Additional Site Investigation Report

for

Greentree Cleaners Tenant Space
Greentree Centre
5111 Douglas Avenue, Unit D
Racine, Racine County, Wisconsin

DNR FID #252138700
DNR BRRTS #02-52-579863

June 14, 2022

Apex Project No. PECO_2017-100

Prepared for:

Greentree Station LLC, c/o Phillips Edison & Company
11501 Northlake Drive
Cincinnati, Ohio 45249

June 14, 2022

Ms. Shanna Laube-Anderson
State of Wisconsin
Department of Natural Resources
Southeast Region Headquarters
2300 N. Dr. Martin Luther King, Jr. Drive
Milwaukee, Wisconsin 53212-3128

Re: Additional Site Investigation Report
Greentree Cleaners Tenant Space, Greentree Centre
5111 Douglas Avenue, Unit D, Racine, Wisconsin
Wisconsin DNR Facility Identification #252138700
Wisconsin DNR BRRTS Activity #02-52-579863

Dear Ms. Laube-Anderson:

Greentree Station LLC retained Apex to conduct additional site investigation at the location of the former dry cleaner tenant space at 5111 Douglas Avenue, Unit D. This tenant space is located within Greentree Station LLC's Greentree Centre, a retail strip mall located at 5055 & 5111-5141 Douglas Avenue in Racine, Racine County, Wisconsin.

Additional site assessment has been conducted in response to comments provided in the letter from the Wisconsin DNR dated April 23, 2022, and comments provided to Steve Newlin via email dated October 1, 2021 on the Additional Site Investigation Work Plan dated June 28, 2021.

If you have any questions regarding our findings, please contact Jane Allan at (513) 771-3617 x3801. Thank you for attention to this matter.

Respectfully Submitted,
Apex Companies, LLC

Jane Allan
Senior Project Manager

cc: Mr. Joe Schlosser, Greentree Station LLC

Attachments

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

RESULTS OF ADDITIONAL SITE INVESTIGATION
GREENTREE CLEANERS TENANT SPACE, GREENTREE CENTRE
5111 DOUGLAS AVENUE
RACINE, RACINE COUNTY, WISCONSIN

1.0 INTRODUCTION

Phillips Edison Company (Client) retained Apex Companies, LLC (Apex) to conduct additional site investigation in association with the dry cleaner tenant space at 5111 Douglas Avenue in Racine, Wisconsin (the Site). Greentree Station LLC (Client) acquired a retail strip mall located at 5055 & 5111-5141 Douglas Avenue in Racine, Racine County, Wisconsin (the Site) from IRC Greentree, L.L.C in May 2017. The general vicinity of the Site is shown in **Figure B.1.a** and the Site is shown in **Figure B.2.b**.

Prior to acquiring the Site, Client retained Apex to conduct a Phase I Environmental Site Assessment (ESA) at the Greentree Centre. The Phase I ESA identified one recognized environmental condition (REC), use of dry cleaning solvents in a tenant space currently occupied by Greentree Cleaners. Client subsequently retained Apex to conduct a Site Investigation (subsurface investigation) at the dry cleaner tenant space at 5111 Douglas Avenue, Unit D.

In response to a release of chlorinated volatile organic compounds (cVOCs), Apex designed and operated a soil vapor extraction (SVE) system intended to draw the soil-vapor from below the floor slab in the areas of soil-gas exceedances by creating a vacuum field beneath the slab. Operation of the SVE reduced potential vapor intrusion from the sub-slab to indoor air, and reduce soil contamination.

After operation of the SVE system and the resampling of the soil and vapor beneath the floor slab, a Closure Request was submitted to the DNR dated May 2020. In a letter dated April 23, 2022 Wisconsin Department of Natural Resources (DNR) did not recommended case closure, and identified additional site investigation required to confirm the SVE system has fully remediated the Site.

1.1 Objectives and Scope of Work

To further characterize the extent of VOC impacts sub-slab soil-gas, assess potential vapor intrusion migration pathways and verify that vapor intrusion mitigation is no longer required, Apex conducted additional assessment in January and May 2022. The specific scope of work included (1) soil-gas sampling/analysis; (2) indoor air sampling/analysis; and (3) conduit vapor sampling/analysis.

The subsurface assessment activities are discussed in **Section 2.0**; soil-gas. indoor air and conduit vapor analysis are discussed in **Section 3.0**; a summary of the assessment are discussed in **Section 4.0**; and conclusions and recommendations are discussed in **Section 5.0**.

2.0 ADDITIONAL ASSESSMENT

Subsurface assessment included a non-invasive geophysical survey to identify the location of subsurface utility beneath and behind the building. Installation of two additional sub-slab soil vapor probes (SV-13 and SV-14), collection of twelve sub-slab soil vapor samples, collection of one sewer cleanout sample from the dry cleaner tenant space, and collection of two rounds of indoor air samples at the dry cleaner and adjacent vacant tenant space to the north.

The locations of the sub-slab sample, sewer cleanout sample and indoor air sample are shown on **Figure B.4.a**.

2.1 Performance of a Geophysical Survey

Apex retained Ground Penetrating Radar Systems, Inc. (GPRS) to perform a non-invasive geophysical survey in an effort to identify the locations subsurface utilities beneath the building slab and behind the building that may have provided a preferential pathway for contaminant migration in soil at the time of release, and may continue to provide a preferential pathway for the migration of vapors and vapor intrusion. In addition the locations of proposed sampling were cleared to avoid damaging underground utilities. The geophysical survey was performed using a combination of ground-penetrating radar (GPR) and radio detection (RD) techniques. The geophysical survey was conducted in May 2021, prior to preparation of the June 28, 2021 work plan, to identify locations of the installation of proposed sub-slab soil vapor probes along potential vapor migration pathways.

2.2 Vapor Intrusion Sampling and Analytical Program

On November 14, 2021, the exhaust vent on the existing vapor mitigation system was sealed off to eliminate passive venting.

2.2.1 Sampling of Sub-Slab Soil Vapor

Apex collected 12 soil-gas samples immediately below the concrete floor slab in and adjacent to the former dry cleaner tenant space. Sampling was conducted during the heating season. One soil-gas sample was collected from the following locations shown in **Figure B.4.a**: SV-2, SV-3, SV-4, SV-5, SV-6, SV-7, SV-8, SV-9, SV-10, SV-11 and two new locations SV-13 and SV-14. The two new sample points were included to further investigate potential preferential pathway migration along sewer and water lines beneath the floor slab.

The probes were installed by drilling a small diameter hole (5/8-inch) through the concrete slab into the underlying gravel-aggregate layer, approximately nine inches below the top of the concrete floor. Then a 1-inch diameter hole was drilled in the same location to approximately ½-inch below the top of the concrete floor for leak testing. The hole was cleared of any debris prior to installing the soil gas probe. The soil gas probes consisted of a stainless-steel MIP adapter/compression coupling, covered with a silicone tube, inserted and seated firmly into the 5/8-inch diameter hole drilled through the concrete slab.

Prior to sample collection, leak tests were performed on the sample probes by mechanical means using the larger diameter hole as a water dam. The annulus of the 1-inch hole was filled with distilled water and monitored for fluctuations prior to and during sampling to verify that a leak had not occurred. The laboratory-supplied regulator assembly was attached to the Summa canister and a 3-foot section of 0.25-inch Teflon-lined polyethylene tubing was attached to the regulator with Swagelock® fittings. A shut-in test was performed on the sample train by connecting the tubing to a syringe and plunger. With the Summa ® canister valve closed, a vacuum of approximately 20 inches of mercury was be applied to the sample train and maintained for 60 seconds. The pressure was observed to confirm the pressure gauge remains stable for the duration of the test.

The sub-slab gas probes was purged a minimum of three probe volumes of air from the sampling media to ensure representative samples of sub-slab soil gas and field screened for volatile organic emissions using a PID equipped with a 10.6 eV PID lamp. Upon successful leak test completion and probe purging/screening, sub-slab soil gas samples were collected using batch-certified 6-liter Summa® canisters (evacuated stainless steel canisters) with (30-minute) flow control valves with a flow rate of 200 milliliters per minute (mL/min). At each of the soil vapor probe locations, the Summa canister was connected to the sample probe and the regulator valve will be opened. Results of the field screening, purge volumes, leak test observations, sampling intervals, initial and final vacuum pressures and laboratory-supplied equipment identification numbers are summarized on sub-slab sampling logs (**Appendix A).**

Soil-slab vapor samples were submitted to Pace Analytical for analysis of the target analytes (cVOCs) by EPA Method TO-15. The results of the soil-gas analysis are summarized in **Table A.4.1** and discussed in **Section 3.1.** The laboratory analytical report is included in **Appendix B.**

2.2.2 Sampling of Indoor Air

In addition to the sub-slab vapor sampling described above, one indoor air sample was collected at the former dry cleaner space and one at the adjacent tenant space to the north, for analysis of cVOCs by EPA Method TO-15.

During the January 12 sampling event, the air samples were collected using batch-certified 6-liter Summa® canisters with (30-minute) flow control valves with a flow rate of 200 milliliters per minute (mL/min), rather than with 8-hour regulator. Due to the deviation from the standard sampling protocols for indoor air sampling, a second indoor air sampling event was conducted in May 5, 2022 and samples were collected over a period of 8-hours. The outside temperature during the January 12, 2022 sampling event ranged from 33 to 40° F and during the May 5, 2022 sampling event ranged from 44 to 55° F, and the HVAC in both tenant spaces were operating.

The indoor air samples were collected from summa canisters placed at approximately the height of the normal breathing zone in the central portion of the store. The air sample logs are included in **Appendix A**.

Samples collected on January 13, 2022 were submitted to Pace Analytical for analysis of the target analytes (cVOCs) by EPA Method TO-15. Samples collected on May 5, 2022 were analyzed by STAT Lab for analysis of the target analytes (cVOCs) by EPA Method TO-15. The results of the indoor air

are summarized in **Table A.4.2** and discussed in **Section 3.2**. The laboratory analytical reports are included in **Appendix B.**

2.2.2 Sampling of Sewer System at Floor Drain

During the January 12, 2022 sampling event, a sample was collected from the floor drain in the bathroom of the dry cleaner tenant space. This location represents the closest sewer access point to the dry cleaner location. The sample tubing was inserted into the floor drain, and a sump was created by temporarily sealing the drain around the tubing to prevent indoor air from entering the drain during sampling. The sample train was allowed to equilibrate for a period of one hour, then purged a minimum of three tubing volumes prior to collecting the sample.

The sample was collected into a batch-certified 6-liter Summa® canisters with (30-minute) flow control valves with a flow rate of 200 mL/min. The sample log is included in **Appendix A**.

The conduit air sample was submitted to Pace Analytical for analysis of the target analytes (cVOCs) by EPA Method TO-15. The results are summarized in **Table A.4.3,** discussed in **Section 3.3.** The laboratory analytical report is included in **Appendix B.**

3.0 RESULTS OF VAPOR INTRUSION ANALYSIS

Subslab soil vapor samples were collected to assess soil gas concentration post-SVE and to assess conditions along subsurface utilities under the building that may provide a preferential pathway for vapor migration. Indoor air samples were collected to assess whether vapor mitigation is required. A sample was collected from the plumbing system in the former dry cleaner, to assess whether this is a significant vapor intrusion pathway.

3.1 Results of the Sub-Slab Soil-Gas Analysis

Apex collected 12 soil-gas samples immediately below the concrete floor slab at the locations shown in **Figure B.4.a**. Sample collected at the previously installed SV-2, SV-3, SV-4, SV-5, SV-6, SV-7, SV-8, SV-9, SV-10 and SV-11 were collected to provide a second round of post-SVE sampling. These sample locations provided. The sample locations were selected to include the source area by the dry cleaning equipment, and to assess the lateral extent of VOCs in sub-slab soil-gas in the dry cleaner and adjacent tenant spaces.

Samples were collected a two new vapor points (SV-13 and SV-14) to further assess the potential vapor migration along utilities. The previously installed SV-7 is located immediately adjacent to the lines running south of the dry-cleaner and provides delineation in that direction.

The results of the soil-gas analysis were compared to sub-slab Vapor Risk Screening Levels (VRSLs) for residential, small commercial, and large commercial/industrial (**Table A.4.1**).

- Tetrachloroethene (PCE) was detected in all of the samples at concentrations ranging from 3.0 to 342. µg/m^3
- Trichloroethene (TCE) was detected in eight (8) of the twelve (12) samples at concentrations ranging from 1.5 to 16.7 µg/m^3
- Cis-1,2-Dichloroethene (cDCE) was dected in seven (7) of the twelve (12) samples at concentrations ranging from 0.49 to 6.6. µg/m^3

There were no detections of trans-1,2-Dichloroethene (tDCE) or vinyl chloride (VC) in soil gas samples, and no exceedances of any VRSLs.

3.2 Results of the Indoor Air Analysis

Apex collected indoor air samples at the dry cleaner and the adjacent space to the north on January 13, 2022 and May 5, 2022 (**Figure B.4.a**).

The results of the indoor air analysis were compared to indoor air Vapor Action Level (VALs) for residential, small commercial, and large commercial/industrial (**Table A.4.2**).

- Tetrachloroethene (PCE) was detected in all of the samples at concentrations ranging from 10.3 to 28 µg/m^3

There were no detections of TCE, cDCE, tDCE or VC in indoor air samples. There were no exceedances of any VALs.

3.3 Results of the Floor Drain Sump Air Analysis

A vapor sample was collected from floor drain located in the dry cleaner tenant space (**Figure B.4.a**).

There were no detections of TCE, cDCE, tDCE or VC in indoor air samples. Per WDNR Guidance for Documenting the Investigation of Human-made Preferential Pathways Including Utility Corridors, since the sample was collected from a sump that was temporarily sealed for sampling, the floor drain sample were compared to the VAL (attenuation = 1) **Table A.4.2.**

- Tetrachloroethene (PCE) was detected in at 70.5 µg/m^3;

This exceeds the residential VAL of 42 µg/m^3; but is well below the small commercial and large commercial/industrial VAL.

4.0 SUMMARY

Client retained Apex to conduct additional site investigation in association with the dry cleaner tenant space at 5111 Douglas Avenue in Racine, Wisconsin. This tenant space is located within Client's Greentree Centre, a retail strip mall located at 5055 & 5111-5141 Douglas Avenue in Racine, Racine County, Wisconsin

Prior to acquiring the Site, Client retained Apex to conduct a Phase I Environmental Site Assessment (ESA) at the Greentree Centre. The Phase I ESA identified one recognized environmental condition (REC), use of dry cleaning solvents in a tenant space currently occupied by Greentree Cleaners. Client subsequently retained Apex to conduct a Site Investigation (subsurface investigation) at the dry cleaner tenant space at 5111 Douglas Avenue, Unit D.

