

**From:** Brian Youngwirth <[byoungwirth@generalengineering.net](mailto:byoungwirth@generalengineering.net)>  
**Sent:** Wednesday, September 4, 2019 7:30 AM  
**To:** Krueger, Sarah E - DNR  
**Subject:** Susie's  
**Attachments:** Vapor Testing.pdf; COC Vapor VP6 8.28.19.pdf; Vapor VP6 8.28.19.pdf

Sarah, attached are the second round of sampling results from VP-6 at Autowerks and a table of the results from all of the vapor samples collected. I am planning on abandoning the vapor points at the commercial buildings tomorrow or Friday. Please let me know if you need any other information from me regarding the two completed scopes of work. Also, can I just send one invoice for all of the work or do I need two invoices separated into the two phases?

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## Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914  
920-830-2455 • FAX 920-733-0631

**Sample Handling Request**

Rush Analysis Date Required \_\_\_\_\_  
(Rushes accepted only with prior authorization)  
Normal Turn Around \_\_\_\_\_

Lab I.D. # \_\_\_\_\_  
Account No. : \_\_\_\_\_ Quote No.: \_\_\_\_\_  
Project #: \_\_\_\_\_  
Sampler: (signature) *[Signature]*

Project (Name / Location): *Susie's Restaurant / Manitowish*  
Reports To: *Brian Younger* Invoice To: \_\_\_\_\_  
Company: *GEC* Company: \_\_\_\_\_  
Address: *916 S.W. Lake Ave* Address: *C/O GEC*  
City State Zip: *Portage WI 53901* City State Zip: \_\_\_\_\_  
Phone: *608 897 8010* Phone: \_\_\_\_\_  
FAX: \_\_\_\_\_ FAX: \_\_\_\_\_

**Analysis Requested**

**Other Analysis**

Lab I.D.	Sample I.D.	Collection Date	Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 524.2)	VOC (EPA 8260)	8-PCRA METALS	PID/FID	
<i>S036697A</i>	<i>VP-6</i>	<i>8/28/19</i>	<i>AM</i>			<i>N</i>	<i>1</i>	<i>Air</i>																<i>XCVOC</i>	

Comments/Special Instructions (\*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.

Method of Shipment: *Chit*

Temp. of Temp. Blank \_\_\_\_\_ °C On Ice:

Cooler seal intact upon receipt:  Yes  No

Relinquished By: (sign) *[Signature]*

Time Date *8:35 AM 8/28/19*

Received By: (sign) \_\_\_\_\_

Time Date \_\_\_\_\_

Received in Laboratory By: *[Signature]*

Time: *9:35*

Date: *8/28/19*

**TABLE 2**  
**SUMMARY OF SUB-SLAB/AMBIENT VAPOR ANALYTICAL RESULTS**  
**SUSIE'S RESTAURANT**  
**2-0519-258**

<b>TABLE 1 REGIONAL SCREENING LEVEL SUMMARY</b>								
Sample No.	Residential Indoor Air VAL	Residential Sub-Slab Vapor VAL	VP-1 RESIDENCE AT 2614 CUSTER (SUB-SLAB BASEMENT-1 HOUR)		IA-1 RESIDENCE AT 2614 CUSTER (INDOOR AIR BASEMENT-24 HOUR)		IA-2 RESIDENCE AT 2614 CUSTER (INDOOR AIR 1ST FLOOR LIVING ROOM-24 HOUR)	
			07/18/19	08/07/19	07/17/19	08/07/19	07/17/19	08/07/19
Sampling Date	ug/m3	ug/m3	ug/m3					
<b>VOLATILE ORGANIC COMPOUNDS (VOC) (ug/m3)</b>								
Benzene	3.6	120	8.4	NA	0.96	NA	0.57	NA
Carbon Tetrachloride	4.7	160	<0.307	NA	0.44J	NA	0.5J	NA
Chloroform	1.2	40	0.63J	NA	0.44J	NA	3.9	NA
Chloromethane	94	3100	<0.831	NA	1.3J	NA	1.73J	NA
Dichlorodifluoromethane	100	3300	3.02	NA	2.67	NA	2.62	NA
1,1 Dichloroethane	18	600	<0.187	<0.187	<0.187	<0.187	<0.187	<0.187
1,2-Dichloroethane	1.1	37	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24
1,1 Dichloroethene	210	7000	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21
1,2 Dichloroethene Cis	NE	NE	0.40J	<0.197	<0.197	<0.197	<0.197	<0.197
1,2 Dichloroethene Trans	NE	NE	0.238J	<0.231	<0.231	<0.231	<0.231	<0.231
Ethylbenzene	11	370	8.5	NA	1	NA	0.78	NA
Methyl-Tert_Butyl-Ether	110	3700	<0.16	NA	<0.16	NA	<0.16	NA
Methylene Chloride	630	21000	<15	NA	<15	NA	<15	NA
Naphthalene	0.83	28	2.56	NA	<0.675	NA	0.89J	NA
Tetrachloroethylene	42	1400	8.5	1.15	<0.278	<0.278	<0.278	<0.278
Toluene	5200	170000	38	NA	2.22	NA	2.56	NA
1,1,1-Trichloroethane	5200	17000	0.65J	0.65J	<0.249	<0.249	<0.249	<0.249
Trichloroethylene	2.1	70	5.5	3.6	<0.237	<0.237	0.37J	<0.237
Trichlorofluoromethane	NE	NE	1.24	NA	1.46	NA	2.47	NA
1,2,4-Trimethylbenzene	63	2100	12.5	NA	1.52	NA	0.83J	NA
1,3,5-Trimethylbenzene	63	2100	3.09	NA	0.44J	NA	0.245J	NA
Vinyl chloride	1.7	57	<0.148	0.36J	<0.148	<0.148	<0.148	<0.148
m&p-Xylene	100	3300	23.8	NA	2.21	NA	1.78	NA
o-Xylene	100	3300	9.9	NA	0.43J	NA	0.52J	NA

