Notified)  
 Same Day  Three Day  
 Next Day  Five Day  
 Two Day

Date Results Needed: **2 weeks**

Sample ID	Can #	Flow Cont. #	Date	Time	Initial	Final	TO-15 Summa	BENZENE	NAPHTHALENE	Rem./Contaminant		Sample # (lab only)
										Collection	Canister Pressure/Vacuum	
HV-1 ET-1	20587	10214	5/23/23	1027	-28	0	X	X	X			-01
HV-1	20507	007802	5/23		-28		X	X	X			-02
HV-2	020628	005956	5/23	1449	-29	-4	X	X	X			-03
HV-3	020488	<del>008347</del>	5/24		-28		X	X	X			-04
HV-3 ET-1	020211	007803	5/24	1300	-29	0	X	X	X			-05
HV-4	020306	012357	5/24	1150	-27	-2	X	X	X			-06
HV-5	020159	007849	5/24	1426	-29	-3	X	X	X			-07
HV-6	020208	008358	5/24	1244	-30	-4	X	X	X			-08
HV-6 ET-1	020575	005919	5/24	1143	-30	-1	X	X	X			-09
HV-7	02059	012398	5/23	1400	-29	-4	X	X	X			-10

Remarks: ~~HV-1~~ ~~ET-1~~ ~~20587~~ ~~007802~~ ~~012357~~ ~~5/23~~ ~~1027~~ ~~-28~~ ~~0~~

**ANALYZE BENZENE + NAPHTHALENE ONLY ON ALL SAMPLES**

Relinquished by: (Signature) *[Signature]* Date: **5/25** Time: **1400**

Relinquished by: (Signature) Date: Time:

Relinquished by: (Signature) Date: Time:

Samples returned via:  UPS  FedEx  Courier Tracking #

Received by: (Signature) *[Signature]* Date: **5/25** Time: **1400**


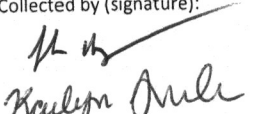
Received by: (Signature) Date: Time:

Received for lab by: (Signature) *[Signature]* Date: **5/26/23** Time: **0900**

Condition: (lab use only) **ambo**

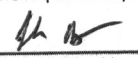
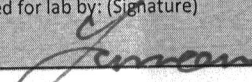
COC Seal Intact:  Y  N  NA

NCF:

Company Name/Address: <b>KPRG and Associates, Inc.</b>			Billing Information: Attn: Accounts Payable 414 Plaza Dr., Ste. 106 Westmont, IL 60559				Analysis			Chain of Custody Page <u>2</u> of <u>2</u>	
14665 West Lisbon Road, Suite 2B Brookfield, WI 53005			Report To: <b>Joshua D. Davenport</b>				Email To: JoshuaD@KPRGINC.COM			 PEOPLE ADVANCING SCIENCE <b>MT JULIET, TN</b> 12065 Lebanon Road Mt Juliet, TN 37122 Phone: 615-758-5858 Alt: 800-767-5859 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <a href="https://info.pacelabs.com/hubs/pas-standard-terms.pdf">https://info.pacelabs.com/hubs/pas-standard-terms.pdf</a>	
Project Description: <b>KOMATSU</b>		City/State Collected: <b>MILWAUKEE, WI</b>		Please Circle: PT MT <input checked="" type="radio"/> ET		TO-15 Summa BENZENE NAPHTHALENE					
Phone: <b>262-781-0475</b>		Client Project # <b>17519</b>		Lab Project # <b>KRPG BWI-17519</b>							
Collected by (print): <b>JOSH + KAELYN</b>		Site/Facility ID #		P.O. # <b>17519</b>							
Collected by (signature): 		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Three Day <input type="checkbox"/> Next Day <input type="checkbox"/> Five Day <input type="checkbox"/> Two Day		Date Results Needed <b>2 WEEKS</b>							
				Collection					Canister Pressure/Vacuum		
Sample ID	Can #	Flow Cont. #	Date	Time	Initial	Final				Rem./Contaminant	Sample # (lab only)
HV-7 ET-1	20299	011433	5/23	1252	-29	0	X	X	X		-11
HV-1-ALT *	020621	012357	5/24	1525	-29	-3	X	X	X		-12

Remarks: \* CALL ME BEFORE ANALYZING HV-1-ALT

ANALYSE BENZENE + NAPH ONLY ON ALL SAMPLES

Relinquished by: (Signature) 			Date: <b>5/25</b>	Time: <b>1400</b>	Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier		Tracking #		Hold #	
Relinquished by: (Signature)			Date:	Time:	Received by: (Signature) <b>FED EX</b>		Date: <b>5/25</b>	Time: <b>1400</b>	Condition: (lab use only) <b>AMMO</b>	
Relinquished by: (Signature)			Date:	Time:	Received by: (Signature)		Date:	Time:	COC Seal Intact: <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
Relinquished by: (Signature)			Date:	Time:	Received for lab by: (Signature) 		Date: <b>5/26/23</b>	Time: <b>0900</b>	NCF:	