In response to a release of chlorinated volatile organic compounds (cVOCs), Apex designed and operated a soil vapor extraction (SVE) system intended to draw the soil-vapor from below the floor slab in the areas of soil-gas exceedances by creating a vacuum field beneath the slab. Operation of the SVE reduced potential vapor intrusion from the sub-slab to indoor air, and reduce soil contamination.

After operation of the SVE system and the resampling of the soil and vapor beneath the floor slab, a Closure Request was submitted to the DNR dated May 2020. In a letter dated April 23, 2022 Wisconsin Department of Natural Resources (DNR) did not recommended case closure, and identified additional site investigation required to confirm the SVE system has fully remediated the Site.

Twelve sub-slab soil gas samples were collected: ten from existing sub-slab soil vapor probes at SV-2, SV-3, SV-4, SV-5, SV-6, SV-7, SV-8, SV-9, SV-10, SV-11 and two at newly installed soil vapor probes SV-13 and SV-14. The results from soil vapor sampling confirmed that the sub-slab soil vapors are delineated in tenant spaces to the north and south of the dry cleaner, and there is no indication of vapor migration along preferential pathway provided by utilities running north-south under the slab.

Indoor air samples were collected at the dry cleaner and the vacant tenant space to the north Indoor air meets VALs for residential, small commercial, and large commercial/industrial. Samples were collected with the venting system off (since DATE), and the exhaust capped to prevent passive venting.

A sample was collected from behind the p-trap at the floor drain in the dry cleaner. The results indicated that the plumbing system was not a significant source for vapor intrusion.

6.0 CONCLUSIONS AND RECOMENDATIONS

It is Apex's opinion that vapors beneath the slab are delineated including along preferential pathways provided by utilities that run north-south beneath the slab. There are no exceedances of any VRSL.

Results from a conduit sample collected from the bathroom floor drain at the Greentree Cleaner met the small commercial VAL but exceeded the residential VAL, indicating there does not appear to be a significant preferential pathway for vapor intrusion to indoor air from the plumbing system.

The SVE system ran between September 18, 2018 and December 20, 2018, and has been inactive since that time. The SVE vent was capped on November 14, 2021 to eliminate passive venting. Indoor air samples collected on January 13, 2022 and May 5, 2022 met Indoor Air VALs for residential, small commercial and large commercial/industrial. Therefore, it is Apex's opinion that mitigation is not needed.

Apex intends to update the previous closure request with the results from this assessment, along with clarification regarding the soil and groundwater delineation requested in the April 23, 2021 Case Closure Not Recommended letter.

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TABLES

A.4.1 Summary of Soil Gas Data for Volatile Organic Compounds (VOCs)
EPA Method TO-15
Greentree Centre
5111 Douglas Avenue, Racine, Wisconsin

Analytes	Sub-Slab Vapor VRSL				SV-1		SV-2			SV-3			
	RESIDENTIAL	SMALL COMMERCIAL	LARGE COMMERCIAL	Sub-slab Sample Location									
				Collection Time	8:44-9:14 AM	10:38-11:17 AM	9:36-10:15 AM	11:11-11:48 AM	12:31-1:12 PM	12:52-1:25 PM	11:00-11:39 AM	10:46-11:22 AM	12:31-1:12 PM
	AF = 0.03	AF = 0.03	AF = 0.01	Date	6/13/2017	6/27/2019	6/13/2017	1/4/2019	1/13/2022	6/13/2017	1/4/2019	6/27/2019	1/13/2022
Benzene	120	520	1,600		1.3	0.6	1.4	<0.23	NR	1.2	0.28	0.62	NR
Chloroform	41.0	180	530		1.7	2.2	39.0	27.3	NR	29.8	13.6	16.2	NR
Chloromethane	3,100	13,000	39,000		1.9	<0.23	11.8	<0.24	NR	<0.19	<0.24	<0.24	NR
Dichlorodifluoromethane	3,500	15,000	44,000		849	139	3.2	6.4	NR	3.7	10.9	3.3	NR
1,1-Dichloroethane	590	2,600	7,700		<0.26	<0.34	<0.23	<0.34	NR	<0.27	<0.34	<0.35	NR
1,2-Dichloroethane	36	160	470		<0.34	<0.22	<0.31	<0.23	NR	<0.36	<0.23	<0.23	NR
1,1-Dichloroethene	7,000	29,000	88,000		<0.40	<0.41	<0.353	<0.42	NR	<0.42	<0.42	<0.42	NR
cis-1,2-Dichloroethene	NE	NE	NE		<0.41	<0.33	2.2	13.4	<0.27	5.4	<0.33	<0.34	<0.28
trans-1,2-Dichloroethene	NE	NE	NE		<0.65	<0.42	<0.57	<0.43	<0.24	<0.67	<0.43	<0.44	<0.24
Ethylbenzene	370.0	1,600	4,900		2.3	1	1.5	2.0	NR	2.0	1.4	1.1	NR
Methylene Chloride	21,000	88,000	260,000		14.7	19.6	4.8	2.9	NR	3.8	3.9	17.9	NR
Methyl tertiary-butyl ether	3,700	16,000	47,000		<0.51	<0.99	<0.45	<1.0	NR	<0.53	<1.0	<1.0	NR
Naphthalene	28.0	120	360		19.0	2.9	25.3	11.7	NR	26.0	18.0	2.3	NR
Tetrachloroethene	1,400.0	5,800	18,000		116	30.8	*4,570*	490	8.3	***7,720***	128	61	178
Toluene	170,000	730,000	2,200,000		13.0	3.9	2.8	7.9	NR	4.1	3.7	3.1	NR
1,1,1-Trichloroethane	170,000	730,000	2,200,000		<0.41	<0.46	<0.37	<0.47	NR	<0.43	<0.47	<0.48	NR
Trichloroethene	70.0	290	880		2.7	1.1	28.6	44.9	<0.28	48.0	2.0	2.1	5.6
Trichlorofluoromethane	NE	NE	NE		3.3	2.9	1.9	<0.56	NR	1.9	1.1	1.5	NR
1,2,4-Trimethylbenzene	2,100	8,700	26,000		36.6	15.3	10.6	6.7	NR	16.5	6.6	10.3	NR
1,3,5-Trimethylbenzene	2,100	8,700	26,000		22.4	8.5	4.4	3.6	NR	7.9	2.4	4.7	NR
Vinyl chloride	56	930	2,800		<0.33	<0.19	<0.29	<0.19	<0.12	<0.34	<0.19	<0.20	<0.12
m,p-Xylene	3,500	15,000	44,000		6.3	3.6	2.8	9.1	NR	3.3	6.6	4.1	NR
o-Xylene	3300	15,000	44,000		3.4	3.8	1.5	3.4	NR	2.2	2.7	3	NR

Notes:

Concentrations expressed in micrograms per cubic meter ($\mu g/m^3$)

Analytes above residential VRSL are shown in *italics*

Analytes above small commercial VRSL concentrations are shown in **bold**

NR = Not reported

AF = Attenuation Factor

NE = Remedial Objective not established.

< = Not Detected: Concentration less than the indicated laboratory detection limit.

All samples collected into 6L Summa canisters; Vapor pins purged and sampled at < 0.2 lpm.

Each vapor pin location was leak tested using the water dam method and shut in test.

VRSL = Vapor Risk Screening level

A.4.1 Summary of Soil Gas Data for Volatile Organic Compounds (VOCs)
EPA Method TO-15
Greentree Centre
5111 Douglas Avenue, Racine, Wisconsin

Analytes	Sub-Slab Vapor VRSL				SV-4			SV-5		SV-6		SV-7		SV-8	
	RESIDENTIAL	SMALL COMMERCIAL	LARGE COMMERCIAL	Sub-slab Sample Location											
				Collection Time	1:23-1:58 PM	9:34-10:11 AM	3:08-3:48 PM	1:24-1:58 PM	3:09-3:49 PM	12:24-12:57 PM	11:34-12:00 PM	12:15-12:52 PM	3:06-3:43 PM	2:38-3:11 PM	12:31-1:04 PM
	AF = 0.03	AF = 0.03	AF = 0.01	Date	8/16/2017	6/27/2019	1/13/2022	8/16/2017	1/13/2022	8/16/2017	1/13/2022	8/16/2017	1/13/2022	8/16/2017	1/13/2022
Benzene	120	520	1,600		<2.1	0.5	NR	<2.0	NR	<2.1	NR	<2.0	NR	<2.2	NR
Chloroform	41.0	180	530		***630***	0.58	NR	*53*	NR	*92.2*	NR	39.8	NR	*124*	NR
Chloromethane	3,100	13,000	39,000		<1.7	0.26	NR	<1.6	NR	<1.7	NR	<1.6	NR	<1.8	NR
Dichlorodifluoromethane	3,500	15,000	44,000		<6.7	2.9	NR	115	NR	<6.7	NR	<6.4	NR	<7.0	NR
1,1-Dichloroethane	590	2,600	7,700		<3.4	<0.34	NR	<3.3	NR	<3.4	NR	<3.3	NR	<3.6	NR
1,2-Dichloroethane	36	160	470		<3.0	<0.23	NR	<2.9	NR	<3.0	NR	<2.9	NR	<3.2	NR
1,1-Dichloroethene	7,000	29,000	88,000		<3.8	<0,42	NR	<3.7	NR	<3.8	NR	<3.7	NR	<4.0	NR
cis-1,2-Dichloroethene	NE	NE	NE		32	<0.33	0.49	6	3.7	<3.5	3.4	28.2	2.6	3.9	<0.31
trans-1,2-Dichloroethene	NE	NE	NE		<3.1	<0.43	<0.24	<3.0	<0.24	<3.1	<0.26	<3.0	<0.25	<3.3	<0.27
Ethylbenzene	370.0	1,600	4,900		<2.8	0.9	NR	<2.7	NR	<2.8	NR	<2.7	NR	<2.9	NR
Methylene Chloride	21,000	88,000	260,000		<24.5	105	NR	71.7	NR	<24.5	NR	<23.6	NR	<25.5	NR
Methyl tertiary-butyl ether	3,700	16,000	47,000		<5.0	<1.0	NR	<4.9	NR	<5.0	NR	<4.9	NR	<5.3	NR
Naphthalene	28.0	120	360		<9.4	<2.0	NR	<9.0	NR	<9.4	NR	<9.0	NR	<9.8	NR
Tetrachloroethene	1,400.0	5,800	18,000		***26,100***	4.3	126	*3,700*	82	*2,340*	120	*2,590*	49	*2,230*	6
Toluene	170,000	730,000	2,200,000		69.6	4.7	NR	117	NR	63	NR	101	NR	81.5	NR
1,1,1-Trichloroethane	170,000	730,000	2,200,000		<5.5	<0.47	NR	<5.3	NR	<5.5	NR	<5.3	NR	<5.7	NR
Trichloroethene	70.0	290	880		***491.0***	<0.339	4.5	58.5	4.4	18.1	8.4	76.5	1.5	47.6	<0.32
Trichlorofluoromethane	NE	NE	NE		<6.7	1.4	NR	<6.5	NR	<6.7	NR	<6.5	NR	<7.0	NR
1,2,4-Trimethylbenzene	2,100	8,700	26,000		14.2	1.2	NR	14.9	NR	11.4	NR	15.8	NR	<2.9	NR
1,3,5-Trimethylbenzene	2,100	8,700	26,000		<3.8	<0.61	NR	<3.6	NR	<3.8	NR	<3.6	NR	<3.5	NR
Vinyl chloride	56	930	2,800		<2.0	<0.41	<0.12	<2.0	<0.12	<2.0	<0.13	<2.0	<0.13	<2.1	<0.14
m,p-Xylene	3,500	15,000	44,000		<5.6	2.9	NR	<5.4	NR	<5.6	NR	<5.4	NR	<5.9	NR
o-Xylene	3300	15,000	44,000		<2.8	0.9	NR	<2.7	NR	<2.8	NR	<2.0	NR	<3.0	NR

Notes:

Concentrations expressed in micrograms per cubic meter ($\mu g/m^3$)

Analytes above residential VRSL are shown in *italics*

Analytes above small commercial VRSL concentrations are shown in **bold**

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VRSL = Vapor Risk Screening level

A.4.1 Summary of Soil Gas Data for Volatile Organic Compounds (VOCs)
EPA Method TO-15
Greentree Centre
5111 Douglas Avenue, Racine, Wisconsin

Analytes	Sub-Slab Vapor VRSL				SV-9		SV-10		SV-11		SV-12		SV-13	SV-14
	RESIDENTIAL	SMALL COMMERCIAL	LARGE COMMERCIAL	Sub-slab Sample Location										
				Collection Time	10:56-11:27 PM	3:07-3:52 PM	11:21-11:51 PM	11:24-12:00 PM	11:53-12:23 PM	3:05-3:42 PM	11:19-11:44 AM	10:54-11:31 AM	11:24-12:00 PM	3:05-3:42 PM
	AF = 0.03	AF = 0.03	AF = 0.01	Date	9/13/2017	1/13/2022	9/13/2017	1/13/2022	9/13/2017	1/13/2022	1/4/2019	6/27/2019	1/13/2022	1/13/2022
Benzene	120	520	1,600		2.8	NR	4.3	NR	4.7	NR	0.7	0.72	NR	NR
Chloroform	41.0	180	530		2	NR	5.6	NR	36.5	NR	6.0	11.5	NR	NR
Chloromethane	3,100	13,000	39,000		<0.23	NR	<0.23	NR	<0.23	NR	<0.24	<0.24	NR	NR
Dichlorodifluoromethane	3,500	15,000	44,000		49	NR	2.8	NR	32.6	NR	7.4	2.8	NR	NR
1,1-Dichloroethane	590	2,600	7,700		<0.36	NR	<0.37	NR	<0.37	NR	<0.35	<0.34	NR	NR
1,2-Dichloroethane	36	160	470		<0.33	NR	<0.35	NR	<0.35	NR	<0.23	<0.23	NR	NR
1,1-Dichloroethene	7,000	29,000	88,000		<0.40	NR	<0.41	NR	<0.41	NR	<0.42	<0.42	NR	NR
cis-1,2-Dichloroethene	NE	NE	NE		<0.57	<0.26	<0.60	4.2	<0.60	6.8	<0.34	<0.33	<0.28	6.6
trans-1,2-Dichloroethene	NE	NE	NE		<0.50	<0.23	<0.52	<0.26	<0.52	<0.25	<0.68	<0.43	<0.25	<0.25
Ethylbenzene	370.0	1,600	4,900		4.0	NR	**3.3**	NR	5.1	NR	2.3	1.3	NR	NR
Methylene Chloride	21,000	88,000	260,000		6.7	NR	<2.7	NR	<2.7	NR	1.8	22.1	NR	NR
Methyl tertiary-butyl ether	3,700	16,000	47,000		<1.1	NR	<1.2	NR	<1.2	NR	<1.0	<1.0	NR	NR
Naphthalene	28.0	120	360		<1.0	NR	<1.0	NR	<1.0	NR	12.7	4.8	NR	NR
Tetrachloroethene	1,400.0	5,800	18,000		100.0	3	127.0	83.6	4,530	342.0	119	83.8	19.7	165
Toluene	170,000	730,000	2,200,000		19.5	NR	12.9	NR	12.5	NR	7.4	4.6	NR	NR
1,1,1-Trichloroethane	170,000	730,000	2,200,000		<0.57	NR	<0.60	NR	<0.60	NR	<0.48	<0.47	NR	NR
Trichloroethene	70.0	290	880		1.8	<0.26	1.5	4.7	68.8	16.7	2.0	2.5	<0.29	10.3
Trichlorofluoromethane	NE	NE	NE		1.8	NR	1.5	NR	2.6	NR	<0.57	1.5	NR	NR
1,2,4-Trimethylbenzene	2,100	8,700	26,000		5.2	NR	7.8	NR	5.3	NR	7.1	31.7	NR	NR
1,3,5-Trimethylbenzene	2,100	8,700	26,000		1.6	NR	3.3	NR	1.7	NR	1.9	16.0	NR	NR
Vinyl chloride	56	930	2,800		<0.21	<0.12	<0.22	<0.13	<0.22	<0.13	<0.20	<0.19	<0.13	<0.13
m,p-Xylene	3,500	15,000	44,000		7.1	NR	7.4	NR	10.4	NR	9.4	5.4	NR	NR
o-Xylene	3300	15,000	44,000		3.3	NR	3.5	NR	4.1	NR	3.8	8.8	NR	NR