UG/M<sup>3</sup> = Micrograms per Cubic Meter of Air  
 Bold indicates analytical results exceed sub-slab screening level  
 NE= Not Established

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2-0519-258**

**TABLE 1 REGIONAL SCREENING LEVEL SUMMARY**

Sample No.	Small Commercial Sub-Slab Vapor VRSL	Small Commercial Indoor Air VAL	VP-2 GOLDEN FLAME RESTAURANT AT 2604 CUSTER (SUB-SLAB BASEMENT-1 HOUR)		IA-3 GOLDEN FLAME RESTAURANT AT 2604 CUSTER (INDOOR AIR BASEMENT 8 HOUR)		IA-4 GOLDEN FLAME RESTAURANT AT 2604 CUSTER (INDOOR AIR BATHROOM-8 HOUR)		IA-5 GOLDEN FLAME RESTAURANT AT 2604 CUSTER (INDOOR AIR 1ST FLOOR 8 HOUR)		OA-1 GOLDEN FLAME RESTAURANT AT 2604 CUSTER (OUTDOOR AIR-8 HOUR W/NW CORNER OF BUILDING)	
			07/18/19	08/07/19	08/07/19	TBD	08/07/19	TBD	08/07/19	TBD	08/07/19	TBD
Sampling Date	ug/m3	ug/m3	ug/m3									
<b>VOLATILE ORGANIC COMPOUNDS (VOC) (ug/m3)</b>												
Benzene	530	16	4J	NA	NA	NA		NA		NA		NA
Carbon Tetrachloride	670	20	<7.675	NA	NA	NA		NA		NA		NA
Chloroform	180	5.3	<7.5	NA	NA	NA		NA		NA		NA
Chloromethane	13000	390	<20.775	NA	NA	NA		NA		NA		NA
Dichlorodifluoromethane	15000	440	<6.575	NA	NA	NA		NA		NA		NA
1,1 Dichloroethane	2600	77	<4.675	<1.87	<0.187	<0.187		<0.187		<0.187		<0.187
1,2-Dichloroethane	160	4.7	<6	<2.4	1.25	<0.24		<0.24		<0.24		<0.24
1,1 Dichloroethene	29000	880	<5.25	17	<0.21	<0.21		<0.21		<0.21		<0.21
1,2 Dichloroethene Cis	NE	NE	2360	2280	5.5	<0.197		<0.197		<0.197		0.44J
1,2 Dichloroethene Trans	NE	NE	135	212	1.03	<0.231		<0.231		<0.231		<0.231
Ethylbenzene	1600	49	7.6J	NA	NA	NA		NA		NA		NA
Methyl-Tert Butyl-Ether	16000	470	<4	NA	NA	NA		NA		NA		NA
Methylene Chloride	87000	2600	<375	NA	NA	NA		NA		NA		NA
Naphthalene	120	3.6	<16.875	NA	NA	NA		NA		NA		NA
Tetrachloroethylene	6000	180	117	141	1.02	<0.278		<0.278		<0.278		<0.278
Toluene	730000	22000	24.5	NA	NA	NA		NA		NA		NA
1,1,1-Trichloroethane	730000	22000	<6.225	<2.49	<0.249	<0.249		<0.249		<0.249		<0.249
Trichloroethylene	290	8.8	<b>1160</b>	<b>1430</b>	4	<0.237		<0.237		<0.237		<0.237
Trichlorofluoromethane	NE	NE	<8.425	NA	NA	NA		NA		NA		NA
1,2,4-Trimethylbenzene	8700	260	13.5J	NA	NA	NA		NA		NA		NA
1,3,5-Trimethylbenzene	8700	260	<5.8	NA	NA	NA		NA		NA		NA
Vinyl chloride	930	28	10.2J	5.4	0.23J	<0.148		<0.148		<0.148		<0.148
m&p-Xylene	15000	440	19.5J	NA	NA	NA		NA		NA		NA
o-Xylene	15000	440	8.7J	NA	NA	NA		NA		NA		NA

