



RECEIVED

December 7, 2018

DEC 10 2018

Kenneth & Margaret Kuester
3659 East Squire Avenue
Cudahy, WI 53110

BY: _____

Subject: Environmental Investigation Sampling Results
BRRTS#: 02-41-515150

Dear Mr. and Mrs. Kuester:

In accordance with Wisconsin Department of Natural Resources (WDNR) regulation NR 716.14, EnviroForensics, LLC. (EnviroForensics) is providing the result of the environmental sample collected from your property located at 3659 East Squire Avenue in Cudahy, Wisconsin. Two (2) groundwater samples, 6306-MW-6 and 6306-MW-8, were collected on January 21, 2018 from monitoring wells MW-6 and MW-8, respectively. The locations of MW-6 and MW-8 are shown on the attached **Figure 1**. The sampling activities are part of an environmental investigation being performed for the Packard Way Cleaners formerly located at 3650-3652 East Barnard Avenue in Cudahy at the direction of the WDNR pursuant to the authority granted to it under State and Federal law. The chemicals of concern (COCs) for the investigation are the dry cleaning solvent tetrachloroethene (PCE) and its associated breakdown products.

The Responsible Party is:

Former Packard Way Cleaners
3650-3652 E. Barnard Ave.
Cudahy, WI

Sampling Results

The results of the COCs in groundwater sample are summarized and compared to WDNR standards on the attached **Table 1**. An excerpt of the laboratory report that relates to the samples collected from monitoring wells MW-6 and MW-8 is also attached.

As shown on **Table 1**, MW-6 and MW-8 contained PCE and trichloroethene at concentrations that exceed their respective WDNR Enforcement Standards. No other chemicals of concern were detected above public health levels.

Additional groundwater samples may be collected from monitoring wells MW-6 and MW-8 during 2019. The results of any samples will be provided to you. We will contact you to discuss additional investigation work if any. If you have any questions or concerns, please contact us at 262-510-0612 or by email at rhoverman@enviroforensics.com. The WDNR project manager, Issac Ross, can be reached at 414 263-8519. We greatly appreciate your help and patience with this matter.

Sincerely,
EnviroForensics, LLC

Kyle Heimstead
Project Manager

Rob Hoverman, PG
Senior Project Manager






Copy: Issac Ross, Wisconsin Department of Natural Resources

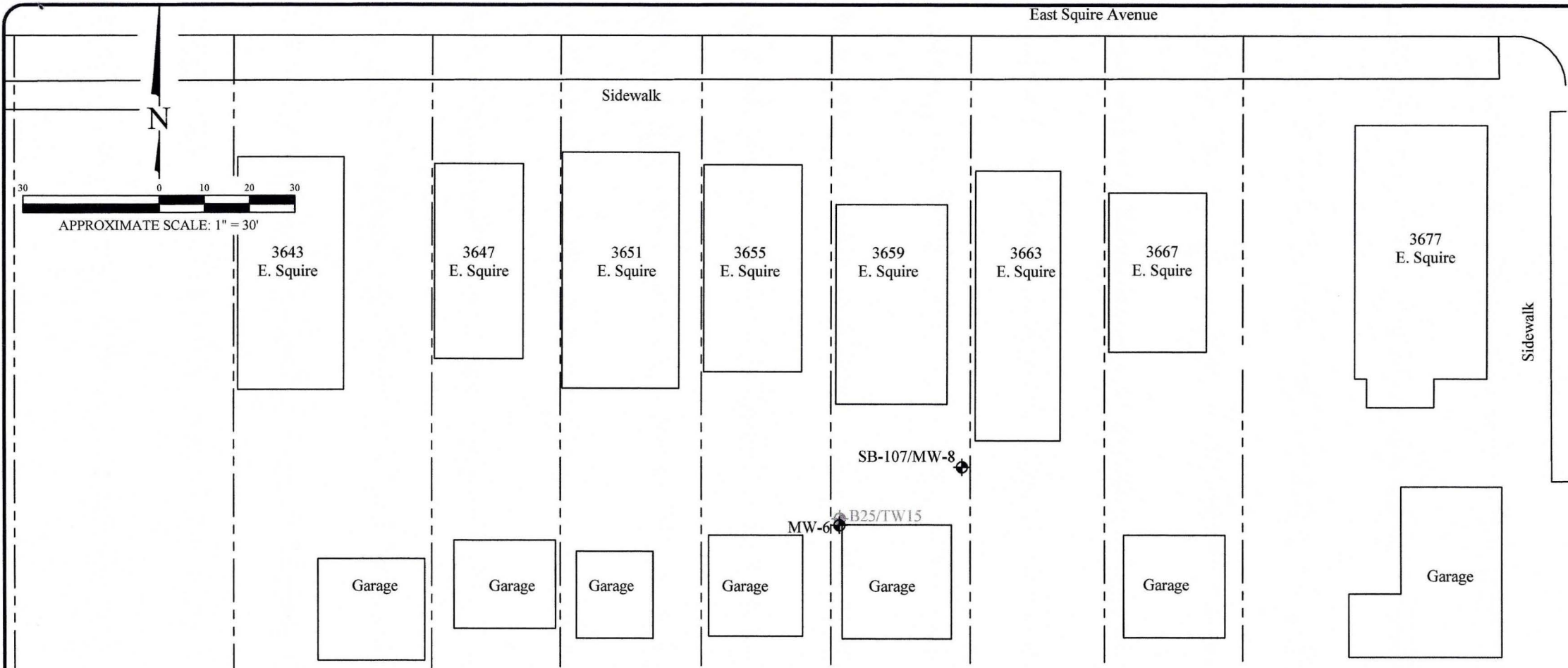
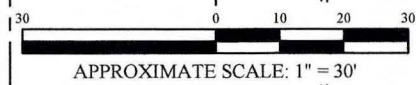
Attachments:

Figure 1 – Site Plan
Table 1 – Groundwater Analytical Results
Laboratory Analytical Report Excerpt

East Squire Avenue

Legend

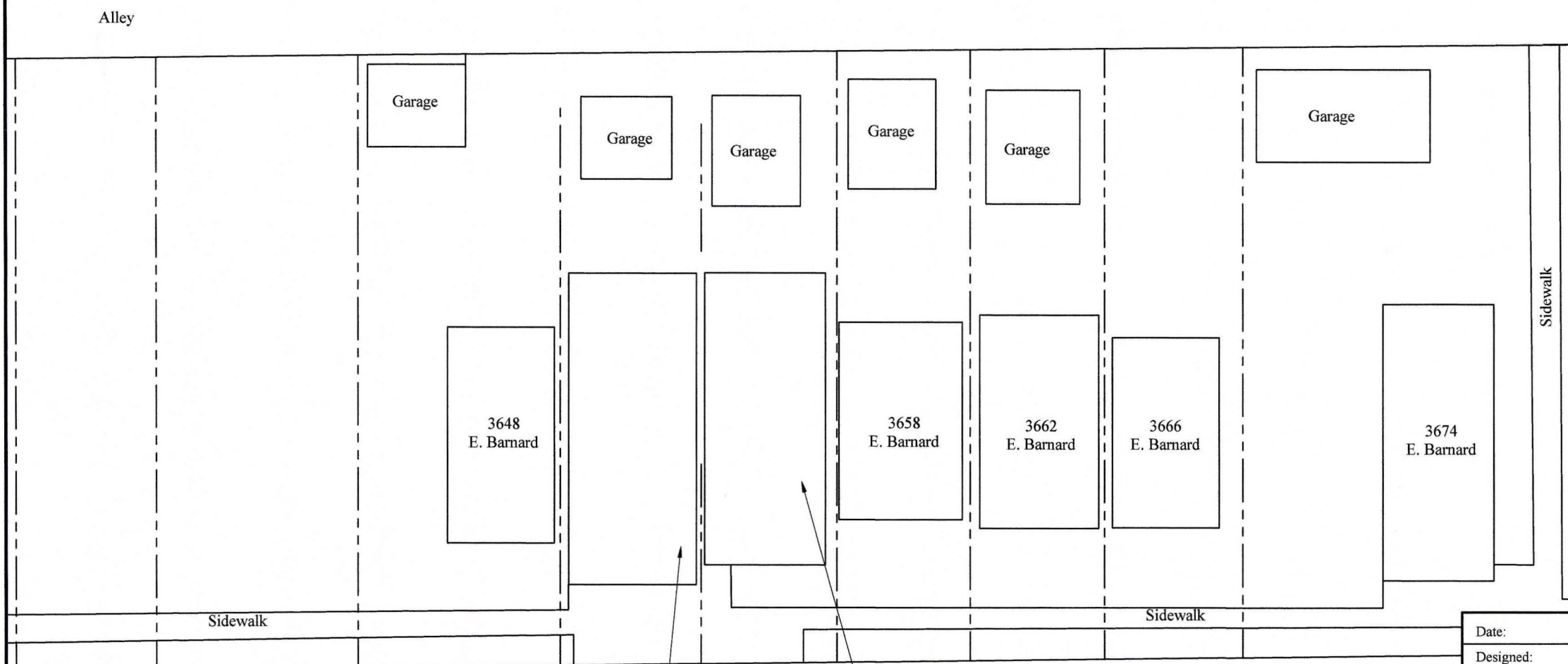
- MW-6  Monitoring well location
- SB-107  Soil boring location
- B1  Soil boring location (By Others)
- B26/TW16  Former soil boring/Temporary well location (By Others)
-  Property boundary



South Kirkwood Avenue

Sidewalk

Sidewalk



East Barnard Avenue

Former Packard Way Cleaners
3650/3652 E. Barnard

Donna's Hair Styling
3654 E. Barnard

SITE PLAN

Former Packard Way Cleaners
3650/3652 East Barnard Avenue
Cudahy, Wisconsin

Date:	7/1/15
Designed:	EB
Drawn:	EB
Checked:	RH
DWG file:	6306-0105



ENVIRONMENTAL FORENSIC INVESTIGATIONS, INC.
602 N. Capitol Ave., Ste. 210 • Indianapolis, IN 46204
EnviroForensics.com

Figure	1
Project	6306

TABLE 1
GROUNDWATER ANALYTICAL RESULTS

Packard Way, Ltd.
3650-3652 East Barnard Avenue
Cudahy, WI

Monitoring Well Identification	Sample Date	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
Public Health Enforcement Standard		5	5	70	100	0.2
Public Health Preventive Action Limit		0.5	0.5	7	20	0.02
MW-6/TW15	6/15/2007	470	25.3	ND	ND	ND
	5/13/2015	246	17.2	6.8	<0.54	<0.17
	9/27/2016	360	22.6	5.1	<0.54	<0.17
	1/5/2017	320	14.3 J	<0.45	<0.54	<0.17
	1/31/2018	232	12.2	<3.7	<3.4	<2
	11/21/2018	221	20.5	5.6	<0.34	<0.2
MW-8	11/21/2018	360	6.4	<0.37	<0.34	<0.2

Notes:

Samples analyzed for VOCs according to EPA Method 8260

Only detected compounds are listed

All concentrations reported in micrograms per liter (µg/L)

Bolded values are above method detection limits

Bolded and orange shaded values are above Public Health Enforcement Standard

ND = Not Detected

Project Name PACKARD WAY LTD.
 Project # 6306

Invoice # E35524

Lab Code 5035524G
 Sample ID 6306-MW-6
 Sample Matrix Water
 Sample Date 11/21/2018

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		11/28/2018	CJR	1
Bromobenzene	< 0.44	ug/l	0.44	1.38	1	8260B		11/28/2018	CJR	1
Bromodichloromethane	< 0.33	ug/l	0.33	1.06	1	8260B		11/28/2018	CJR	1
Bromoform	< 0.45	ug/l	0.45	1.44	1	8260B		11/28/2018	CJR	1
tert-Butylbenzene	< 0.25	ug/l	0.25	0.8	1	8260B		11/28/2018	CJR	1
sec-Butylbenzene	< 0.79	ug/l	0.79	2.53	1	8260B		11/28/2018	CJR	1
n-Butylbenzene	< 0.71	ug/l	0.71	2.25	1	8260B		11/28/2018	CJR	1
Carbon Tetrachloride	< 0.31	ug/l	0.31	0.98	1	8260B		11/28/2018	CJR	1
Chlorobenzene	< 0.26	ug/l	0.26	0.83	1	8260B		11/28/2018	CJR	1
Chloroethane	< 0.61	ug/l	0.61	1.95	1	8260B		11/28/2018	CJR	1
Chloroform	< 0.26	ug/l	0.26	0.82	1	8260B		11/28/2018	CJR	1
Chloromethane	< 0.54	ug/l	0.54	1.72	1	8260B		11/28/2018	CJR	1
2-Chlorotoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/28/2018	CJR	1
4-Chlorotoluene	< 0.26	ug/l	0.26	0.83	1	8260B		11/28/2018	CJR	1
1,2-Dibromo-3-chloropropane	< 2.96	ug/l	2.96	9.43	1	8260B		11/28/2018	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.69	1	8260B		11/28/2018	CJR	1
1,4-Dichlorobenzene	< 0.7	ug/l	0.7	2.22	1	8260B		11/28/2018	CJR	1
1,3-Dichlorobenzene	< 0.85	ug/l	0.85	2.7	1	8260B		11/28/2018	CJR	1
1,2-Dichlorobenzene	< 0.86	ug/l	0.86	2.74	1	8260B		11/28/2018	CJR	1
Dichlorodifluoromethane	< 0.32	ug/l	0.32	1.02	1	8260B		11/28/2018	CJR	1
1,2-Dichloroethane	< 0.25	ug/l	0.25	0.78	1	8260B		11/28/2018	CJR	1
1,1-Dichloroethane	< 0.36	ug/l	0.36	1.14	1	8260B		11/28/2018	CJR	1
1,1-Dichloroethene	< 0.42	ug/l	0.42	1.34	1	8260B		11/28/2018	CJR	1
cis-1,2-Dichloroethene	5.6	ug/l	0.37	1.16	1	8260B		11/28/2018	CJR	1
trans-1,2-Dichloroethene	< 0.34	ug/l	0.34	1.07	1	8260B		11/28/2018	CJR	1
1,2-Dichloropropane	< 0.44	ug/l	0.44	1.39	1	8260B		11/28/2018	CJR	1
1,3-Dichloropropane	< 0.3	ug/l	0.3	0.94	1	8260B		11/28/2018	CJR	1
trans-1,3-Dichloropropene	< 0.32	ug/l	0.32	1.01	1	8260B		11/28/2018	CJR	1
cis-1,3-Dichloropropene	< 0.26	ug/l	0.26	0.81	1	8260B		11/28/2018	CJR	1
Di-isopropyl ether	< 0.21	ug/l	0.21	0.66	1	8260B		11/28/2018	CJR	1
EDB (1,2-Dibromoethane)	< 0.34	ug/l	0.34	1.09	1	8260B		11/28/2018	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		11/28/2018	CJR	1
Hexachlorobutadiene	< 1.34	ug/l	1.34	4.28	1	8260B		11/28/2018	CJR	1
Isopropylbenzene	< 0.78	ug/l	0.78	2.47	1	8260B		11/28/2018	CJR	1
p-Isopropyltoluene	< 0.24	ug/l	0.24	0.76	1	8260B		11/28/2018	CJR	1
Methylene chloride	< 1.32	ug/l	1.32	4.21	1	8260B		11/28/2018	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.28	ug/l	0.28	0.89	1	8260B		11/28/2018	CJR	1
Naphthalene	< 2.1	ug/l	2.1	6.65	1	8260B		11/28/2018	CJR	1
n-Propylbenzene	< 0.61	ug/l	0.61	1.95	1	8260B		11/28/2018	CJR	1
1,1,2,2-Tetrachloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/28/2018	CJR	1
1,1,1,2-Tetrachloroethane	< 0.35	ug/l	0.35	1.13	1	8260B		11/28/2018	CJR	1
Tetrachloroethene	221	ug/l	3.8	12.1	10	8260B		12/3/2018	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		11/28/2018	CJR	1
1,2,4-Trichlorobenzene	< 1.15	ug/l	1.15	3.67	1	8260B		11/28/2018	CJR	1

Project Name PACKARD WAY LTD.
Project # 6306

Invoice # E35524

Lab Code 5035524G
Sample ID 6306-MW-6
Sample Matrix Water
Sample Date 11/21/2018

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
1,2,3-Trichlorobenzene	< 1.71	ug/l	1.71	5.43	1	8260B		11/28/2018	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1.05	1	8260B		11/28/2018	CJR	1
1,1,2-Trichloroethane	< 0.42	ug/l	0.42	1.32	1	8260B		11/28/2018	CJR	1
Trichloroethene (TCE)	20.5	ug/l	0.3	0.94	1	8260B		11/28/2018	CJR	1
Trichlorofluoromethane	< 0.35	ug/l	0.35	1.1	1	8260B		11/28/2018	CJR	1
1,2,4-Trimethylbenzene	< 0.8	ug/l	0.8	2.55	1	8260B		11/28/2018	CJR	1
1,3,5-Trimethylbenzene	< 0.63	ug/l	0.63	2	1	8260B		11/28/2018	CJR	1
Vinyl Chloride	< 0.2	ug/l	0.2	0.65	1	8260B		11/28/2018	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		11/28/2018	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		11/28/2018	CJR	1
SUR - Dibromofluoromethane	104	REC %			1	8260B		11/28/2018	CJR	1
SUR - 1,2-Dichloroethane-d4	108	REC %			1	8260B		11/28/2018	CJR	1
SUR - 4-Bromofluorobenzene	98	REC %			1	8260B		11/28/2018	CJR	1
SUR - Toluene-d8	100	REC %			1	8260B		11/28/2018	CJR	1

Project Name PACKARD WAY LTD.
 Project # 6306

Invoice # E35524

Lab Code 5035524I
 Sample ID 6306-MW-8
 Sample Matrix Water
 Sample Date 11/21/2018

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 0.22	ug/l	0.22	0.71	1	8260B		11/29/2018	CJR	1
Bromobenzene	< 0.44	ug/l	0.44	1.38	1	8260B		11/29/2018	CJR	1
Bromodichloromethane	< 0.33	ug/l	0.33	1.06	1	8260B		11/29/2018	CJR	1
Bromoform	< 0.45	ug/l	0.45	1.44	1	8260B		11/29/2018	CJR	1
tert-Butylbenzene	< 0.25	ug/l	0.25	0.8	1	8260B		11/29/2018	CJR	1
sec-Butylbenzene	< 0.79	ug/l	0.79	2.53	1	8260B		11/29/2018	CJR	1
n-Butylbenzene	< 0.71	ug/l	0.71	2.25	1	8260B		11/29/2018	CJR	1
Carbon Tetrachloride	< 0.31	ug/l	0.31	0.98	1	8260B		11/29/2018	CJR	1
Chlorobenzene	< 0.26	ug/l	0.26	0.83	1	8260B		11/29/2018	CJR	1
Chloroethane	< 0.61	ug/l	0.61	1.95	1	8260B		11/29/2018	CJR	1
Chloroform	< 0.26	ug/l	0.26	0.82	1	8260B		11/29/2018	CJR	1
Chloromethane	< 0.54	ug/l	0.54	1.72	1	8260B		11/29/2018	CJR	1
2-Chlorotoluene	< 0.31	ug/l	0.31	0.98	1	8260B		11/29/2018	CJR	1
4-Chlorotoluene	< 0.26	ug/l	0.26	0.83	1	8260B		11/29/2018	CJR	1
1,2-Dibromo-3-chloropropane	< 2.96	ug/l	2.96	9.43	1	8260B		11/29/2018	CJR	1
Dibromochloromethane	< 0.22	ug/l	0.22	0.69	1	8260B		11/29/2018	CJR	1
1,4-Dichlorobenzene	< 0.7	ug/l	0.7	2.22	1	8260B		11/29/2018	CJR	1
1,3-Dichlorobenzene	< 0.85	ug/l	0.85	2.7	1	8260B		11/29/2018	CJR	1
1,2-Dichlorobenzene	< 0.86	ug/l	0.86	2.74	1	8260B		11/29/2018	CJR	1
Dichlorodifluoromethane	< 0.32	ug/l	0.32	1.02	1	8260B		11/29/2018	CJR	1
1,2-Dichloroethane	< 0.25	ug/l	0.25	0.78	1	8260B		11/29/2018	CJR	1
1,1-Dichloroethane	< 0.36	ug/l	0.36	1.14	1	8260B		11/29/2018	CJR	1
1,1-Dichloroethene	< 0.42	ug/l	0.42	1.34	1	8260B		11/29/2018	CJR	1
cis-1,2-Dichloroethene	< 0.37	ug/l	0.37	1.16	1	8260B		11/29/2018	CJR	1
trans-1,2-Dichloroethene	< 0.34	ug/l	0.34	1.07	1	8260B		11/29/2018	CJR	1
1,2-Dichloropropane	< 0.44	ug/l	0.44	1.39	1	8260B		11/29/2018	CJR	1
1,3-Dichloropropane	< 0.3	ug/l	0.3	0.94	1	8260B		11/29/2018	CJR	1
trans-1,3-Dichloropropene	< 0.32	ug/l	0.32	1.01	1	8260B		11/29/2018	CJR	1
cis-1,3-Dichloropropene	< 0.26	ug/l	0.26	0.81	1	8260B		11/29/2018	CJR	1
Di-isopropyl ether	< 0.21	ug/l	0.21	0.66	1	8260B		11/29/2018	CJR	1
EDB (1,2-Dibromoethane)	< 0.34	ug/l	0.34	1.09	1	8260B		11/29/2018	CJR	1
Ethylbenzene	< 0.26	ug/l	0.26	0.83	1	8260B		11/29/2018	CJR	1
Hexachlorobutadiene	< 1.34	ug/l	1.34	4.28	1	8260B		11/29/2018	CJR	1
Isopropylbenzene	< 0.78	ug/l	0.78	2.47	1	8260B		11/29/2018	CJR	1
p-Isopropyltoluene	< 0.24	ug/l	0.24	0.76	1	8260B		11/29/2018	CJR	1
Methylene chloride	< 1.32	ug/l	1.32	4.21	1	8260B		11/29/2018	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.28	ug/l	0.28	0.89	1	8260B		11/29/2018	CJR	1
Naphthalene	< 2.1	ug/l	2.1	6.65	1	8260B		11/29/2018	CJR	1
n-Propylbenzene	< 0.61	ug/l	0.61	1.95	1	8260B		11/29/2018	CJR	1
1,1,2,2-Tetrachloroethane	< 0.3	ug/l	0.3	0.97	1	8260B		11/29/2018	CJR	1
1,1,1,2-Tetrachloroethane	< 0.35	ug/l	0.35	1.13	1	8260B		11/29/2018	CJR	1
Tetrachloroethene	360	ug/l	3.8	12.1	10	8260B		12/3/2018	CJR	1
Toluene	< 0.19	ug/l	0.19	0.6	1	8260B		11/29/2018	CJR	1
1,2,4-Trichlorobenzene	< 1.15	ug/l	1.15	3.67	1	8260B		11/29/2018	CJR	1

Project # 6306

Lab Code 5035524I

Sample ID 6306-MW-8

Sample Matrix Water

Sample Date 11/21/2018

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
1,2,3-Trichlorobenzene	< 1.71	ug/l	1.71	5.43	1	8260B		11/29/2018	CJR	1
1,1,1-Trichloroethane	< 0.33	ug/l	0.33	1.05	1	8260B		11/29/2018	CJR	1
1,1,2-Trichloroethane	< 0.42	ug/l	0.42	1.32	1	8260B		11/29/2018	CJR	1
Trichloroethene (TCE)	6.4	ug/l	0.3	0.94	1	8260B		11/29/2018	CJR	1
Trichlorofluoromethane	< 0.35	ug/l	0.35	1.1	1	8260B		11/29/2018	CJR	1
1,2,4-Trimethylbenzene	< 0.8	ug/l	0.8	2.55	1	8260B		11/29/2018	CJR	1
1,3,5-Trimethylbenzene	< 0.63	ug/l	0.63	2	1	8260B		11/29/2018	CJR	1
Vinyl Chloride	< 0.2	ug/l	0.2	0.65	1	8260B		11/29/2018	CJR	1
m&p-Xylene	< 0.43	ug/l	0.43	1.38	1	8260B		11/29/2018	CJR	1
o-Xylene	< 0.29	ug/l	0.29	0.93	1	8260B		11/29/2018	CJR	1
SUR - 1,2-Dichloroethane-d4	107	REC %			1	8260B		11/29/2018	CJR	1
SUR - Toluene-d8	99	REC %			1	8260B		11/29/2018	CJR	1
SUR - 4-Bromofluorobenzene	98	REC %			1	8260B		11/29/2018	CJR	1
SUR - Dibromofluoromethane	100	REC %			1	8260B		11/29/2018	CJR	1