Notes:

Concentrations expressed in micrograms per cubic meter ($\mu g/m^3$)

Analytes above residential VRSL are shown in *italics*

Analytes above small commercial VRSL concentrations are shown in **bold**

NR = Not reported

AF = Attenuation Factor

NE = Remedial Objective not established.

< = Not Detected: Concentration less than the indicated laboratory detection limit.

All samples collected into 6L Summa canisters; Vapor pins purged and sampled at < 0.2 lpm.

Each vapor pin location was leak tested using the water dam method and shut in test.

VRSL = Vapor Risk Screening level

A.4.2 Summary Indoor Air and Floor Drain Sump Data for Volatile Organic Compounds (VOCs)
Method TO-15
Greentree Centre
5111 Douglas Avenue, Racine, Wisconsin

Analytes	Indoor Air Vapor Action Level (VAL)			Sample Name	IA-1 (Indoor)	IA-2 (Indoor)	BD-1 (Bathroom Sewer Cleanout)
	Residential	Small Commercial	Large Commercial/Industrial	Date Collected	1/13/2022		
cis-1,2-Dichloroethene	NE	NE	NE		<0.31	<0.3	<0.3
trans-1,2-Dichloroethene	42	180	5800		<0.27	<0.26	<0.26
Tetrachloroethene	42	180	5800		10.3	11.9	**70.5**
Trichloroethene	2.1	8.8	8.8		<0.31	<0.3	<0.3
Vinyl chloride	1.7	28	28		<0.14	<0.13	<0.13

Notes:

concentrations in micrograms per cubic meter (ug/m3).

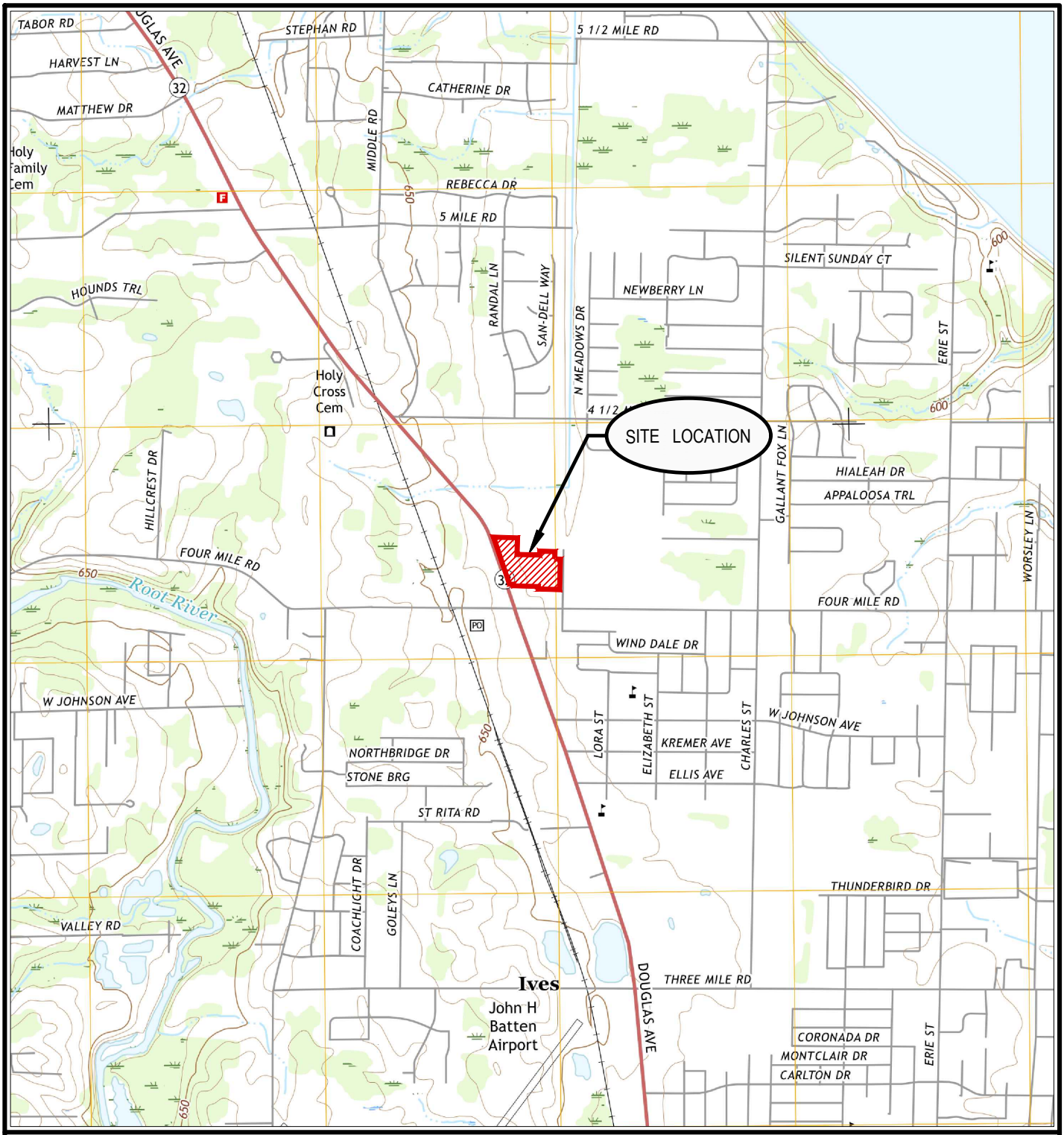
Samples collected into 6 L. Summa Canisters with < 0.2 lpm regulators.

< = Not Detected: Concentration less than the indicated laboratory detection limit.

Analytes above Indoor Vapor Action Level concentrations are shown in **bold**.

NE = Remedial Objective not established.

FIGURES



WISCONSIN

QUADRANGLE LOCATION

Scale 1:24000

0 1/2 1 MILE

1000 0 1000 2000 3000 FEET

(SOURCE OF MAP IS USGS 7.5 MINUTE QUADRANGLE MAP, RACINE NORTH (2016), WISCONSIN)

CHECK BY	JA
DRAWN BY	EM
DATE	04-29-22
SCALE	AS SHOWN
CAD NO.	2017-100.005[1]
PRJ NO.	PECO_2017-100

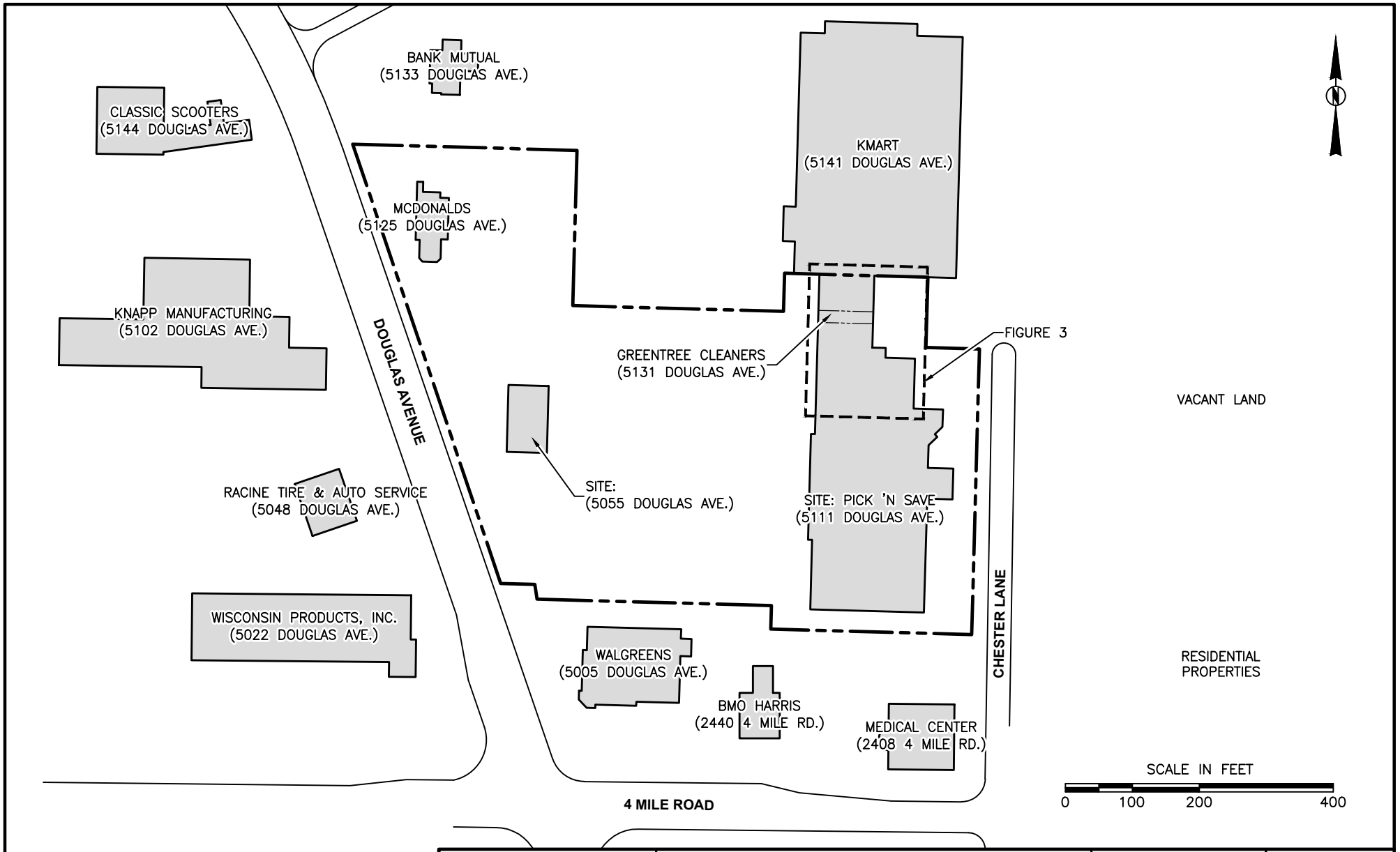
SITE LOCATION MAP

GREENTREE CENTRE
5111 DOUGLAS AVENUE
RACINE, WISCONSIN

APEX

FIGURE

B1a



LEGEND

PROPERTY BOUNDARY

CHK BY	JA
DWN BY	EM
DATE	04-29-22
SCALE	AS SHOWN
CAD NO.	2017-100.05[2]
PRJ NO.	PECO_2017-100

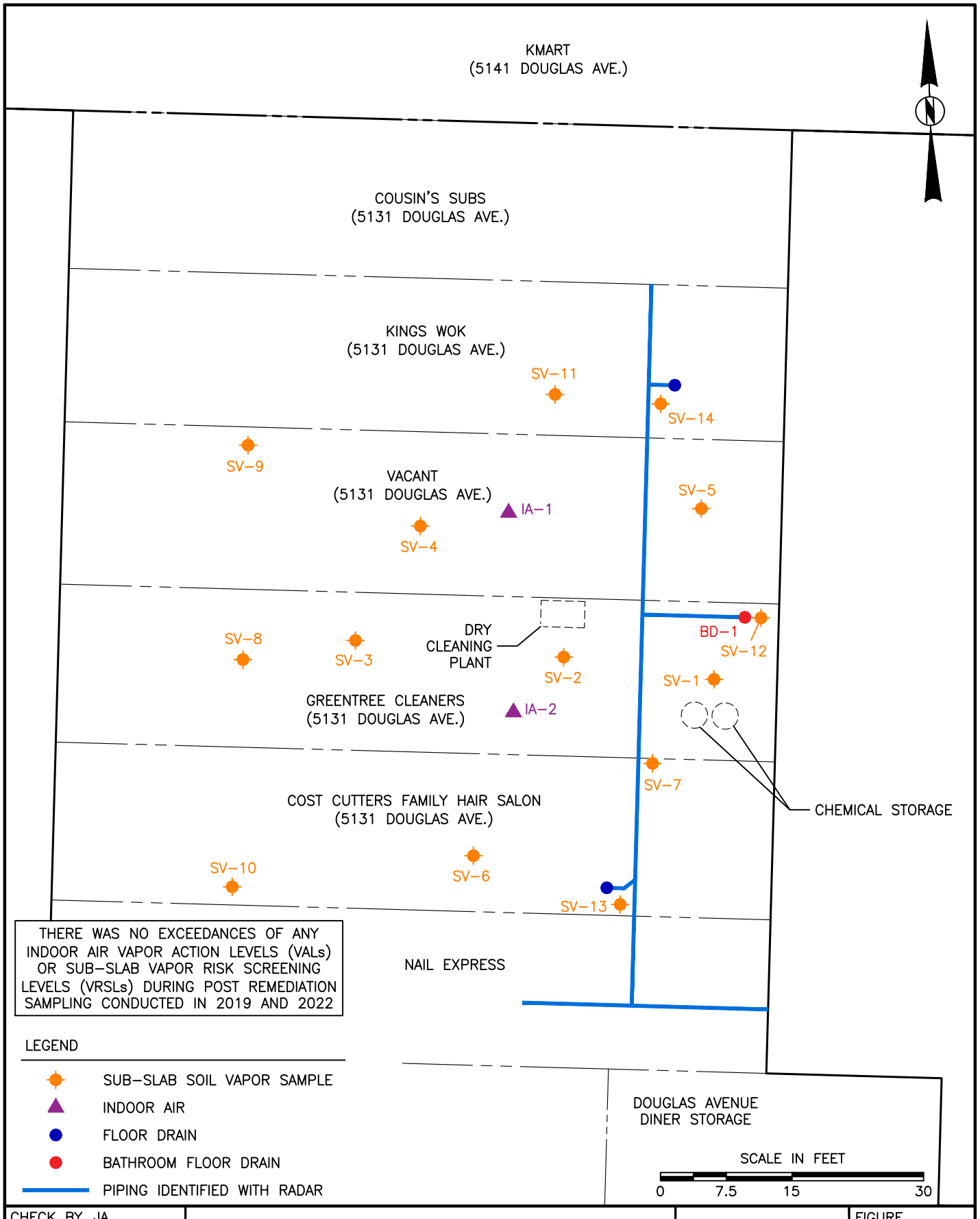
SITE PLAN

GREENTREE CENTRE
5111 DOUGLAS AVENUE
RACINE, WISCONSIN

APEX

FIGURE

B1b



CHECK BY	JA
DRAWN BY	OS
DATE	4-29-22
SCALE	AS SHOWN
CAD NO.	PEC0.2017.100G2
PRJ NO.	PEC0_2017-100

VAPOR INTRUSION MAP

GREENTREE CENTRE
5111 DOUGLAS AVENUE, UNIT D
RACINE, WISCONSIN

APEX

FIGURE

B.4.a

APPENDIX A

Sample Logs

SOIL-VAPOR IMPLANT SAMPLE LOG

Project Name:	Green Tree Sub Slab Sampling	Project Number:	PECO_2017-100
Soil-Vapor Implant Installation Date:	January 13, 2022	Project Address:	5131 Douglas Avenue Suite #D,
Soil-Vapor Sample Date:	January 13, 2022		Racine, WI 53402

SAMPLING INFORMATION

Soil-Vapor Implant Purge Air:	0.0 (Stabilized PID Reading (PPM))	2.5 (Volume (liters))	Sample Start Time:	January 13, 2022 (DATE)	12:31 (TIME)
Leak Test Method:	Shut-in Test (Sample Train)	Water Dam (Soil-Vapor Implant)	Sample End Time:	January 13, 2022 (DATE)	1:12 (TIME)
Shut-in Test:	29 (Max. Vacuum (inches Hg))	60 (Test Duration (seconds))	Canister Vacuum:	29 (Initial (Inches Hg))	2 (Final (Inches Hg))
Leak Test Notes:	Pass (Shut-in Test)		Analysis Details:	Pace Analytical (Laboratory)	MN (Location)
	Pass (Water Dam)		Sample Delivery:	January 14, 2022 (DATE)	13:00 (TIME)
Sample Container Details:	6 (Volume (liters))	30 (Flow Controler (minutes))	Delivery Method (FedEx, courier, etc.):	FedEx	

METEOROLOGICAL CONDITIONS FOR SAMPLING DAY

Ambient Temperature (°F):	33 (Low)	40 (High)	Sea Level Pressure (inches):	29.18
Average Wind:	5 (Direction)	NNW (Velocity (mph))	Average Humidity (%):	70

ADDITIONAL DETAILS

Other details of Site (e.g. recent construction/renovation, cleaning activities, chemical storage, slab/foundation cracks, HVAC status etc.):

Problems or inconsistancies encountered during sampling:

* Include a site sketch on separate sheet noting sample locations (with measurements), chemical storage areas, former operations areas, etc.

Sample Number:	SV-2	Analysis:	TO-15 (Chlorinated Short List)
SUMMA ID Number:	2143	Requested Turnaround Time:	Standard
Regulator ID Number:	1689	Sample Crew:	Ahmed Ali

SOIL-VAPOR IMPLANT SAMPLE LOG

Project Name:	Green Tree Sub Slab Sampling	Project Number:	PECO_2017-100
Soil-Vapor Implant Installation Date:	January 13, 2022	Project Address:	5131 Douglas Avenue Suite #D,
Soil-Vapor Sample Date:	January 13, 2022		Racine, WI 53402

SAMPLING INFORMATION

Soil-Vapor Implant Purge Air:	0.0 (Stabilized PID Reading (PPM))	2.5 (Volume (liters))	Sample Start Time:	January 13, 2022 (DATE)	12:31 (TIME)
Leak Test Method:	Shut-in Test (Sample Train)	Water Dam (Soil-Vapor Implant)	Sample End Time:	January 13, 2022 (DATE)	1:12 (TIME)
Shut-in Test:	29 (Max. Vacuum (inches Hg))	60 (Test Duration (seconds))	Canister Vacuum:	29 (Initial (Inches Hg))	2 (Final (Inches Hg))
Leak Test Notes:	Pass (Shut-in Test)		Analysis Details:	Pace Analytical (Laboratory)	MN (Location)
	Pass (Water Dam)		Sample Delivery:	January 14, 2022 (DATE)	13:00 (TIME)
Sample Container Details:	6 (Volume (liters))	30 (Flow Controler (minutes))	Delivery Method (FedEx, courier, etc.):	FedEx	

METEOROLOGICAL CONDITIONS FOR SAMPLING DAY

Ambient Temperature (°F):	33 (Low)	40 (High)	Sea Level Pressure (inches):	29.18
Average Wind:	5 (Direction)	NNW (Velocity (mph))	Average Humidity (%):	70

ADDITIONAL DETAILS

Other details of Site (e.g. recent construction/renovation, cleaning activities, chemical storage, slab/foundation cracks, HVAC status etc.):

Problems or inconsistancies encountered during sampling:

* Include a site sketch on separate sheet noting sample locations (with measurements), chemical storage areas, former operations areas, etc.

Sample Number:	SV-3	Analysis:	TO-15 (Chlorinated Short List)
SUMMA ID Number:	936	Requested Turnaround Time:	Standard
Regulator ID Number:	1678	Sample Crew:	Ahmed Ali

SOIL-VAPOR IMPLANT SAMPLE LOG

Project Name:	Green Tree Sub Slab Sampling	Project Number:	PECO_2017-100
Soil-Vapor Implant Installation Date:	January 13, 2022	Project Address:	5131 Douglas Avenue Suite #D,
Soil-Vapor Sample Date:	January 13, 2022		Racine, WI 53402

SAMPLING INFORMATION

Soil-Vapor Implant Purge Air:	0.0 (Stabilized PID Reading (PPM))	2.5 (Volume (liters))	Sample Start Time:	January 13, 2022 (DATE)	3:08 (TIME)
Leak Test Method:	Shut-in Test (Sample Train)	Water Dam (Soil-Vapor Implant)	Sample End Time:	January 13, 2022 (DATE)	3:48 (TIME)
Shut-in Test:	30 (Max. Vacuum (inches Hg))	60 (Test Duration (seconds))	Canister Vacuum:	30 (Initial (Inches Hg))	5 (Final (Inches Hg))
Leak Test Notes:	Pass (Shut-in Test)		Analysis Details:	Pace Analytical (Laboratory)	MN (Location)
	Pass (Water Dam)		Sample Delivery:	January 14, 2022 (DATE)	13:00 (TIME)
Sample Container Details:	6 (Volume (liters))	30 (Flow Controler (minutes))	Delivery Method (FedEx, courier, etc.):	FedEx	

METEOROLOGICAL CONDITIONS FOR SAMPLING DAY

Ambient Temperature (°F):	33 (Low)	40 (High)	Sea Level Pressure (inches):	29.18
Average Wind:	5 (Direction)	NNW (Velocity (mph))	Average Humidity (%):	70

ADDITIONAL DETAILS

Other details of Site (e.g. recent construction/renovation, cleaning activities, chemical storage, slab/foundation cracks, HVAC status etc.):

Problems or inconsistancies encountered during sampling:

* Include a site sketch on separate sheet noting sample locations (with measurements), chemical storage areas, former operations areas, etc.

Sample Number:	SV-4	Analysis:	TO-15 (Chlorinated Short List)
SUMMA ID Number:	728	Requested Turnaround Time:	Standard
Regulator ID Number:	1716	Sample Crew:	Ahmed Ali

SOIL-VAPOR IMPLANT SAMPLE LOG

Project Name:	Green Tree Sub Slab Sampling	Project Number:	PECO_2017-100
Soil-Vapor Implant Installation Date:	January 13, 2022	Project Address:	5131 Douglas Avenue Suite #D,
Soil-Vapor Sample Date:	January 13, 2022		Racine, WI 53402

SAMPLING INFORMATION

Soil-Vapor Implant Purge Air:	0.0 (Stabilized PID Reading (PPM))	2.5 (Volume (liters))	Sample Start Time:	January 13, 2022 (DATE)	3:09 (TIME)
Leak Test Method:	Shut-in Test (Sample Train)	Water Dam (Soil-Vapor Implant)	Sample End Time:	January 13, 2022 (DATE)	3:49 (TIME)
Shut-in Test:	29 (Max. Vacuum (inches Hg))	60 (Test Duration (seconds))	Canister Vacuum:	29 (Initial (Inches Hg))	4 (Final (Inches Hg))
Leak Test Notes:	Pass (Shut-in Test)		Analysis Details:	Pace Analytical (Laboratory)	MN (Location)
	Pass (Water Dam)		Sample Delivery:	January 14, 2022 (DATE)	13:00 (TIME)
Sample Container Details:	6 (Volume (liters))	30 (Flow Controler (minutes))	Delivery Method (FedEx, courier, etc.):	FedEx	

METEOROLOGICAL CONDITIONS FOR SAMPLING DAY

Ambient Temperature (°F):	33 (Low)	40 (High)	Sea Level Pressure (inches):	29.18
Average Wind:	5 (Direction)	NNW (Velocity (mph))	Average Humidity (%):	70

ADDITIONAL DETAILS

Other details of Site (e.g. recent construction/renovation, cleaning activities, chemical storage, slab/foundation cracks, HVAC status etc.):

Problems or inconsistancies encountered during sampling:

* Include a site sketch on separate sheet noting sample locations (with measurements), chemical storage areas, former operations areas, etc.

Sample Number:	SV-5	Analysis:	TO-15 (Chlorinated Short List)
SUMMA ID Number:	2302	Requested Turnaround Time:	Standard
Regulator ID Number:	2833	Sample Crew:	Ahmed Ali

SOIL-VAPOR IMPLANT SAMPLE LOG

Project Name:	Green Tree Sub Slab Sampling	Project Number:	PECO_2017-100
Soil-Vapor Implant Installation Date:	January 13, 2022	Project Address:	5131 Douglas Avenue Suite #D,
Soil-Vapor Sample Date:	January 13, 2022		Racine, WI 53402

SAMPLING INFORMATION

Soil-Vapor Implant Purge Air:	0.0 (Stabilized PID Reading (PPM))	2.5 (Volume (liters))	Sample Start Time:	January 13, 2022 (DATE)	11:24 (TIME)
Leak Test Method:	Shut-in Test (Sample Train)	Water Dam (Soil-Vapor Implant)	Sample End Time:	January 13, 2022 (DATE)	12:00 (TIME)
Shut-in Test:	29 (Max. Vacuum (inches Hg))	60 (Test Duration (seconds))	Canister Vacuum:	29 (Initial (Inches Hg))	5 (Final (Inches Hg))
Leak Test Notes:	Pass (Shut-in Test)		Analysis Details:	Pace Analytical (Laboratory)	MN (Location)
	Pass (Water Dam)		Sample Delivery:	January 14, 2022 (DATE)	13:00 (TIME)
Sample Container Details:	6 (Volume (liters))	30 (Flow Controler (minutes))	Delivery Method (FedEx, courier, etc.):	FedEx	

METEOROLOGICAL CONDITIONS FOR SAMPLING DAY

Ambient Temperature (°F):	33 (Low)	40 (High)	Sea Level Pressure (inches):	29.18
Average Wind:	5 (Direction)	NNW (Velocity (mph))	Average Humidity (%):	70

ADDITIONAL DETAILS

Other details of Site (e.g. recent construction/renovation, cleaning activities, chemical storage, slab/foundation cracks, HVAC status etc.):

Problems or inconsistancies encountered during sampling:

* Include a site sketch on separate sheet noting sample locations (with measurements), chemical storage areas, former operations areas, etc.

Sample Number:	SV-6	Analysis:	TO-15 (Chlorinated Short List)
SUMMA ID Number:	2345	Requested Turnaround Time:	Standard
Regulator ID Number:	1562	Sample Crew:	Ahmed Ali

SOIL-VAPOR IMPLANT SAMPLE LOG

Project Name:	Green Tree Sub Slab Sampling	Project Number:	PECO_2017-100
Soil-Vapor Implant Installation Date:	January 13, 2022	Project Address:	5131 Douglas Avenue Suite #D,
Soil-Vapor Sample Date:	January 13, 2022		Racine, WI 53402

SAMPLING INFORMATION

Soil-Vapor Implant Purge Air:	0.0 (Stabilized PID Reading (PPM))	2.5 (Volume (liters))	Sample Start Time:	January 13, 2022 (DATE)	3:06 (TIME)
Leak Test Method:	Shut-in Test (Sample Train)	Water Dam (Soil-Vapor Implant)	Sample End Time:	January 13, 2022 (DATE)	3:43 (TIME)
Shut-in Test:	29 (Max. Vacuum (inches Hg))	60 (Test Duration (seconds))	Canister Vacuum:	29 (Initial (Inches Hg))	3 (Final (Inches Hg))
Leak Test Notes:	Pass (Shut-in Test)		Analysis Details:	Pace Analytical (Laboratory)	MN (Location)
	Pass (Water Dam)		Sample Delivery:	January 14, 2022 (DATE)	13:00 (TIME)
Sample Container Details:	6 (Volume (liters))	30 (Flow Controler (minutes))	Delivery Method (FedEx, courier, etc.):	FedEx	

METEOROLOGICAL CONDITIONS FOR SAMPLING DAY

Ambient Temperature (°F):	33 (Low)	40 (High)	Sea Level Pressure (inches):	29.18
Average Wind:	5 (Direction)	NNW (Velocity (mph))	Average Humidity (%):	70

ADDITIONAL DETAILS

Other details of Site (e.g. recent construction/renovation, cleaning activities, chemical storage, slab/foundation cracks, HVAC status etc.):

Problems or inconsistancies encountered during sampling:

* Include a site sketch on separate sheet noting sample locations (with measurements), chemical storage areas, former operations areas, etc.

Sample Number:	SV-07	Analysis:	TO-15 (Chlorinated Short List)
SUMMA ID Number:	2761	Requested Turnaround Time:	Standard
Regulator ID Number:	2712	Sample Crew:	Ahmed Ali

SOIL-VAPOR IMPLANT SAMPLE LOG

Project Name:	Green Tree Sub Slab Sampling	Project Number:	PECO_2017-100
Soil-Vapor Implant Installation Date:	January 13, 2022	Project Address:	5131 Douglas Avenue Suite #D,
Soil-Vapor Sample Date:	January 13, 2022		Racine, WI 53402

SAMPLING INFORMATION

Soil-Vapor Implant Purge Air:	0.0 (Stabilized PID Reading (PPM))	2.5 (Volume (liters))	Sample Start Time:	January 13, 2022 (DATE) / 12:31 (TIME)
Leak Test Method:	Shut-in Test (Sample Train)	Water Dam (Soil-Vapor Implant)	Sample End Time:	January 13, 2022 (DATE) / 1:04 (TIME)
Shut-in Test:	30 (Max. Vacuum (inches Hg))	60 (Test Duration (seconds))	Canister Vacuum:	30 (Initial (Inches Hg)) / 5 (Final (Inches Hg))
Leak Test Notes:	Pass (Shut-in Test)		Analysis Details:	Pace Analytical (Laboratory) / MN (Location)
	Pass (Water Dam)		Sample Delivery:	January 14, 2022 (DATE) / 13:00 (TIME)
Sample Container Details:	6 (Volume (liters))	30 (Flow Controler (minutes))	Delivery Method (FedEx, courier, etc.):	FedEx

METEOROLOGICAL CONDITIONS FOR SAMPLING DAY

Ambient Temperature (°F):	33 (Low)	40 (High)	Sea Level Pressure (inches):	29.18
Average Wind:	5 (Direction)	NNW (Velocity (mph))	Average Humidity (%):	70

ADDITIONAL DETAILS

Other details of Site (e.g. recent construction/renovation, cleaning activities, chemical storage, slab/foundation cracks, HVAC status etc.):

Problems or inconsistancies encountered during sampling:

* Include a site sketch on separate sheet noting sample locations (with measurements), chemical storage areas, former operations areas, etc.

Sample Number:	SV-08	Analysis:	TO-15 (Chlorinated Short List)
SUMMA ID Number:	3875	Requested Turnaround Time:	Standard
Regulator ID Number:	3074	Sample Crew:	Ahmed Ali

SOIL-VAPOR IMPLANT SAMPLE LOG

Project Name:	Green Tree Sub Slab Sampling	Project Number:	PECO_2017-100
Soil-Vapor Implant Installation Date:	January 13, 2022	Project Address:	5131 Douglas Avenue Suite #D,
Soil-Vapor Sample Date:	January 13, 2022		Racine, WI 53402

SAMPLING INFORMATION

Soil-Vapor Implant Purge Air:	0.0 (Stabilized PID Reading (PPM))	2.5 (Volume (liters))	Sample Start Time:	January 13, 2022 (DATE) / 3:07 (TIME)
Leak Test Method:	Shut-in Test (Sample Train)	Water Dam (Soil-Vapor Implant)	Sample End Time:	January 13, 2022 (DATE) / 3:52 (TIME)
Shut-in Test:	30 (Max. Vacuum (inches Hg))	60 (Test Duration (seconds))	Canister Vacuum:	30 (Initial (Inches Hg)) / 2 (Final (Inches Hg))
Leak Test Notes:	Pass (Shut-in Test)		Analysis Details:	Pace Analytical (Laboratory) / Location
	Pass (Water Dam)		Sample Delivery:	January 14, 2022 (DATE) / 13:00 (TIME)
Sample Container Details:	6 (Volume (liters))	30 (Flow Controler (minutes))	Delivery Method (FedEx, courier, etc.):	FedEx

METEOROLOGICAL CONDITIONS FOR SAMPLING DAY

Ambient Temperature (°F):	33 (Low)	40 (High)	Sea Level Pressure (inches):	29.18
Average Wind:	5 (Direction)	NNW (Velocity (mph))	Average Humidity (%):	70

ADDITIONAL DETAILS

Other details of Site (e.g. recent construction/renovation, cleaning activities, chemical storage, slab/foundation cracks, HVAC status etc.):

Problems or inconsistancies encountered during sampling:

* Include a site sketch on separate sheet noting sample locations (with measurements), chemical storage areas, former operations areas, etc.

Sample Number:	SV-09	Analysis:	TO-15 (Chlorinated Short List)
SUMMA ID Number:	2675	Requested Turnaround Time:	Standard
Regulator ID Number:	1640	Sample Crew:	Ahmed Ali

SOIL-VAPOR IMPLANT SAMPLE LOG

Project Name:	Green Tree Sub Slab Sampling	Project Number:	PECO_2017-100
Soil-Vapor Implant Installation Date:	January 13, 2022	Project Address:	5131 Douglas Avenue Suite #D,
Soil-Vapor Sample Date:	January 13, 2022		Racine, WI 53402

SAMPLING INFORMATION

Soil-Vapor Implant Purge Air:	0.0 (Stabilized PID Reading (PPM))	2.5 (Volume (liters))	Sample Start Time:	January 13, 2022 (DATE)	11:24 (TIME)
Leak Test Method:	Shut-in Test (Sample Train)	Water Dam (Soil-Vapor Implant)	Sample End Time:	January 13, 2022 (DATE)	12:00 (TIME)
Shut-in Test:	29 (Max. Vacuum (inches Hg))	60 (Test Duration (seconds))	Canister Vacuum:	29 (Initial (Inches Hg))	4 (Final (Inches Hg))
Leak Test Notes:	Pass (Shut-in Test)		Analysis Details:	Pace Analytical (Laboratory)	MN (Location)
	Pass (Water Dam)		Sample Delivery:	January 14, 2022 (DATE)	13:00 (TIME)
Sample Container Details:	6 (Volume (liters))	30 (Flow Controler (minutes))	Delivery Method (FedEx, courier, etc.):	FedEx	

METEOROLOGICAL CONDITIONS FOR SAMPLING DAY

Ambient Temperature (°F):	33 (Low)	40 (High)	Sea Level Pressure (inches):	29.18
Average Wind:	5 (Direction)	NNW (Velocity (mph))	Average Humidity (%):	70

ADDITIONAL DETAILS

Other details of Site (e.g. recent construction/renovation, cleaning activities, chemical storage, slab/foundation cracks, HVAC status etc.):

Problems or inconsistancies encountered during sampling:

* Include a site sketch on separate sheet noting sample locations (with measurements), chemical storage areas, former operations areas, etc.

Sample Number:	SV-10	Analysis:	TO-15 (Chlorinated Short List)
SUMMA ID Number:	4011	Requested Turnaround Time:	Standard
Regulator ID Number:	FC2845	Sample Crew:	Ahmed Ali

SOIL-VAPOR IMPLANT SAMPLE LOG

Project Name:	Green Tree Sub Slab Sampling	Project Number:	PECO_2017-100
Soil-Vapor Implant Installation Date:	January 13, 2022	Project Address:	5131 Douglas Avenue Suite #D,
Soil-Vapor Sample Date:	January 13, 2022		Racine, WI 53402

SAMPLING INFORMATION

Soil-Vapor Implant Purge Air:	0.0 (Stabilized PID Reading (PPM))	2.5 (Volume (liters))	Sample Start Time:	January 13, 2022 (DATE)	3:05 (TIME)
Leak Test Method:	Shut-in Test (Sample Train)	Water Dam (Soil-Vapor Implant)	Sample End Time:	January 13, 2022 (DATE)	3:42 (TIME)
Shut-in Test:	29 (Max. Vacuum (inches Hg))	60 (Test Duration (seconds))	Canister Vacuum:	29 (Initial (Inches Hg))	4 (Final (Inches Hg))
Leak Test Notes:	Pass (Shut-in Test)		Analysis Details:	Pace Analytical (Laboratory)	MN (Location)
	Pass (Water Dam)		Sample Delivery:	January 14, 2022 (DATE)	13:00 (TIME)
Sample Container Details:	6 (Volume (liters))	30 (Flow Controler (minutes))	Delivery Method (FedEx, courier, etc.):	FedEx	

METEOROLOGICAL CONDITIONS FOR SAMPLING DAY

Ambient Temperature (°F):	33 (Low)	40 (High)	Sea Level Pressure (inches):	29.18
Average Wind:	5 (Direction)	NNW (Velocity (mph))	Average Humidity (%):	70

ADDITIONAL DETAILS

Other details of Site (e.g. recent construction/renovation, cleaning activities, chemical storage, slab/foundation cracks, HVAC status etc.):

Problems or inconsistancies encountered during sampling:

* Include a site sketch on separate sheet noting sample locations (with measurements), chemical storage areas, former operations areas, etc.

Sample Number:	SV-11	Analysis:	TO-15 (Chlorinated Short List)
SUMMA ID Number:	505	Requested Turnaround Time:	Standard
Regulator ID Number:	3166	Sample Crew:	Ahmed Ali

SOIL-VAPOR IMPLANT SAMPLE LOG

Project Name:	Green Tree Sub Slab Sampling	Project Number:	PECO_2017-100
Soil-Vapor Implant Installation Date:	January 13, 2022	Project Address:	5131 Douglas Avenue Suite #D,
Soil-Vapor Sample Date:	January 13, 2022		Racine, WI 53402

SAMPLING INFORMATION

Soil-Vapor Implant Purge Air:	0.0 (Stabilized PID Reading (PPM))	2.5 (Volume (liters))	Sample Start Time:	January 13, 2022 (DATE)	11:24 (TIME)
Leak Test Method:	Shut-in Test (Sample Train)	Water Dam (Soil-Vapor Implant)	Sample End Time:	January 13, 2022 (DATE)	12:00 (TIME)
Shut-in Test:	29 (Max. Vacuum (inches Hg))	60 (Test Duration (seconds))	Canister Vacuum:	29 (Initial (Inches Hg))	5 (Final (Inches Hg))
Leak Test Notes:	Pass (Shut-in Test)		Analysis Details:	Pace Analytical (Laboratory)	MN (Location)
	Pass (Water Dam)		Sample Delivery:	January 14, 2022 (DATE)	13:00 (TIME)
Sample Container Details:	6 (Volume (liters))	30 (Flow Controler (minutes))	Delivery Method (FedEx, courier, etc.):	FedEx	

METEOROLOGICAL CONDITIONS FOR SAMPLING DAY

Ambient Temperature (°F):	33 (Low)	40 (High)	Sea Level Pressure (inches):	29.18
Average Wind:	5 (Direction)	NNW (Velocity (mph))	Average Humidity (%):	70

ADDITIONAL DETAILS

Other details of Site (e.g. recent construction/renovation, cleaning activities, chemical storage, slab/foundation cracks, HVAC status etc.):

Problems or inconsistancies encountered during sampling:

* Include a site sketch on separate sheet noting sample locations (with measurements), chemical storage areas, former operations areas, etc.

Sample Number:	SV-13	Analysis:	TO-15 (Chlorinated Short List)
SUMMA ID Number:	2185	Requested Turnaround Time:	Standard
Regulator ID Number:	FC2996	Sample Crew:	Ahmed Ali

SOIL-VAPOR IMPLANT SAMPLE LOG

Project Name:	Green Tree Sub Slab Sampling	Project Number:	PECO_2017-100
Soil-Vapor Implant Installation Date:	January 13, 2022	Project Address:	5131 Douglas Avenue Suite #D,
Soil-Vapor Sample Date:	January 13, 2022		Racine, WI 53402

SAMPLING INFORMATION

Soil-Vapor Implant Purge Air:	0.0 (Stabilized PID Reading (PPM))	2.5 (Volume (liters))	Sample Start Time:	January 13, 2022 (DATE) / 3:05 (TIME)
Leak Test Method:	Shut-in Test (Sample Train)	Water Dam (Soil-Vapor Implant)	Sample End Time:	January 13, 2022 (DATE) / 3:42 (TIME)
Shut-in Test:	29 (Max. Vacuum (inches Hg))	60 (Test Duration (seconds))	Canister Vacuum:	29 (Initial (Inches Hg)) / 4 (Final (Inches Hg))
Leak Test Notes:	Pass (Shut-in Test)		Analysis Details:	Pace Analytical (Laboratory) / MN (Location)
	Pass (Water Dam)		Sample Delivery:	January 14, 2022 (DATE) / 13:00 (TIME)
Sample Container Details:	6 (Volume (liters))	30 (Flow Controler (minutes))	Delivery Method (FedEx, courier, etc.):	FedEx

METEOROLOGICAL CONDITIONS FOR SAMPLING DAY

Ambient Temperature (°F):	33 (Low)	40 (High)	Sea Level Pressure (inches):	29.18
Average Wind:	5 (Direction)	NNW (Velocity (mph))	Average Humidity (%):	70

ADDITIONAL DETAILS

Other details of Site (e.g. recent construction/renovation, cleaning activities, chemical storage, slab/foundation cracks, HVAC status etc.):

Problems or inconsistancies encountered during sampling:

* Include a site sketch on separate sheet noting sample locations (with measurements), chemical storage areas, former operations areas, etc.

Sample Number:	SV-14	Analysis:	TO-15 (Chlorinated Short List)
SUMMA ID Number:	679	Requested Turnaround Time:	Standard
Regulator ID Number:	1240	Sample Crew:	Ahmed Ali

INDOOR AIR SAMPLE LOG

Project Name:	Green Tree Sub Slab Sampling	Project Number:	PECO_2017-100
Soil-Vapor Implant Installation Date:	January 13, 2022	Project Address:	5131 Douglas Avenue Suite #D,
Soil-Vapor Sample Date:	January 13, 2022		Racine, WI 53402

SAMPLING INFORMATION

Soil-Vapor Implant Purge Air:	0.0 (Stabilized PID Reading (PPM))	2.5 (Volume (liters))	Sample Start Time:	January 13, 2022 (DATE)	3:08 (TIME)
Leak Test Method:	Shut-in Test (Sample Train)	NA (Soil-Vapor Implant)	Sample End Time:	January 13, 2022 (DATE)	3:43 (TIME)
Shut-in Test:	30 (Max. Vacuum (inches Hg))	60 (Test Duration (seconds))	Canister Vacuum:	30 (Initial (Inches Hg))	5 (Final (Inches Hg))
Leak Test Notes:	PASS (Shut-in Test)		Analysis Details:	Pace Analytical (Laboratory)	MN (Location)
	NA (Water Dam)		Sample Delivery:	January 14, 2022 (DATE)	13:00 (TIME)
Sample Container Details:	6 (Volume (liters))	30 (Flow Controler (minutes))	Delivery Method (FedEx, courier, etc.):	FedEx	

METEOROLOGICAL CONDITIONS FOR SAMPLING DAY

Ambient Temperature (°F):	33 (Low)	40 (High)	Sea Level Pressure (inches):	29.18
Average Wind:	5 (Direction)	NNW (Velocity (mph))	Average Humidity (%):	70

ADDITIONAL DETAILS

Other details of Site (e.g. recent construction/renovation, cleaning activities, chemical storage, slab/foundation cracks, HVAC status etc.):

Problems or inconsistancies encountered during sampling:

* Include a site sketch on separate sheet noting sample locations (with measurements), chemical storage areas, former operations areas, etc.

Sample Number:	IA-1	Analysis:	TO-15 (Chlorinated Short List)
SUMMA ID Number:	3089	Requested Turnaround Time:	Standard
Regulator ID Number:	2764	Sample Crew:	Ahmed Ali

INDOOR AIR SAMPLE LOG

Project Name:	Green Tree Sub Slab Sampling	Project Number:	PECO_2017-100
Soil-Vapor Implant Installation Date:	January 13, 2022	Project Address:	5131 Douglas Avenue Suite #D,
Soil-Vapor Sample Date:	January 13, 2022		Racine, WI 53402

SAMPLING INFORMATION

Soil-Vapor Implant Purge Air:	NA (Stabilized PID Reading (PPM))	NA (Volume (liters))	Sample Start Time:	January 13, 2022 (DATE)	12:36 (TIME)
Leak Test Method:	Shut-in Test (Sample Train)	NA (Soil-Vapor Implant)	Sample End Time:	January 13, 2022 (DATE)	1:13 (TIME)
Shut-in Test:	29 (Max. Vacuum (inches Hg))	60 (Test Duration (seconds))	Canister Vacuum:	29 (Initial (Inches Hg))	4 (Final (Inches Hg))
Leak Test Notes:	PASS (Shut-in Test)		Analysis Details:	Pace Analytical (Laboratory)	MN (Location)
	NA (Water Dam)		Sample Delivery:	January 14, 2022 (DATE)	13:00 (TIME)
Sample Container Details:	6 (Volume (liters))	30 (Flow Controler (minutes))	Delivery Method (FedEx, courier, etc.):	FedEx	

METEOROLOGICAL CONDITIONS FOR SAMPLING DAY

Ambient Temperature (°F):	33 (Low)	40 (High)	Sea Level Pressure (inches):	29.18
Average Wind:	5 (Direction)	NNW (Velocity (mph))	Average Humidity (%):	70

ADDITIONAL DETAILS

Other details of Site (e.g. recent construction/renovation, cleaning activities, chemical storage, slab/foundation cracks, HVAC status etc.):

Problems or inconsistancies encountered during sampling:

* Include a site sketch on separate sheet noting sample locations (with measurements), chemical storage areas, former operations areas, etc.

Sample Number:	IA-2	Analysis:	TO-15 (Chlorinated Short List)
SUMMA ID Number:	227	Requested Turnaround Time:	Standard
Regulator ID Number:	1216	Sample Crew:	Ahmed Ali

DRAIN SAMPLE LOG

Project Name:	Green Tree Sub Slab Sampling	Project Number:	PECO_2017-100
Soil-Vapor Implant Installation Date:	January 13, 2022	Project Address:	5131 Douglas Avenue Suite #D,
Soil-Vapor Sample Date:	January 13, 2022		Racine, WI 53402

SAMPLING INFORMATION

Soil-Vapor Implant Purge Air:	0.0 (Stabilized PID Reading (PPM))	2.5 (Volume (liters))	Sample Start Time:	January 13, 2022 (DATE)	12:53 (TIME)
Leak Test Method:	Shut-in Test (Sample Train)	NA (Soil-Vapor Implant)	Sample End Time:	January 13, 2022 (DATE)	2:09 (TIME)
Shut-in Test:	29 (Max. Vacuum (inches Hg))	60 (Test Duration (seconds))	Canister Vacuum:	29 (Initial (Inches Hg))	2 (Final (Inches Hg))
Leak Test Notes:	PASS (Shut-in Test)		Analysis Details:	Pace Analytical (Laboratory)	MN (Location)
	NA (Water Dam)		Sample Delivery:	January 14, 2022 (DATE)	13:00 (TIME)
Sample Container Details:	6 (Volume (liters))	30 (Flow Controler (minutes))	Delivery Method (FedEx, courier, etc.):	FedEx	

METEOROLOGICAL CONDITIONS FOR SAMPLING DAY

Ambient Temperature (°F):	33 (Low)	40 (High)	Sea Level Pressure (inches):	29.18
Average Wind:	5 (Direction)	NNW (Velocity (mph))	Average Humidity (%):	70

ADDITIONAL DETAILS

Other details of Site (e.g. recent construction/renovation, cleaning activities, chemical storage, slab/foundation cracks, HVAC status etc.):

Problems or inconsistancies encountered during sampling:

* Include a site sketch on separate sheet noting sample locations (with measurements), chemical storage areas, former operations areas, etc.

Sample Number:	BD-1	Analysis:	TO-15 (Chlorinated Short List)
SUMMA ID Number:	33	Requested Turnaround Time:	Standard
Regulator ID Number:	1151	Sample Crew:	Ahmed Ali

INDOOR AIR SUMMA® CANISTER VACUUM LOG

CLIENT INFO		
	Name:	
	Address:	
	City, State, Zip:	

SITE INFO		
	Name:	GreenTree Cleaners and Vacant, Adj, Space (504)
	Address:	5131 Douglas Avenue
	City, State, Zip:	Racine, WI 53402

Sample Collection Date:	5/5/22
Project #:	PECO_2017-100
Apex Manager / Phone #:	Jane Allan
Email Results To:	Jane.allan@apexcos.com & tim.stauder@apexcos.com

Lab / Canister Supplier:	STAT Analysis Corporation
Lab Delivery Method:	FedEx, Ground Service
Analysis:	TO-15
Turnaround Time:	Standard

Meteorological Conditions Day of Sampling		
Ambient Temperature (Low): 44 °F	Ambient Temperature (High): 50 °F	Average Humidity: 69 %
Barometric Pressure (Low): 40.1 inches Hg	Barometric Pressure (High): 40.2 inches Hg	Rainfall in previous 24 hours? Yes ☐ No x
Average Wind Direction:	Average Wind Velocity: miles per hour	If rainfall, amount: inches
Indoor Conditions Day of Sampling		
Temperature: °F	HVAC Operating? Yes X No ☐	Window/Doors Closed? Yes X No ☐

Summary of pertinent findings from building survey and occupant interview:

Building wasn't surveyed and occupants of dry cleaner store weren't interviewed, adjacent space was vacant and no one present to talk to.

Problems or inconsistencies encountered during sampling:

No problems encountered

Collected by (print): **Tim Stauder, MSPH, CIH, Apex Program Manager**	Collected by (signature):

Sample ID	Canister ID	Regulator ID	Location	Start Time	Initial Vacuum (inches Hg)	Stop Time	Final Vacuum (inches Hg)	Malfunctions, Maintenance or Corrective Actions
1 60454	60454	7306969	GreenTree Cleaners	08:10	- 30	16:05	- 0.5	Yes ☐ No x
								Yes ☐ No ☐
2 60297	60297	7306973	Vacant tenant space immediately adj. and north of GreenTree Cleaners	08:26	- 26	16:14	0	Yes ☐ No x
								Yes ☐ No ☐
								Yes ☐ No ☐

* Include a site sketch on separate sheet noting sample locations (with measurements), chemical storage areas, former operations areas, etc.

APPENDIX B

Laboratory Reports

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

February 01, 2022

Steve Newlin
Apex Companies
300 S. Wacker
Chicago, IL 60606

RE: Project: PECO-2017-100 GREENTREE SAMPLI
Pace Project No.: 10594745

Dear Steve Newlin:

Enclosed are the analytical results for sample(s) received by the laboratory on January 18, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Minneapolis

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

Sincerely,

Carolynne Trout

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

Enclosures

cc: Ahmed Ali, Apex Companies LLC

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

CERTIFICATIONS

Project: PECO-2017-100 GREENTREE SAMPLI
Pace Project No.: 10594745

Pace Analytical Services, LLC - Minneapolis MN
1700 Elm Street SE, Minneapolis, MN 55414
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
A2LA Certification #: 2926.01*
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Approval: via MN 027-053-137
Minnesota Petrofund Registration #: 1240*
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081*
New Jersey Certification #: MN002
New York Certification #: 11647*
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification (1700) #: CL101
Ohio VAP Certification (1800) #: CL110*
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563*
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).

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

SAMPLE SUMMARY

Project: PECO-2017-100 GREENTREE SAMPLI
Pace Project No.: 10594745

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10594745001	SV-10	Air	01/13/22 12:00	01/18/22 12:38
10594745002	SV-6	Air	01/13/22 12:00	01/18/22 12:38
10594745003	SV-13	Air	01/13/22 12:00	01/18/22 12:38
10594745004	SV-2	Air	01/13/22 13:12	01/18/22 12:38
10594745005	SV-3	Air	01/13/22 13:12	01/18/22 12:38
10594745006	SV-8	Air	01/13/22 13:04	01/18/22 12:38
10594745007	IA-2	Air	01/13/22 13:13	01/18/22 12:38
10594745008	BD-1	Air	01/13/22 14:09	01/18/22 12:38
10594745009	SV-7	Air	01/13/22 15:43	01/18/22 12:38
10594745010	SV-11	Air	01/13/22 15:42	01/18/22 12:38
10594745011	SV-14	Air	01/13/22 15:42	01/18/22 12:38
10594745012	SV-9	Air	01/13/22 15:52	01/18/22 12:38
10594745013	SV-4	Air	01/13/22 15:48	01/18/22 12:38
10594745014	IA-1	Air	01/13/22 15:43	01/18/22 12:38
10594745015	SV-5	Air	01/13/22 15:49	01/18/22 12:38
10594745016	UNUSED PACE0081	Air		01/18/22 12:38

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

SAMPLE ANALYTE COUNT

Project: PECO-2017-100 GREENTREE SAMPLI
Pace Project No.: 10594745

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10594745001	**SV-10**	TO-15	SW	5	PASI-M
10594745002	**SV-6**	TO-15	SW	5	PASI-M
10594745003	**SV-13**	TO-15	SW	5	PASI-M
10594745004	**SV-2**	TO-15	SW	5	PASI-M
10594745005	**SV-3**	TO-15	SW	5	PASI-M
10594745006	**SV-8**	TO-15	SW	5	PASI-M
10594745007	**IA-2**	TO-15	SW	5	PASI-M
10594745008	**BD-1**	TO-15	SW	5	PASI-M
10594745009	**SV-7**	TO-15	SW	5	PASI-M
10594745010	**SV-11**	TO-15	SW	5	PASI-M
10594745011	**SV-14**	TO-15	SW	5	PASI-M
10594745012	**SV-9**	TO-15	SW	5	PASI-M
10594745013	**SV-4**	TO-15	SW	5	PASI-M
10594745014	**IA-1**	TO-15	SW	5	PASI-M
10594745015	**SV-5**	TO-15	SW	5	PASI-M

PASI-M = Pace Analytical Services - Minneapolis

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: PECO-2017-100 GREENTREE SAMPLI
Pace Project No.: 10594745

Sample: SV-10 **Lab ID: 10594745001** Collected: 01/13/22 12:00 Received: 01/18/22 12:38 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**4.2**	ug/m3	1.2	0.30	1.52		01/31/22 18:31	156-59-2	
trans-1,2-Dichloroethene	**<0.26**	ug/m3	1.2	0.26	1.52		01/31/22 18:31	156-60-5	
Tetrachloroethene	**83.6**	ug/m3	1.0	0.44	1.52		01/31/22 18:31	127-18-4	
Trichloroethene	**4.7**	ug/m3	0.83	0.30	1.52		01/31/22 18:31	79-01-6	
Vinyl chloride	**<0.13**	ug/m3	0.40	0.13	1.52		01/31/22 18:31	75-01-4	

Sample: SV-6 **Lab ID: 10594745002** Collected: 01/13/22 12:00 Received: 01/18/22 12:38 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**3.4**	ug/m3	1.2	0.30	1.52		01/31/22 19:05	156-59-2	
trans-1,2-Dichloroethene	**<0.26**	ug/m3	1.2	0.26	1.52		01/31/22 19:05	156-60-5	
Tetrachloroethene	**120**	ug/m3	1.0	0.44	1.52		01/31/22 19:05	127-18-4	
Trichloroethene	**8.4**	ug/m3	0.83	0.30	1.52		01/31/22 19:05	79-01-6	
Vinyl chloride	**<0.13**	ug/m3	0.40	0.13	1.52		01/31/22 19:05	75-01-4	

Sample: SV-13 **Lab ID: 10594745003** Collected: 01/13/22 12:00 Received: 01/18/22 12:38 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.28**	ug/m3	1.2	0.28	1.46		01/31/22 19:39	156-59-2	
trans-1,2-Dichloroethene	**<0.25**	ug/m3	1.2	0.25	1.46		01/31/22 19:39	156-60-5	
Tetrachloroethene	**19.7**	ug/m3	1.0	0.43	1.46		01/31/22 19:39	127-18-4	
Trichloroethene	**<0.29**	ug/m3	0.80	0.29	1.46		01/31/22 19:39	79-01-6	
Vinyl chloride	**<0.13**	ug/m3	0.38	0.13	1.46		01/31/22 19:39	75-01-4	

Sample: SV-2 **Lab ID: 10594745004** Collected: 01/13/22 13:12 Received: 01/18/22 12:38 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.27**	ug/m3	1.1	0.27	1.41		01/31/22 20:13	156-59-2	
trans-1,2-Dichloroethene	**<0.24**	ug/m3	1.1	0.24	1.41		01/31/22 20:13	156-60-5	
Tetrachloroethene	**8.3**	ug/m3	0.97	0.41	1.41		01/31/22 20:13	127-18-4	
Trichloroethene	**<0.28**	ug/m3	0.77	0.28	1.41		01/31/22 20:13	79-01-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: PECO-2017-100 GREENTREE SAMPLI
Pace Project No.: 10594745

Sample: SV-2 **Lab ID: 10594745004** Collected: 01/13/22 13:12 Received: 01/18/22 12:38 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
Vinyl chloride	**<0.12**	ug/m3	0.37	0.12	1.41		01/31/22 20:13	75-01-4	

Sample: SV-3 **Lab ID: 10594745005** Collected: 01/13/22 13:12 Received: 01/18/22 12:38 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.28**	ug/m3	1.2	0.28	1.44		01/31/22 20:46	156-59-2	
trans-1,2-Dichloroethene	**<0.24**	ug/m3	1.2	0.24	1.44		01/31/22 20:46	156-60-5	
Tetrachloroethene	**178**	ug/m3	0.99	0.42	1.44		01/31/22 20:46	127-18-4	
Trichloroethene	**5.6**	ug/m3	0.79	0.28	1.44		01/31/22 20:46	79-01-6	
Vinyl chloride	**<0.12**	ug/m3	0.37	0.12	1.44		01/31/22 20:46	75-01-4	

Sample: SV-8 **Lab ID: 10594745006** Collected: 01/13/22 13:04 Received: 01/18/22 12:38 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.31**	ug/m3	1.3	0.31	1.61		01/31/22 21:20	156-59-2	
trans-1,2-Dichloroethene	**<0.27**	ug/m3	1.3	0.27	1.61		01/31/22 21:20	156-60-5	
Tetrachloroethene	**5.9**	ug/m3	1.1	0.47	1.61		01/31/22 21:20	127-18-4	
Trichloroethene	**<0.32**	ug/m3	0.88	0.32	1.61		01/31/22 21:20	79-01-6	
Vinyl chloride	**<0.14**	ug/m3	0.42	0.14	1.61		01/31/22 21:20	75-01-4	

Sample: IA-2 **Lab ID: 10594745007** Collected: 01/13/22 13:13 Received: 01/18/22 12:38 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.30**	ug/m3	1.2	0.30	1.52		01/31/22 21:54	156-59-2	
trans-1,2-Dichloroethene	**<0.26**	ug/m3	1.2	0.26	1.52		01/31/22 21:54	156-60-5	
Tetrachloroethene	**11.9**	ug/m3	1.0	0.44	1.52		01/31/22 21:54	127-18-4	
Trichloroethene	**<0.30**	ug/m3	0.83	0.30	1.52		01/31/22 21:54	79-01-6	
Vinyl chloride	**<0.13**	ug/m3	0.40	0.13	1.52		01/31/22 21:54	75-01-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: PECO-2017-100 GREENTREE SAMPLI
Pace Project No.: 10594745

Sample: BD-1 **Lab ID: 10594745008** Collected: 01/13/22 14:09 Received: 01/18/22 12:38 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.30**	ug/m3	1.2	0.30	1.52		01/31/22 22:28	156-59-2	
trans-1,2-Dichloroethene	**<0.26**	ug/m3	1.2	0.26	1.52		01/31/22 22:28	156-60-5	
Tetrachloroethene	**70.5**	ug/m3	1.0	0.44	1.52		01/31/22 22:28	127-18-4	
Trichloroethene	**<0.30**	ug/m3	0.83	0.30	1.52		01/31/22 22:28	79-01-6	
Vinyl chloride	**<0.13**	ug/m3	0.40	0.13	1.52		01/31/22 22:28	75-01-4	

Sample: SV-7 **Lab ID: 10594745009** Collected: 01/13/22 15:43 Received: 01/18/22 12:38 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**2.6**	ug/m3	1.2	0.28	1.46		01/31/22 23:02	156-59-2	
trans-1,2-Dichloroethene	**<0.25**	ug/m3	1.2	0.25	1.46		01/31/22 23:02	156-60-5	
Tetrachloroethene	**48.7**	ug/m3	1.0	0.43	1.46		01/31/22 23:02	127-18-4	
Trichloroethene	**1.5**	ug/m3	0.80	0.29	1.46		01/31/22 23:02	79-01-6	
Vinyl chloride	**<0.13**	ug/m3	0.38	0.13	1.46		01/31/22 23:02	75-01-4	

Sample: SV-11 **Lab ID: 10594745010** Collected: 01/13/22 15:42 Received: 01/18/22 12:38 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**6.8**	ug/m3	1.2	0.28	1.46		01/31/22 23:35	156-59-2	
trans-1,2-Dichloroethene	**<0.25**	ug/m3	1.2	0.25	1.46		01/31/22 23:35	156-60-5	
Tetrachloroethene	**342**	ug/m3	1.0	0.43	1.46		01/31/22 23:35	127-18-4	
Trichloroethene	**16.7**	ug/m3	0.80	0.29	1.46		01/31/22 23:35	79-01-6	
Vinyl chloride	**<0.13**	ug/m3	0.38	0.13	1.46		01/31/22 23:35	75-01-4	

Sample: SV-14 **Lab ID: 10594745011** Collected: 01/13/22 15:42 Received: 01/18/22 12:38 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**6.6**	ug/m3	1.2	0.28	1.46		02/01/22 00:43	156-59-2	
trans-1,2-Dichloroethene	**<0.25**	ug/m3	1.2	0.25	1.46		02/01/22 00:43	156-60-5	
Tetrachloroethene	**165**	ug/m3	1.0	0.43	1.46		02/01/22 00:43	127-18-4	
Trichloroethene	**10.3**	ug/m3	0.80	0.29	1.46		02/01/22 00:43	79-01-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: PECO-2017-100 GREENTREE SAMPLI
Pace Project No.: 10594745

Sample: SV-14 **Lab ID: 10594745011** Collected: 01/13/22 15:42 Received: 01/18/22 12:38 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
Vinyl chloride	**<0.13**	ug/m3	0.38	0.13	1.46		02/01/22 00:43	75-01-4	

Sample: SV-9 **Lab ID: 10594745012** Collected: 01/13/22 15:52 Received: 01/18/22 12:38 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.26**	ug/m3	1.1	0.26	1.34		02/01/22 01:17	156-59-2	
trans-1,2-Dichloroethene	**<0.23**	ug/m3	1.1	0.23	1.34		02/01/22 01:17	156-60-5	
Tetrachloroethene	**2.6**	ug/m3	0.92	0.39	1.34		02/01/22 01:17	127-18-4	
Trichloroethene	**<0.26**	ug/m3	0.73	0.26	1.34		02/01/22 01:17	79-01-6	
Vinyl chloride	**<0.12**	ug/m3	0.35	0.12	1.34		02/01/22 01:17	75-01-4	

Sample: SV-4 **Lab ID: 10594745013** Collected: 01/13/22 15:48 Received: 01/18/22 12:38 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**0.49J**	ug/m3	1.1	0.27	1.41		02/01/22 01:51	156-59-2	
trans-1,2-Dichloroethene	**<0.24**	ug/m3	1.1	0.24	1.41		02/01/22 01:51	156-60-5	
Tetrachloroethene	**126**	ug/m3	0.97	0.41	1.41		02/01/22 01:51	127-18-4	
Trichloroethene	**4.5**	ug/m3	0.77	0.28	1.41		02/01/22 01:51	79-01-6	
Vinyl chloride	**<0.12**	ug/m3	0.37	0.12	1.41		02/01/22 01:51	75-01-4	

Sample: IA-1 **Lab ID: 10594745014** Collected: 01/13/22 15:43 Received: 01/18/22 12:38 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**<0.31**	ug/m3	1.3	0.31	1.58		01/31/22 17:57	156-59-2	
trans-1,2-Dichloroethene	**<0.27**	ug/m3	1.3	0.27	1.58		01/31/22 17:57	156-60-5	
Tetrachloroethene	**10.3**	ug/m3	1.1	0.46	1.58		01/31/22 17:57	127-18-4	
Trichloroethene	**<0.31**	ug/m3	0.86	0.31	1.58		01/31/22 17:57	79-01-6	
Vinyl chloride	**<0.14**	ug/m3	0.41	0.14	1.58		01/31/22 17:57	75-01-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: PECO-2017-100 GREENTREE SAMPLI
Pace Project No.: 10594745

Sample: SV-5 **Lab ID: 10594745015** Collected: 01/13/22 15:49 Received: 01/18/22 12:38 Matrix: Air

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis								
cis-1,2-Dichloroethene	**3.7**	ug/m3	1.1	0.27	1.41		02/01/22 11:58	156-59-2	
trans-1,2-Dichloroethene	**<0.24**	ug/m3	1.1	0.24	1.41		02/01/22 11:58	156-60-5	
Tetrachloroethene	**82.0**	ug/m3	0.97	0.41	1.41		02/01/22 11:58	127-18-4	
Trichloroethene	**4.4**	ug/m3	0.77	0.28	1.41		02/01/22 11:58	79-01-6	
Vinyl chloride	**<0.12**	ug/m3	0.37	0.12	1.41		02/01/22 11:58	75-01-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: PECO-2017-100 GREENTREE SAMPLI
Pace Project No.: 10594745

QC Batch: 796299
QC Batch Method: TO-15
Analysis Method: TO-15
Analysis Description: TO15 MSV AIR Low Level
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10594745001, 10594745002, 10594745003, 10594745004, 10594745005, 10594745006, 10594745007, 10594745008, 10594745009, 10594745010, 10594745011, 10594745012, 10594745013, 10594745014

METHOD BLANK: 4233549 Matrix: Air
Associated Lab Samples: 10594745001, 10594745002, 10594745003, 10594745004, 10594745005, 10594745006, 10594745007, 10594745008, 10594745009, 10594745010, 10594745011, 10594745012, 10594745013, 10594745014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/m3	<0.20	0.81	01/31/22 13:34	
Tetrachloroethene	ug/m3	<0.29	0.69	01/31/22 13:34	
trans-1,2-Dichloroethene	ug/m3	<0.17	0.81	01/31/22 13:34	
Trichloroethene	ug/m3	<0.20	0.55	01/31/22 13:34	
Vinyl chloride	ug/m3	<0.087	0.26	01/31/22 13:34	

LABORATORY CONTROL SAMPLE: 4233550

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/m3	43.4	46.4	107	70-136	
Tetrachloroethene	ug/m3	73.4	79.6	108	70-134	
trans-1,2-Dichloroethene	ug/m3	43.6	38.9	89	70-134	
Trichloroethene	ug/m3	58.4	61.5	105	70-134	
Vinyl chloride	ug/m3	28	24.1	86	70-132	

SAMPLE DUPLICATE: 4233922

Parameter	Units	10594745010 Result	Dup Result	RPD	Max RPD	Qualifiers
cis-1,2-Dichloroethene	ug/m3	6.8	6.8	1	25	
Tetrachloroethene	ug/m3	342	337	2	25	
trans-1,2-Dichloroethene	ug/m3	<0.25	0.43J		25	
Trichloroethene	ug/m3	16.7	16.2	3	25	
Vinyl chloride	ug/m3	<0.13	<0.13		25	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: PECO-2017-100 GREENTREE SAMPLI
Pace Project No.: 10594745

QC Batch: 796437
QC Batch Method: TO-15
Analysis Method: TO-15
Analysis Description: TO15 MSV AIR Low Level
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10594745015

METHOD BLANK: 4233960 Matrix: Air
Associated Lab Samples: 10594745015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/m3	<0.098	0.40	02/01/22 11:20	
Tetrachloroethene	ug/m3	<0.15	0.34	02/01/22 11:20	
trans-1,2-Dichloroethene	ug/m3	<0.084	0.40	02/01/22 11:20	
Trichloroethene	ug/m3	<0.098	0.27	02/01/22 11:20	
Vinyl chloride	ug/m3	<0.043	0.13	02/01/22 11:20	

LABORATORY CONTROL SAMPLE: 4233961

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/m3	43.4	49.2	113	70-136	
Tetrachloroethene	ug/m3	73.4	79.4	108	70-134	
trans-1,2-Dichloroethene	ug/m3	43.6	39.9	92	70-134	
Trichloroethene	ug/m3	58.4	62.2	106	70-134	
Vinyl chloride	ug/m3	28	25.9	93	70-132	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: PECO-2017-100 GREENTREE SAMPLI
Pace Project No.: 10594745

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: PECO-2017-100 GREENTREE SAMPLI
Pace Project No.: 10594745

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10594745001	**SV-10**	TO-15	796299		
10594745002	**SV-6**	TO-15	796299		
10594745003	**SV-13**	TO-15	796299		
10594745004	**SV-2**	TO-15	796299		
10594745005	**SV-3**	TO-15	796299		
10594745006	**SV-8**	TO-15	796299		
10594745007	**IA-2**	TO-15	796299		
10594745008	**BD-1**	TO-15	796299		
10594745009	**SV-7**	TO-15	796299		
10594745010	**SV-11**	TO-15	796299		
10594745011	**SV-14**	TO-15	796299		
10594745012	**SV-9**	TO-15	796299		
10594745013	**SV-4**	TO-15	796299		
10594745014	**IA-1**	TO-15	796299		
10594745015	**SV-5**	TO-15	796437		

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www.pacelabs.com

AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

55636

Page: 1 of 2

Section A Required Client Information:

Company: APEX COMPANIES, LLC
Address: 205 W RANDOLPH ST STE 740 CHICAGO IL
Email To: STEVE.NEWLIN@apexcos.com
Phone: Fax:
Requested Due Date/TAT: Standard

Section B Required Project Information:

Report To: STEVE NEWLIN
Copy To: AHMED ALI
Purchase Order No.:
Project Name: GREENTREE SAMPLING
Project Number: PECO_2017_100

Section C Invoice Information:

Attention: STEVE NEWLIN
Company Name: APEX COS. LLC
Address: 205 W RANDOLPH ST, STE 740, Chicago
Pace Quote Reference:
Pace Project Manager/Sales Rep.
Pace Profile #: 41608

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

Location of Sampling by State:

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

Report Level: II. III. IV. Other

'Section D Required Client Information

AIR SAMPLE ID
Sample IDs MUST BE UNIQUE

Valid Media Codes

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

Method: PM10 | 3C - Fixed Gas (%) | TO-3 BTEX | TO-3M (Methane) | TO-14 | TO-15 Full List VOCs | TO-15 Short List BTEX | TO-15 Short List Chlorinated | TO-15 Short List (other)

ITEM #	AIR SAMPLE ID	MEDIA CODE	PID Reading (Client only)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE - END/GRAB DATE	COMPOSITE - END/GRAB TIME	Canister Pressure (Initial Field - in Hg)	Canister Pressure (Final Field - in Hg)	Summa Can Number	Flow Control Number	TO-15 Full List VOCs	Pace Lab ID
1	SV-10	6LC		01/13	11:24	1/13	12:00	29	4	4011	28455	X	001
2	SV-6	↓		↓	11:24	↓	12:00	29	5	23455	15622	X	002
3	SV-13				11:24		12:00	29	5	29962	21855	X	003
4	SV-2				12:31		1:12	29	2	21436	16899	X	004
5	SV-3				12:31		1:12	29	2	09361	16778	X	005
6	SV-8				12:31		1:04	30	5	38753	30744	X	006
7	IA-2				12:36		1:13	29	4	02271	21216	X	007
8	BD-1				12:53		2:09	29	2	00331	15151	X	008
9	SV-7				3:06		3:43	29	3	27612	71712	X	009
10	SV-11				3:05		3:42	29	4	05053	16660	X	010
11	SV-14				3:05		3:42	29	4	06791	24010	X	011
12	SV-9	↓		↓	3:07	↓	3:52	30	2	26751	64010	X	012

Comments :

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
AHMED ALI (APEX)	1/14	1:00PM	Matt King/Pace	1-18-22	12:38

SAMPLE CONDITIONS

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: AHMED ALI

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM / DD / YY): 01/14/21

WO# : 10594745

10594745

Air Technical Phone: 612.607.6386

FC046Rev.01, 03Feb2010

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www.pacelabs.com

AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

55637

Section A Required Client Information:

Company: APEX Companies, LLC
Address: 205 W Randolph St
STE 740, Chicago IL 60606
Email To: Steve.newlin@apexcos.com
Phone: Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: STEVE NEWLIN
Copy To: AHMED ALI
ahmed.ali@apexcos.com
Purchase Order No.:
Project Name: GREENTREE SAMPLING
Project Number: PECO-2017-100

Section C Invoice Information:

Attention: STEVE NEWLIN
Company Name: APEX COMPANIES, LLC
Address: 205 W RANDOLPH ST
Pace Quote Reference:
Pace Project Manager/Sales Rep. 41693
Pace Profile #:

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

Location of Sampling by State:

Reporting Units
ug/m³ ___ mg/m³ ___
PPBV ___ PPMV ___
Other ___

Report Level II.___ III.___ IV.___ Other___

'Section D Required Client Information

AIR SAMPLE ID
Sample IDs MUST BE UNIQUE

Valid Media Codes

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

ITEM #	AIR SAMPLE ID	MEDIA CODE	PID Reading (Client only)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	Canister Pressure (Initial Field - in Hg)	Canister Pressure (Final Field - in Hg)	Summa Can Number	Flow Control Number	Method: PM10	3C - Fixed Gas (%)	TO-3 BTEX	TO-3M (Methane)	TO-14	TO-15 Full List VOCs	TO-15 Short List BTEX	TO-15 Short List Chlorinated	TO-15 Short List (other)	Pace Lab ID
1	SV-4	6LC		1/13	3:08	1/13	3:48	30	5	0728	1716							X			013
2	IA-1	↓		↓	3:08	↓	3:43	30	5	2764	3089							X			014
3	SV-5	↓		↓	3:09	↓	3:49	29	4	2302	2833							X			015
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

Comments :

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
AHMED ALI (APEX)	1/14	1:00PM	Matt Fenn/Pace	1-18-22	12:38

SAMPLE CONDITIONS

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: AHMED ALI

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM / DD / YY): 01/14/22

ORIGINAL

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414 Air Technical Phone: 612.607.6386

Pace Analytical®	Document Name: **Sample Condition Upon Receipt (SCUR) - Air**	Document Revised: 13Oct2021 **Page 1 of 1**
	Document No.: **ENV-FRM-MIN4-0113 Rev.01**	Pace Analytical Services - **Minneapolis**

Air Sample Condition Upon Receipt **Client Name:** Apex-IL **Project #:** WO#: 10594745

PM: CT1 Due Date: 01/25/22

CLIENT: Apex CO LLC

Courier: ☒ FedEx ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ SpeeDee ☐ Commercial

Tracking Number: ☒ See Exception

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

Seals Intact? ☐ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Tin Can ☐ Other:

Date & Initials of Person Examining Contents: 1-18-22 MT

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

Gauge #: ☐ 10AIR26 ☐ 10AIR34 ☒ 10AIR35 ☐ 10AIR17 ☐ 10AIR47 ☐ 10AIR48

Canisters					Canisters				
Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure	Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure
SV-10	4011	2845	-3.5	+5	SV-5	2302	2833	-1.5	+5
11-6	2345	1562	-3.5		Unused	81	2913	-29	—
11-13	2985	2986	-2.5						
11-2	2143	1689	-1.5						
11-3	936	1678	-2						
11-8	3875	3074	-5						
IA-2	227	1216	-3.5						
BD-1	33	1151	-3.5						
SV-7	2761	2712	-2.5						
11-11	0505	3166	-2.5						
11-14	679	1240	-2.5						
11-9	2675	1640	0						
11-4	728	1716	-1.5						
IA-1	2764	3089	-4.5						

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

Person Contacted: S. Newlin Date/Time:

Comments/Resolution: analyte list verified TCE, PCE, cis- trans- 1,2 DCE, VC

Project Manager Review: Carolynne Trach **Date:** 1/19/22

Note: *Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e., out of hold, incorrect preservative, out of temp, incorrect containers).*

Pace Analytical®	Document Name: **Sample Condition Upon Receipt (SCUR) Exception Form**	Document Revised: 04Jun2020 **Page 1 of 1**
	Document No.: **ENV-FRM-MIN4-0142 Rev.01**	Pace Analytical Services - **Minneapolis**

SCUR Exceptions:

Workorder #:

Out of Temp Sample IDs	Container Type	# of Containers

PM Notified? ☐Yes ☐No

If yes, indicate who was contacted/date/time.
If no, indicate reason why.

Multiple Cooler Project? ☐Yes ☐No
If you answered yes, fill out information to the left.

No Temp Blank		
Read Temp	Corrected Temp	Average Temp

Tracking Number/Temperature
975384482792
2829
2807
2818

Issue Type: Sample ID	Container Type	# of Containers

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preserv.	pH Upon Receipt	Date Adjusted	Time Adjusted	Amount Added (mL)	Lot # Added	pH After	In Compliance after addition?	Initials
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	

Comments:

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

May 13, 2022

Apex Companies, LLC
1701 East Woodfield Rd, Suite 333
Schaumburg, IL 60173
Telephone: (847) 956-8589
Fax: (847) 956-8619

Analytical Report for STAT Work Order: 22050207 Revision 0

RE: PECO-2017-100, Racine, WI, Greentree Centre

Dear Apex Companies, LLC:

STAT Analysis received 2 samples for the referenced project on 5/6/2022 2:10:00 PM. The analytical results are presented in the following report.

All analyses were performed in accordance with the requirements of 35 IAC Part 186 / NELAP standards. Analyses were performed in accordance with methods as referenced on the analytical report. Those analytical results expressed on a dry weight basis are also noted on the analytical report.

All analyses were performed within established holding time criteria, and all Quality Control criteria met EPA or laboratory specifications except when noted in the Case Narrative or Analytical Report. If required, an estimate of uncertainty for the analyses can be provided. A listing of accredited methods/parameters can also be provided.

Thank you for the opportunity to serve you and I look forward to working with you in the future. If you have any questions regarding the enclosed materials, please contact me at (312) 733-0551.

Sincerely,

Justice Kwateng
Project Manager

STAT Analysis Corporation

Date: May 13, 2022

Client: Apex Companies, LLC
Project: PECO-2017-100, Racine, WI, Greentree Centre
Work Order: 22050207 Revision 0

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
22050207-001A	160454		5/5/2022 4:05:00 PM	5/6/2022
22050207-002A	260297		5/5/2022 4:14:00 PM	5/6/2022

CLIENT: Apex Companies, LLC
Project: PECO-2017-100, Racine, WI, Greentree Centre
Work Order: 22050207 Revision 0

CASE NARRATIVE

TO-15 results that are reported in µg/m³ are calculated based on a temperature of 25°C, atmospheric pressure of 760 mm Hg, and the molecular weight of the analyte.

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Accreditations:IEPA ELAP 100445;ORELAP IL300001;AIHA-LAP, LLC 101160;NVLAP LabCode 101202-0

Date Reported: May 13, 2022
Date Printed: May 13, 2022

ANALYTICAL RESULTS

Client: Apex Companies, LLC
Project: PECO-2017-100, Racine, WI, Greentree Centre **Work Order:** 22050207 Revision 0

Lab ID: 22050207-001 **Collection Date:** 5/5/2022 4:05:00 PM
Client Sample ID 160454 **Matrix:** Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS **TO-15**				Prep Date: **5/9/2022**		Analyst: **MAS**
cis-1,2-Dichloroethene	ND	0.30		ppbv	1	5/9/2022
Tetrachloroethene	3.7	0.30		ppbv	1	5/9/2022
trans-1,2-Dichloroethene	ND	0.30		ppbv	1	5/9/2022
Trichloroethene	ND	0.30		ppbv	1	5/9/2022
Vinyl chloride	ND	0.30		ppbv	1	5/9/2022
Volatile Organic Compounds in Air by GC/MS **TO-15**				Prep Date: **5/9/2022**		Analyst: **MAS**
cis-1,2-Dichloroethene	ND	1.2		µg/m³	1	5/9/2022
Tetrachloroethene	25	2.0		µg/m³	1	5/9/2022
trans-1,2-Dichloroethene	ND	1.2		µg/m³	1	5/9/2022
Trichloroethene	ND	1.6		µg/m³	1	5/9/2022
Vinyl chloride	ND	0.77		µg/m³	1	5/9/2022

Lab ID: 22050207-002 **Collection Date:** 5/5/2022 4:14:00 PM
Client Sample ID 260297 **Matrix:** Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS **TO-15**				Prep Date: **5/9/2022**		Analyst: **MAS**
cis-1,2-Dichloroethene	ND	0.29		ppbv	1	5/9/2022
Tetrachloroethene	4.2	0.29		ppbv	1	5/9/2022
trans-1,2-Dichloroethene	ND	0.29		ppbv	1	5/9/2022
Trichloroethene	ND	0.29		ppbv	1	5/9/2022
Vinyl chloride	ND	0.29		ppbv	1	5/9/2022
Volatile Organic Compounds in Air by GC/MS **TO-15**				Prep Date: **5/9/2022**		Analyst: **MAS**
cis-1,2-Dichloroethene	ND	1.2		µg/m³	1	5/9/2022
Tetrachloroethene	28	2.0		µg/m³	1	5/9/2022
trans-1,2-Dichloroethene	ND	1.2		µg/m³	1	5/9/2022
Trichloroethene	ND	1.6		µg/m³	1	5/9/2022
Vinyl chloride	ND	0.75		µg/m³	1	5/9/2022

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

STAT Analysis Corporation
2242 W. Harrison Suite 200, Chicago, Illinois 60612 Phone: (312) 733-0551 Fax: (312) 733-2386
e-mail address: STATinfo@STATAnalysis.com

CHAIN OF CUSTODY RECORD **Nº:** 934046 **Page :** 1 **of** 1

Company: Apex Companies LLC
Project Number: PECO-2017-100 Client Tracking No.:
Project Name:
Project Location: Racine, WI Greentree Centre
Sampler(s): Tim Stauder
Report To: Tim Stauder & Jane Allan Phone: 630-776-3337
Fax:
QC Level: 1 ___ 2 ___ 3 ___ 4 ___ e-mail: tim.stauder@apexcos.com

Quote No.:
P.O. No.:
Turn Around Time (Days): Standard
1 2 3 4 5-7 10
Results Needed:
/ / am/pm

Client Sample Number/Description:	Date Taken	Time Taken	Matrix	Comp.	Grab	Preserv.	No. of Containers	TO-15 Chlorinated Short List		Additional Information:	Lab No.:
160454	5/5/22	0810-1605	Air	X			1	X	X		001
		475	min								~~00~~ AM 5/6
260297	5/5/22	0826-1614	Air	X			1	X	X		002
		468	min								

Relinquished by: (Signature) Tim Stauder 5/5/22 Date/Time: 17:30
Received by: (Signature) 272824885597 Date/Time:
Relinquished by: (Signature) Fed Ex Date/Time:
Received by: (Signature) Date/Time: 5/6/22 1410
Relinquished by: (Signature) Date/Time:
Received by: (Signature) Date/Time:

Comments: Standard turn around, send rpt to jane.allan@apexcos.com too

Laboratory Work Order No.: 2205020 7

Received on Ice: Yes ☐ No ☑

Temperature: Ambient °C

Preservation Code: A = None B = HNO_3 C = NaOH
D = H_2SO_4 E = HCl F = 5035/EnCore G = Other

STAT Analysis Corporation

Sample Receipt Checklist

Client Name APEX | Date and Time Received: 5/6/2022 2:10:00 PM

Work Order Number 22050207 | Received by: MM

Checklist completed by: 05/06/2022 (Signature / Date) | Reviewed by: JK (Initials) 5/9/22 (Date)

Matrix: | Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels/containers?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container or Temp Blank temperature in compliance?	Yes ☑	No ☐	Temperature Ambient °C
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☐	No ☐
Water - Samples pH checked?	Yes ☐	No ☐	Checked by:
Water - Samples properly preserved?	Yes ☐	No ☐	pH Adjusted?

Any No response must be detailed in the comments section below.

Comments:

Client / Person contacted: | Date contacted: | Contacted by:

Response:

Craig Chawla

From: Jane Allan <Jane.Allan@ApexCos.com>
Sent: Monday, May 09, 2022 2:19 PM
To: Craig Chawla
Cc: Tim Stauder
Subject: RE: [EXT] PECO-2017-100, Racine, WI, Greentree Centre 22050207

Hi Craig
This is the shortlist:

cis-1,2-Dichloroethene
trans-1,2-Dichloroethene
Tetrachloroethene
Trichloroethene
Vinyl chloride

Please provide results in µg/m³
Thanks!

Jane Allan, PhD
Sr Project Manager
Apex Companies, LLC
4701 Creek Rd, Ste 100
Blue Ash, OH 45242
O) 513-771-3617 x3801 M) 513-477-4602
Add me to your contact list!

***ENR* Top 30 All-Environmental Firm**

We've moved! Our new address is 4701 Creek Road, Suite 100, Cincinnati, OH 45242. Please update your contact list. Thanks.

From: Craig Chawla <cchawla@statanalysis.com>
Sent: Monday, May 9, 2022 2:59 PM
To: Jane Allan <Jane.Allan@ApexCos.com>
Cc: Tim Stauder <Tim.Stauder@apexcos.com>
Subject: [EXT] PECO-2017-100, Racine, WI, Greentree Centre 22050207

Hi Jane and Tim,

The chain of custody for project PECO-2017-100, Racine, WI, Greentree Centre references a ‘short list’. Can you provide the list of compounds that you would like reported when you have a chance?