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<b>TABLE 1 REGIONAL SCREENING LEVEL SUMMARY</b>			
<b>Sample No.</b>	<b>Small Commercial Sub-Slab Vapor VRSL</b>	<b>VP-3 DAVID'S HOUSE OF TRAVEL AT 1029 S. 26TH (SUB-SLAB BASEMENT 1 HOUR)</b>	
<b>Sampling Date</b>		<b>07/18/19</b>	<b>08/07/19</b>
	<b>ug/m3</b>	<b>ug/m3</b>	
<b><i>VOLATILE ORGANIC COMPOUNDS (VOC) (ug/m3)</i></b>			
Benzene	530	3.6	NA
Carbon Tetrachloride	670	<0.307	NA
Chloroform	180	0.54J	NA
Chloromethane	13000	<0.831	NA
Dichlorodifluoromethane	15000	6.9	NA
1,1 Dichloroethane	2600	<0.187	<0.187
1,2-Dichloroethane	160	<0.24	<0.24
1,1 Dichloroethene	29000	<0.21	<0.21
1,2 Dichloroethene Cis	NE	<0.197	<0.197
1,2 Dichloroethene Trans	NE	<0.231	<0.231
Ethylbenzene	1600	7.8	NA
Methyl-Tert_Butyl-Ether	16000	<0.16	NA
Methylene Chloride	87000	<15	NA
Naphthalene	120	3.9	NA
Tetrachloroethylene	6000	1.97	3.9
Toluene	730000	53	NA
1,1,1-Trichloroethane	730000	<0.249	<0.249
Trichloroethylene	290	<0.237	<0.237
Trichlorofluoromethane	NE	2.02	NA
1,2,4-Trimethylbenzene	8700	11.9	NA
1,3,5-Trimethylbenzene	8700	2.7	NA
Vinyl chloride	930	0.33J	<0.148
m&p-Xylene	15000	26.2	NA
o-Xylene	15000	10.5	NA

UG/M<sup>3</sup>- Micrograms per Cubic Meter of Air

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<b>TABLE 1 REGIONAL SCREENING LEVEL SUMMARY</b>			
<b>Sample No.</b>	<b>Small Commercial Sub-Slab Vapor VRSL</b>	<b>VP-4 CUSTER STREET AUTOMOTIVE AT 1015 S. 26TH (SUB-SLAB 1ST FLOOR OF SHOP- 1 HOUR)</b>	
<b>Sampling Date</b>		<b>07/18/19</b>	<b>08/07/19</b>
	<b>ug/m3</b>	<b>ug/m3</b>	
<b><i>VOLATILE ORGANIC COMPOUNDS (VOC) (ug/m3)</i></b>			
Benzene	530	14.5	NA
Carbon Tetrachloride	670	<0.307	NA
Chloroform	180	0.34J	NA
Chloromethane	13000	<0.831	NA
Dichlorodifluoromethane	15000	4900	NA
1,1 Dichloroethane	2600	<0.187	<0.187
1,2-Dichloroethane	160	<0.24	<0.24
1,1 Dichloroethene	29000	<0.21	<0.21
1,2 Dichloroethene Cis	NE	3.01	<0.197
1,2 Dichloroethene Trans	NE	<0.231	<0.231
Ethylbenzene	1600	20.3	NA
Methyl-Tert_Butyl-Ether	16000	<0.16	NA
Methylene Chloride	87000	<15	NA
Naphthalene	120	15.7	NA
Tetrachloroethylene	6000	187	105
Toluene	730000	70	NA
1,1,1-Trichloroethane	730000	1.14	1.25
Trichloroethylene	290	3.6	2.09
Trichlorofluoromethane	NE	1.46	NA
1,2,4-Trimethylbenzene	8700	51	NA
1,3,5-Trimethylbenzene	8700	12.3	NA
Vinyl chloride	930	0.49	<0.148
m&p-Xylene	15000	66	NA
o-Xylene	15000	26.7	NA

UG/M<sup>3</sup>- Micrograms per Cubic Meter of Air

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**2-0519-258**

<b>TABLE 1 REGIONAL SCREENING LEVEL SUMMARY</b>			
Sample No.	Small Commercial Sub-Slab Vapor VRSL	VP-5 SHOP AT 1025 S. 26TH (SUB-SLAB 1ST FLOOR OF SHOP-1 HOUR)	
Sampling Date		07/18/19	08/07/19
	ug/m3		
<b><i>VOLATILE ORGANIC COMPOUNDS (VOC) (ug/m3)</i></b>			
Benzene	530	13.7	NA
Carbon Tetrachloride	670	<0.307	NA
Chloroform	180	<0.3	NA
Chloromethane	13000	<0.831	NA
Dichlorodifluoromethane	15000	4.5	NA
1,1 Dichloroethane	2600	<0.187	<0.187
1,2-Dichloroethane	160	<0.24	<0.24
1,1 Dichloroethene	29000	<0.21	<0.21
1,2 Dichloroethene Cis	NE	<0.197	<0.197
1,2 Dichloroethene Trans	NE	<0.231	<0.231
Ethylbenzene	1600	18.9	NA
Methyl-Tert_Butyl-Ether	16000	<0.16	NA
Methylene Chloride	87000	<15	NA
Naphthalene	120	6.9	NA
Tetrachloroethylene	6000	33	24.4
Toluene	730000	71	NA
1,1,1-Trichloroethane	730000	<0.249	<0.249
Trichloroethylene	290	<0.237	<0.237
Trichlorofluoromethane	NE	1.4	NA
1,2,4-Trimethylbenzene	8700	43	NA
1,3,5-Trimethylbenzene	8700	12	NA
Vinyl chloride	930	0.41J	<0.148
m&p-Xylene	15000	50	NA
o-Xylene	15000	21	NA

UG/M<sup>3</sup>- Micrograms per Cubic Meter of Air

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<b>TABLE 1 REGIONAL SCREENING LEVEL SUMMARY</b>			
Sample No.	Small Commercial Sub-Slab Vapor VRSL	VP-6 AUTOWERKS AT 1037 S. 26TH (SUB-SLAB 1ST FLOOR OF SHOP-1 HOUR)	
Sampling Date		08/06/19	08/28/19
	ug/m3	ug/m3	
<b><i>VOLATILE ORGANIC COMPOUNDS (VOC) (ug/m3)</i></b>			
1,1 Dichloroethane	2600	<0.187	<0.187
1,2-Dichloroethane	160	<0.24	<0.24
1,1 Dichloroethene	29000	<0.21	<0.21
1,2 Dichloroethene Cis	NE	<0.197	<0.197
1,2 Dichloroethene Trans	NE	<0.231	<0.231
Tetrachloroethylene	6000	9.6	0.41J
1,1,1-Trichloroethane	730000	<0.249	<0.249
Trichloroethylene	290	<0.237	<0.237
Vinyl chloride	930	<0.148	<0.148

UG/M<sup>3</sup> - Micrograms per Cubic Meter of Air

Bold indicates analytical results exceed sub-slab screening level

NE= Not Established



# Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 \*P 920-830-2455 \* F 920-733-0631

BRIAN YOUNGWIRTH  
GENERAL ENGINEERING  
916 SILVER LAKE DRIVE  
PORTAGE, WI 53901

Report Date 03-Sep-19

Project Name  
Project #

Invoice # E36697

Lab Code 5036697A  
Sample ID vp-6  
Sample Matrix Air  
Sample Date 8/28/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
Air Samples										
1,2-Dichloroethane	< 0.24	ug/m3	0.24	0.763	1	TO-15	8/28/2019	8/28/2019	CJR	1
1,1-Dichloroethane	< 0.187	ug/m3	0.187	0.596	1	TO-15	8/28/2019	8/28/2019	CJR	1
1,1-Dichloroethene	< 0.21	ug/m3	0.21	0.668	1	TO-15	8/28/2019	8/28/2019	CJR	1
cis-1,2-Dichloroethene	< 0.197	ug/m3	0.197	0.626	1	TO-15	8/28/2019	8/28/2019	CJR	1
trans-1,2-Dichloroethene	< 0.231	ug/m3	0.231	0.734	1	TO-15	8/28/2019	8/28/2019	CJR	1
Tetrachloroethene	0.41 "J"	ug/m3	0.278	0.884	1	TO-15	8/28/2019	8/28/2019	CJR	1
1,1,1-Trichloroethane	< 0.249	ug/m3	0.249	0.793	1	TO-15	8/28/2019	8/28/2019	CJR	1
Trichloroethene (TCE)	< 0.237	ug/m3	0.237	0.754	1	TO-15	8/28/2019	8/28/2019	CJR	1
Vinyl Chloride	< 0.148	ug/m3	0.148	0.472	1	TO-15	8/28/2019	8/28/2019	CJR	1

"J" Flag: Analyte detected between LOD and LOQ

LOD Limit of Detection

LOQ Limit of Quantitation

**Code**      **Comment**

1      Laboratory QC within limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature