KSingh | Engineers Scientists Consultants

January 26, 2023

Ms. Jennifer Dorman **Project # 40441**
Remediation and Redevelopment Program
Wisconsin Department of Natural Resources
1027 West St. Paul Avenue
Milwaukee, WI 53233

Subject: **Vapor Mitigation System Pilot Testing for Buildings 1BW, 1BSW, 1C, 1B-S, 1BSE, and 1D**
Community Within the Corridor Limited Partnership – East Block
2748 N. 32nd Street, Milwaukee, WI 53210
BRRTS #: 02-41-263675, FID #: 241025400

Dear Ms. Dorman:

On behalf of the Community Within the Corridor Limited Partnership, K. Singh & Associates, Inc. (KSingh) is pleased to submit the results of the Pilot Testing of the Vapor Mitigation System for buildings 1BW, 1BSW, 1C, 1B-S, 1BSE, and 1D for East Block of the Community Within the Corridor project.

Project Background
The Community Within the Corridor Limited Partnership is proposing to redevelop the property into a mix of affordable housing, commercial spaces, and other amenities. The property has been rezoned to Industrial Mix to facilitate development of the project. No demolition of the buildings is planned. The building interiors will be renovated and reconfigured. A ramp will be constructed to utilize the basement as a parking garage. Paved areas will be milled and paved or have pavement removed, regraded, and then restored with asphalt.

As part of the installation process for the sub-slab vapor mitigation system, pilot testing was performed from 12/29/2022 through 01/03/2023 in Buildings 1BW, 1BSW, 1C, 1B-S, 1BSE, and 1D as shown on Figure 1. The buildings make up the southern half of the East Block of the Community Within the Corridor project. All buildings are connected, with one vapor mitigation system designed to create vacuum in the sub-slab environment in order to mitigate the potential for vapor intrusion to the buildings and reduce the volume of contamination.

The pilot testing program was designed to determine whether the system was able to provide vacuum through the entire relevant building footprint, as well as whether mass reduction is taking place in the sub-slab environment. The program consisted of sub-slab vacuum measurements, as well as exhaust sampling and measurements.

Sub-slab Depressurization System Vacuum Measurements
Twenty locations were chosen to take measurements to get an accurate model of sub-slab depressurization from each suction point. A handheld hammer drill was used to install vapor pins beneath the slab of the structure. A digital manometer was utilized to take measurements of vacuum below the slab after the vapor points passed a water dam test.

A vacuum reading of 0.004 inches of water was utilized to determine whether the system was adequately operating. Recorded vacuum measurements ranged from 0.004 to 0.663 inches of water, all of which are greater than the minimum required vacuum measurement. However, two vacuum measurements including VP-37 (12/28/2022) and VP-26 (1/2/2023) measured 0.001 and 0.003 inches of water respectively, were below the minimum requirement. The final readings for VP-37 and VP-26 were 0.011 and 0.004, respectively and met the minimum required vacuum measurement. Locations furthest from the blower appeared to have the lowest recorded vacuum measurements, indicating that steps to increase flow at the extremities of the system may need to be taken.

The locations and results of June 2022 sub-slab depressurization measurements are depicted on Figure 1 and summarized in Table 1.

Exhaust Sampling

Sampling of the exhaust point was performed four times during the pilot testing program in order to determine whether mass reduction is taking place in the sub-slab. Vapor extraction utilities within buildings 1BW, 1BSW, 1C, 1B-S, 1BSE, and 1D were connected to a 10-horsepower FPZ K09-MS Regenerative Blower located on the north side of building 1BSE. The vacuum blower was connected to the exhaust point in building 1BSE, as shown in Figure 1. As part of pilot testing, 1.4L Summa canisters provided by Synergy Environmental Lab, Inc. (Synergy) were utilized to gather air quality data from the exhaust point. Four samples were collected between 01/28/2022 and 01/03/2023. Samples were gathered for fifteen minutes via vapor lines connected to a port on the vacuum blower while it was operational. System tightness was confirmed with shut in testing, and sample lines were purged between each sample. Upon completion of sampling, cannisters were submitted to Synergy for analysis of TO-15 parameters.

Test results are summarized on Table 2 and included in Attachment A. Results from Synergy document concentrations of 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Benzene, Ethylbenzene, m&p-Xylene, Methyl tert-butyl ether (MTBE), Toluene cis-1,2-Dichloroethene (cis-DCE), trans-1,2-Dichloroethene (trans-DCE), Tetrachloroethene (PCE), and Trichloroethene (TCE) in exhaust samples. No results were discovered in exhaust samples at concentrations greater than the Residential Indoor Air VAL. The mass reduction rate for total VOCs, TCE, PCE, and PVOCs has been calculated and is shown below in Table A.

Table A – Mass Reduction Rate

Parameter	Mass Reduction Rate (lbs/day)	Mass Reduction Rate (lbs/month)
Total VOCs	0.010276526	0.312577681
Total TCE	0.000067152	0.002042551
Total PCE	0.000069580	0.002116390
Total PVOCs	0.000716422	0.021791154

Based on the concentrations of Benzene, cis-DCE, trans-DCE, PCE, and TCE in the exhaust, some mass reduction is taking place in the sub-slab.

In addition, vacuum, Photoionization Detector (PID), and temperature readings were taken several times each day during pilot testing. Vacuum (inch H2O) and temperature (Fahrenheit) were observed by gauges on the vacuum pump at steady readings of approximately 18 inches of H2O and 55-75˚ Fahrenheit, respectively, during pilot testing. PID readings were taken from a port in the vacuum blower and observed between 3.2 and 6.1 ppm. Technical documents for FPZ MS Series Regenerative Blowers indicate that based on the model number and vacuum produced, a flow rate of approximately 450 CFM is estimated.

The results of the December 2022/January 2023 pilot test sampling are summarized on Table 2 and readings taken from the vacuum blower during pilot testing are summarized on Table 3.

Conclusions and Recommendations
The following conclusions were reached based on the sampling:

- Based on the results of sub-slab vacuum measurements, the vapor mitigation system installed on the subject site creates more than the minimum required vacuum of 0.004 inches of water beneath the building slab for buildings 1BW, 1BSW, 1C, 1B-S, 1BSE, and 1D.
- Exhaust point emissions sampling indicates that 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Benzene, Ethylbenzene, m&p-Xylene, MTBE, cis-DCE, trans-DCE, PCE, and TCE are still present in the sub-slab and that mass reduction is taking place.
- Based on the vacuum blower utilized for pilot testing, 10-horsepower blowers are recommended in order to create sufficient sub-slab vacuum. Technical documents for FPZ Regenerative Blowers indicate that the 10-horsepower K-09 series blower has a power requirement of 208-230 volts and 24.3-22.4 amps.
- As part of final system installation, valves are recommended to be installed in order to control vacuum to various zones of the system for buildings 1B-NW, 1B-NE, 2A, 2B, 2C, and 3A.
- A commissioning plan will be submitted for the project which will include passive air sampling and regular measurements of vacuum beneath the slab.
- If inadequate vacuum is demonstrated during commissioning options for correcting the performance will include a) adjusting the valves to pull less air from areas with adequate vacuum, b) installing a larger blower, or c) both installing a larger blower and adjusting the valves to improve performance.

Please contact us if you have any questions or seek clarification regarding this information.

Sincerely,
K. SINGH & ASSOCIATES, INC.

Justin P. Bush
Staff Geologist

Robert T. Reineke, P.E.
Project Manager

Pratap N. Singh, Ph.D., P.E.
Principal Engineer

cc: Shane LaFave / Roers Companies
Que El-Amin / Scott Crawford, Inc.

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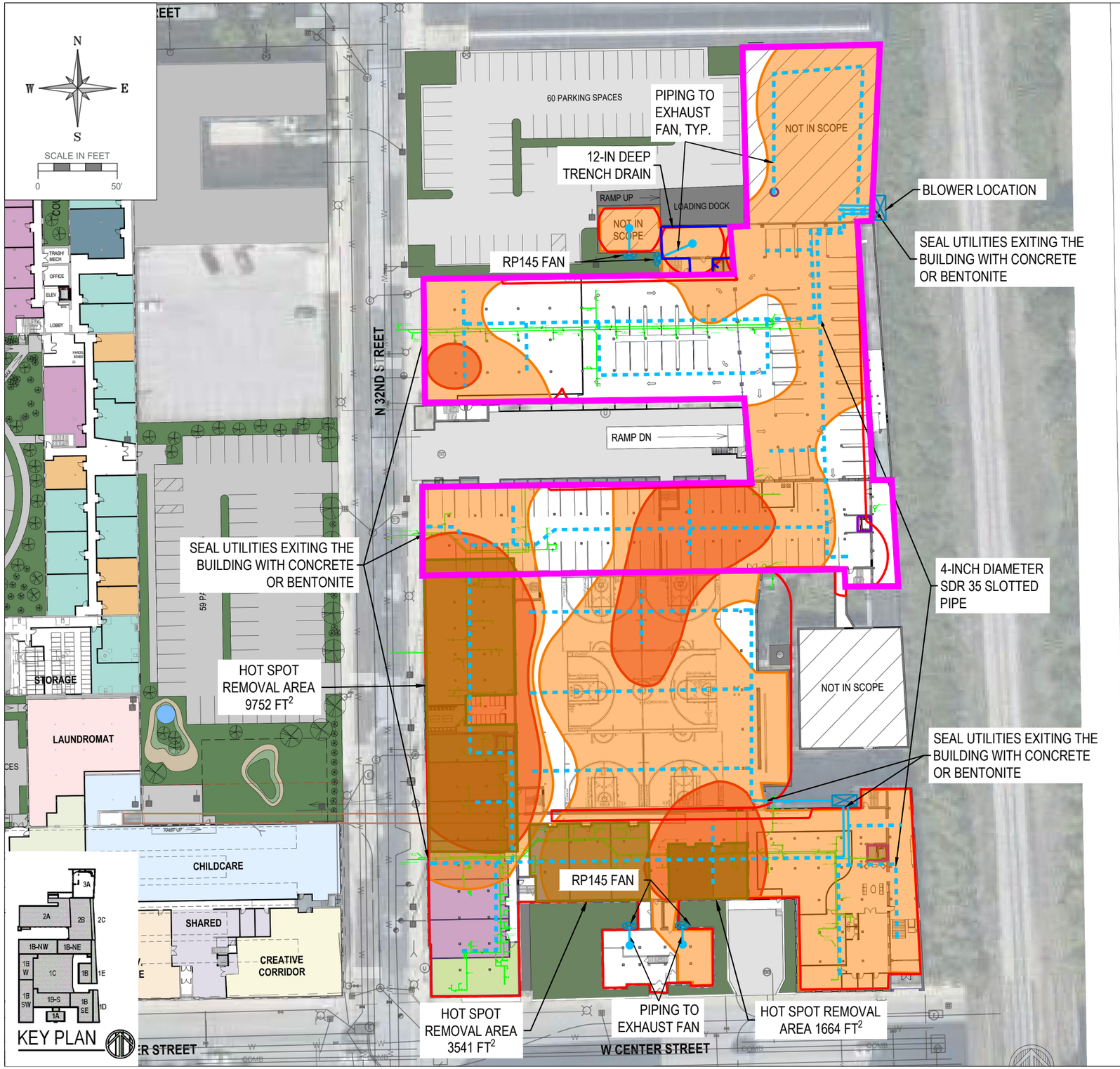
Attachments:

Figure 1	Sub-slab Depressurization System and VSRL Exceedances
Figure 2	Sub-slab Depressurization System and Vacuum Measurement Results
Table 1	Sub-slab Depressurization Results
Table 2	Exhaust Fan Sampling Results
Table 3	Pilot Test Outlet Measurements
Attachment A	Vapor Sampling Report

FIGURE



LEGEND

- Sub-Slab Sampling Locations (51)
- Previous Boring and Temporary Well Locations
- Known Elevator Shaft
- 1 - Bedroom Apartment
- 2 - Bedroom Apartment
- 3 - Bedroom Apartment
- 4 - Bedroom Apartment
- Studio Apartment
- WI Residential VRSL Exceedance Extents
- WI Large Commercial / Industrial VRSL Exceedance Extents
- Hot Spot Removal Area
- Slotted Horizontal Extraction Piping
- Solid Horizontal Extraction Piping
- Extraction Points
- Extraction Point Zone of Influence
- Potential Blower Locations
- Vapor Mitigation Fan
- Zone of Influence
- 12-Inch Trench Drain
- Underground Plumbing
- Trench System Extents
- ISO-PRESSURE LINE (0.004 inches vacuum)

NOTES:
1. SAMPLING LOCATIONS AND VAPOR EXTRACTION POINTS ARE APPROXIMATE

KSingh Engineers Scientists Consultants
3636 North 124th Street
Wauwatosa, WI 53222
262-821-1171

CONSULTANT

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CONSULTANT

PROJECT TITLE: COMMUNITY WITHIN THE CORRIDOR
2748 N 32ND STREET
MILWAUKEE, WI 53210
PROJECT NUMBER: 40441

CLIENT: COMMUNITY WITHIN THE CORRIDOR LIMITED PARTNERSHIP

REVISIONS	DATE	DESCRIPTION

DRAWN BY JDS	DATE 11/23/2022
CHECKED BY RR	DATE 11/23/2022

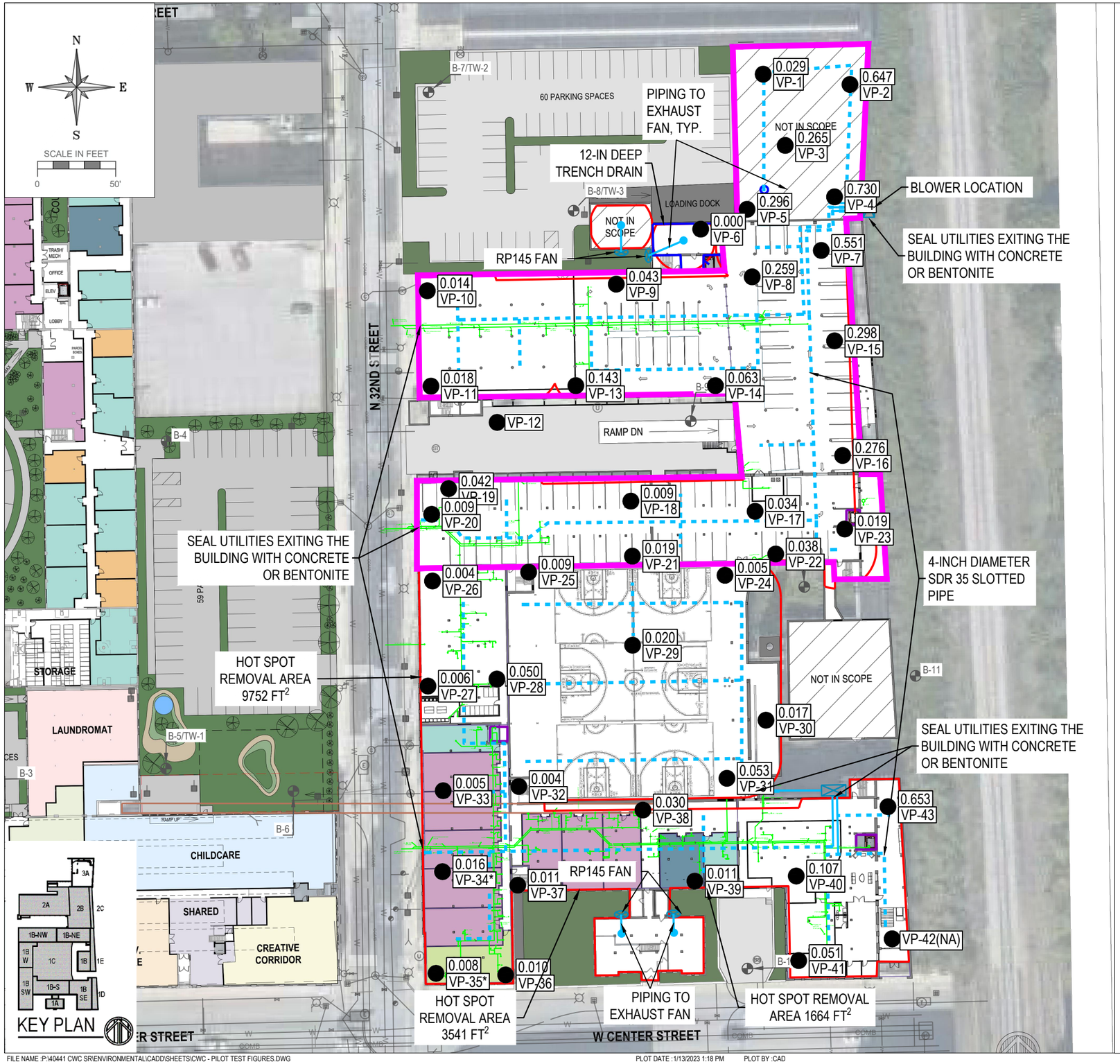
SHEET TITLE

VAPOR MITIGATION DESIGN LAYOUT AND HOTSPOT AREAS

FIGURE 1

SHEET 1 of SHEET 2

FILE NAME :P:\40441 CWC SR\ENVIRONMENTAL\CADD\SHEETS\CWC - PILOT TEST FIGURES.DWG
PLOT DATE :11/23/2022 5:10 PM PLOT BY :JOSH SCHULTZE



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- Extraction Point Zone of Influence
- Potential Blower Locations
- Vapor Mitigation Fan
- Zone of Influence
- 12-Inch Trench Drain
- Underground Plumbing Trench System Extents
- ISO-PRESSURE LINE
- # IN H2O VP-#

NOTES:
1. SAMPLING LOCATIONS AND VAPOR EXTRACTION POINTS ARE APPROXIMATE
2. VP-42 WAS NOT ACCESSIBLE
3. * = READINGS WERE FROM 12/28 to 1/02

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REVISIONS	DATE	DESCRIPTION

DRAWN BY JDS	DATE 01/13/2023
CHECKED BY RR	DATE 01/13/2023

SHEET TITLE

VACUUM MEASUREMENT PLAN FOR EAST BLOCK BUILDINGS

FIGURE 2

SHEET 1 of SHEET 2

TABLE

TABLE 1 - SUB-SLAB DEPRESSURIZATION RESULTS
COMMUNITY WITHIN THE CORRIDOR - EAST BLOCK
2748 N. 32nd STREET, MILWAUKEE, WI
PROJECT NUMBER: 40441

Date	12/28/2022	12/29/2022	1/2/2023	1/2/2023	1/3/2023
Sample Location	Reading (inches H20)				
VP-24	0.032	0.009	0.006	0.005	0.005
VP-25	0.004	0.007	0.009	0.008	0.009
VP-26	NA	0.004	0.021	0.003	0.004
VP-27	0.008	0.006	0.008	0.011	0.006
VP-28	0.009	0.014	0.018	0.004	0.050
VP-29	0.011	0.018	0.010	0.015	0.020
VP-30	0.016	0.016	0.018	0.017	0.017
VP-31	0.042	0.042	0.045	0.046	0.053
VP-32	0.081	0.029	0.012	0.009	0.004
VP-33	0.013	0.011	0.008	0.004	0.005
VP-34	0.019	0.020	0.016	NA	NA
VP-35	NA	0.008	NA	NA	NA
VP-36	NA	0.010	NA	NA	NA
VP-37	0.001	0.086	0.007	0.005	0.011
VP-38	0.015	0.018	0.008	0.006	0.030
VP-39	0.014	0.019	0.004	0.007	0.011
VP-40	0.111	0.024	0.108	0.098	0.107
VP-41	0.037	0.122	0.026	0.031	0.051
VP-42	NA	NA	NA	NA	NA
VP-43	0.659	0.638	0.663	0.651	0.653

NA - No access.

TABLE 2 - EXHAUST POINT SAMPLING RESULTS
COMMUNITY WITHIN THE CORRIDOR - EAST BLOCK
MILWAUKEE, WI
PROJECT NUMBER: 40441

CHEMICAL (ug/m^3)	SUB-SLAB VAPOR VRSL			EP-1	EP-2	EP-3	EP-4
	AF = 0.03	AF=0.03	AF = 0.01	PILOT TEST	PILOT TEST	PILOT TEST	PILOT TEST
	RESIDENTIAL	SMALL COMMERCIAL	LARGE COMMERCIAL / INDUSTRIAL	12/28/2022	12/29/2022	1/2/2023	1/3/2023
				ug/m^3	ug/m^3	ug/m^3	ug/m^3
1,1,1-Trichloroethane	170,000	730,000	2,200,000	1.63	1.47	< 0.498	0.87 J
1,1,2,2-Tetrachloroethane	1.6	7	21	< 0.325	< 0.325	< 0.65	< 0.65
1,1,2-Trichloroethane	0.7	2.9	8.8	< 0.258	< 0.258	< 0.516	< 0.516
1,1-Dichloroethane	600	2,600	7,700	0.48 J	0.28 J	< 0.374	< 0.374
1,1-Dichloroethene	7,000	29,000	88,000	< 0.21	< 0.21	< 0.46	< 0.46
1,2,4-Trichlorobenzene	700	2933	8,800	< 0.657	< 0.657	< 1.314	< 1.314
1,2,4-Trimethylbenzene	2,100	8,700	26,000	2.7	3.9	1.96	2.35
1,2-Dichlorobenzene	700	2933	8,800	< 0.235	< 0.235	< 0.47	< 0.47
1,2-Dichloroethane	36	160	470	< 0.24	< 0.24	< 0.374	< 0.374
1,2-Dichloropropane	14	60	180	< 0.28	< 0.28	< 0.56	< 0.56
1,2-Dichlorotetrafluoroethane	---	---	---	< 0.446	< 0.446	< 0.892	< 0.892
1,3,5-Trimethylbenzene	2,100	8,700	26,000	0.88	1.32	0.69 J	0.78 J
1,3-Butadiene	---	---	---	< 0.143	< 0.143	< 0.286	< 0.286
1,3-Dichlorobenzene	---	---	---	< 0.302	< 0.302	< 0.604	< 0.604
1,4-Dichlorobenzene	8	37	110	< 0.302	< 0.302	< 0.604	< 0.604
1,4-Dioxane	18	83.3	250	< 0.157	< 0.157	< 0.314	< 0.314
2-Hexanone	---	---	---	1.31	< 3.4	1.34 J	1.06 J
4-Ethyltoluene	---	---	---	0.54 J	0.74	< 0.428	< 0.428
Acetone	106,667	466,667	1,400,000	93	140	33	36
Benzene	120	530	1,600	0.96	1.18	1.79	1.4
Benzyl Chloride	1.9	8	25	< 0.209	< 0.209	< 0.418	< 0.418
Bromodichloromethane	2.53	11	33	< 0.374	< 0.374	< 0.748	< 0.748
Bromoform	86.6	367	1,100	< 0.414	< 0.414	< 0.828	< 0.828
Bromomethane	17.3	73	220	< 0.2	< 0.2	< 0.4	< 0.4
Carbon Disulfide	2,433	10,333	31,000	9.8	11	16.5	17.3
Carbon Tetrachloride	156	667	2,000	0.82 J	0.88 J	< 0.614	< 0.614
Chlorobenzene	173	733	2,200	< 0.251	< 0.251	< 0.504	< 0.504
Chloroethane	33,333	146,667	440,000	< 0.159	< 0.159	< 0.318	< 0.318
Chloroform	3,100	13,000	39,000	0.63 J	0.44 J	< 0.6	< 0.6
Chloromethane	3,100	13,000	39,000	1.32 J	1.28 J	< 1.662	< 1.662
cis-1,2-Dichloroethene	---	---	---	0.63	0.44 J	< 0.197	< 0.394
cis-1,3-Dichloropropene	---	---	---	< 0.234	< 0.234	< 0.468	< 0.468
Cyclohexane	3,333	14,667	44,000	1.45	1.58	3.4 J	1.72 J
Dibromochloromethane	---	---	---	< 0.376	< 0.376	< 0.752	< 0.752
Dichlorodifluoromethane	3,300	14,667	44,000	3.02	2.92	2.87	2.77
EDB (1,2-Dibromoethane)	0.157	0.67	2	< 0.342	< 0.342	< 0.684	< 0.684
Ethanol	---	---	---	28.4	54	2.37	< 0.304
Ethyl Acetate	---	---	---	1.76	3.13	< 0.352	< 0.352
Ethylbenzene	370	1,600	4,900	2.38	2.73	1.39	1.47
Heptane	---	---	---	4.7	4.5	8.6	4.8
Hexachlorobutadiene	4.3	19	56	< 0.489	< 0.489	< 0.978	< 0.978
Hexane	1,400	6,000	18,000	5.5	3.9	10.3	4.9
Isopropyl Alcohol	---	---	---	5.1	12.3	1.47	< 0.219
m&p-Xylene	3,300	15,000	44,000	10.9	14	5.8	6.5
Methyl ethyl ketone (MEK)	17,333	73,333	220,000	29.4	47	6	4.4
Methyl isobutyl ketone (MIBK)	10,333	43,333	130,000	< 0.168	2.46	< 0.336	< 0.336
Methyl Methacrylate	---	---	---	< 0.217	< 0.217	< 0.434	< 0.434
Methyl tert-butyl ether (MTBE)	3,700	16,000	47,000	< 0.16	< 0.16	< 0.32	< 0.32
Methylene chloride	21,000	87,000	260,000	18.7	< 15	< 30	< 30
Naphthalene	28	6,000	360	< 0.675	< 0.675	< 1.35	< 1.35
o-Xylene	3,300	15,000	44,000	4.8	7.3	2.86	3.3
Propene	---	---	---	< 0.079	< 0.079	21.6	12
Styrene	3,333	14,667	44,000	5.7	8.1	2.89	3.4
Tetrachloroethene (PCE)	1,400	6,000	18,000	2.1	1.43	1.63 J	< 0.556 J
Tetrahydrofuran	7,000	29,333	88,000	4.3	7	< 0.262	< 0.262
Toluene	170,000	730,000	2,200,000	7.6	6.4	6	4.7
trans-1,2-Dichloroethene	---	---	---	1.23	1.39	< 0.394	< 0.468
trans-1,3-Dichloropropene	---	---	---	< 0.198	< 0.198	< 0.396	< 0.396
Trichloroethene (TCE)	70	290	880	0.86	2.14	1.71	1.93
Trichlorofluoromethane	---	---	---	1.46	1.63	1.91 J	2.02 J
Trichlorotrifluoroethane	---	---	---	0.54 J	0.61 J	< 0.804	< 0.804
Vinyl acetate	700	2933	8,800	< 0.203	< 0.203	< 0.406	< 0.406
Vinyl Chloride	57	930	2,800	< 0.148	< 0.148	< 0.296	< 0.296

Comments

All results in micrograms per cubic meter (ug/m^3)

"J" Flag = Analyte detected between Limit of Detection and Limit of Quantitation

"10" Code = Linear Range of Calibration Curve Exceeded

VRSL = Vapor Risk Screening Levels

Indicates detection is above Residential VRSLs

Indicates detection is above Small Commercial VRSLs

Indicates detection is above Large Commercial / Industrial VRSLs

Table 3 - Pilot Test Outlet Measurements
CWC East Block
2748 N. 32nd Street, Milwaukee, WI 53210
Project Number: 40441

		Vacuum	Flow	PID	Temperature
Day	Time	(inch H2O)	(cfm)	(ppm)	(Fahrenheit)
12/28/2022	3:00	18	450	3.2	55
12/29/2022	11:30	18	450	4.5	55
1/2/2023	12:00	18	450	6.1	55
1/3/2023	10:00	18	450	6.0	75

ATTACHMENTS

ATTACHMENT A

Vapor Sampling Test Results

Synergy Environmental Lab, INC.

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

ROBERT REINEKE
K SINGH & ASSOCIATES
3636 N. 124TH STREET
MILWAUKEE, WI 53222

Report Date *11-Jan-23*

Project Name CWC PILOT TEST/CWC EAST BLOCK **Invoice #** E41867
Project # 40441

Lab Code 5041867A
Sample ID EP-1
Sample Matrix Air
Sample Date 12/28/2022

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
Air Samples										
Acetone	93	ug/m3	0.299	0.95	1	TO-15		1/4/2023	CJR	1
Benzene	0.96	ug/m3	0.136	0.433	1	TO-15		1/4/2023	CJR	1
Benzyl Chloride	< 0.209	ug/m3	0.209	0.665	1	TO-15		1/4/2023	CJR	1
Bromodichloromethane	< 0.374	ug/m3	0.374	1.19	1	TO-15		1/4/2023	CJR	1
Bromoform	< 0.414	ug/m3	0.414	1.32	1	TO-15		1/4/2023	CJR	1
Bromomethane	< 0.2	ug/m3	0.2	0.637	1	TO-15		1/4/2023	CJR	1
1,3-Butadiene	< 0.143	ug/m3	0.143	0.454	1	TO-15		1/4/2023	CJR	1
Carbon Disulfide	9.8	ug/m3	0.138	0.44	1	TO-15		1/4/2023	CJR	1
Carbon Tetrachloride	0.82 "J"	ug/m3	0.307	0.978	1	TO-15		1/4/2023	CJR	1
Chlorobenzene	< 0.251	ug/m3	0.251	0.798	1	TO-15		1/4/2023	CJR	1
Chloroethane	< 0.159	ug/m3	0.159	0.507	1	TO-15		1/4/2023	CJR	1
Chloroform	0.63 "J"	ug/m3	0.3	0.953	1	TO-15		1/4/2023	CJR	1
Chloromethane	1.32 "J"	ug/m3	0.831	2.64	1	TO-15		1/4/2023	CJR	1
Cyclohexane	1.45	ug/m3	0.212	0.674	1	TO-15		1/4/2023	CJR	1
Dibromochloromethane	< 0.376	ug/m3	0.376	1.2	1	TO-15		1/4/2023	CJR	1
1,4-Dichlorobenzene	< 0.302	ug/m3	0.302	0.96	1	TO-15		1/4/2023	CJR	1
1,3-Dichlorobenzene	< 0.302	ug/m3	0.302	0.96	1	TO-15		1/4/2023	CJR	1
1,2-Dichlorobenzene	< 0.235	ug/m3	0.235	0.749	1	TO-15		1/4/2023	CJR	1
Dichlorodifluoromethane	3.02	ug/m3	0.263	0.836	1	TO-15		1/4/2023	CJR	1
1,2-Dichloroethane	< 0.24	ug/m3	0.24	0.763	1	TO-15		1/4/2023	CJR	1
1,1-Dichloroethane	0.48 "J"	ug/m3	0.187	0.596	1	TO-15		1/4/2023	CJR	1
1,1-Dichloroethene	< 0.21	ug/m3	0.21	0.668	1	TO-15		1/4/2023	CJR	1
cis-1,2-Dichloroethene	0.63	ug/m3	0.197	0.626	1	TO-15		1/4/2023	CJR	1
trans-1,2-Dichloroethene	1.23	ug/m3	0.231	0.734	1	TO-15		1/4/2023	CJR	1
1,2-Dichloropropane	< 0.28	ug/m3	0.28	0.89	1	TO-15		1/4/2023	CJR	1
trans-1,3-Dichloropropene	< 0.198	ug/m3	0.198	0.63	1	TO-15		1/4/2023	CJR	1
cis-1,3-Dichloropropene	< 0.234	ug/m3	0.234	0.745	1	TO-15		1/4/2023	CJR	1
1,2-Dichlorotetrafluoroethane	< 0.446	ug/m3	0.446	1.42	1	TO-15		1/4/2023	CJR	1
1,4-Dioxane	< 0.157	ug/m3	0.157	0.5	1	TO-15		1/4/2023	CJR	1

Project Name CWC PILOT TEST/CWC EAST BLOCK **Invoice #** E41867
Project # 40441

Lab Code 5041867A
Sample ID EP-1
Sample Matrix Air
Sample Date 12/28/2022

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
EDB (1,2-Dibromoethane)	< 0.342	ug/m3	0.342	1.09	1	TO-15		1/4/2023	CJR	1
Ethanol	28.4	ug/m3	0.152	0.482	1	TO-15		1/4/2023	CJR	1
Ethyl Acetate	1.76	ug/m3	0.176	0.559	1	TO-15		1/4/2023	CJR	1
Ethylbenzene	2.38	ug/m3	0.203	0.645	1	TO-15		1/4/2023	CJR	1
4-Ethyltoluene	0.54 "J"	ug/m3	0.214	0.681	1	TO-15		1/4/2023	CJR	1
Heptane	4.7	ug/m3	0.265	0.845	1	TO-15		1/4/2023	CJR	1
Hexachlorobutadiene	< 0.489	ug/m3	0.489	1.56	1	TO-15		1/4/2023	CJR	1
Hexane	5.5	ug/m3	0.235	0.748	1	TO-15		1/4/2023	CJR	1
2-Hexanone	1.31	ug/m3	0.222	0.707	1	TO-15		1/4/2023	CJR	1
Isopropyl Alcohol	5.1	ug/m3	0.109	0.347	1	TO-15		1/4/2023	CJR	1
Methyl ethyl ketone (MEK)	29.4	ug/m3	0.178	0.567	1	TO-15		1/4/2023	CJR	1
Methyl isobutyl ketone (MIBK)	< 0.168	ug/m3	0.168	0.536	1	TO-15		1/4/2023	CJR	1
Methyl Methacrylate	< 0.217	ug/m3	0.217	0.69	1	TO-15		1/4/2023	CJR	1
Methylene chloride	18.7	ug/m3	0.159	0.506	1	TO-15		1/4/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.16	ug/m3	0.16	0.509	1	TO-15		1/4/2023	CJR	1
Naphthalene	< 0.675	ug/m3	0.675	2.15	1	TO-15		1/4/2023	CJR	1
Propene	< 0.079	ug/m3	0.079	0.251	1	TO-15		1/4/2023	CJR	1
Styrene	5.7	ug/m3	0.181	0.577	1	TO-15		1/4/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.325	ug/m3	0.325	1.03	1	TO-15		1/4/2023	CJR	1
Tetrachloroethene	2.1	ug/m3	0.278	0.884	1	TO-15		1/4/2023	CJR	1
Tetrahydrofuran	4.3	ug/m3	0.131	0.417	1	TO-15		1/4/2023	CJR	1
Toluene	7.6	ug/m3	0.184	0.585	1	TO-15		1/4/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.657	ug/m3	0.657	2.09	1	TO-15		1/4/2023	CJR	1
1,1,1-Trichloroethane	1.63	ug/m3	0.249	0.793	1	TO-15		1/4/2023	CJR	1
1,1,2-Trichloroethane	< 0.258	ug/m3	0.258	0.822	1	TO-15		1/4/2023	CJR	1
Trichloroethene (TCE)	0.86	ug/m3	0.237	0.754	1	TO-15		1/4/2023	CJR	1
Trichlorofluoromethane	1.46	ug/m3	0.337	1.07	1	TO-15		1/4/2023	CJR	1
Trichlorotrifluoroethane	0.54 "J"	ug/m3	0.402	1.28	1	TO-15		1/4/2023	CJR	1
1,2,4-Trimethylbenzene	2.7	ug/m3	0.283	0.899	1	TO-15		1/4/2023	CJR	1
1,3,5-Trimethylbenzene	0.88	ug/m3	0.232	0.739	1	TO-15		1/4/2023	CJR	1
Vinyl acetate	< 0.203	ug/m3	0.203	0.645	1	TO-15		1/4/2023	CJR	1
Vinyl Chloride	< 0.148	ug/m3	0.148	0.472	1	TO-15		1/4/2023	CJR	1
m&p-Xylene	10.9	ug/m3	0.377	1.2	1	TO-15		1/4/2023	CJR	1
o-Xylene	4.8	ug/m3	0.218	0.695	1	TO-15		1/4/2023	CJR	1

Project Name CWC PILOT TEST/CWC EAST BLOCK **Invoice #** E41867
Project # 40441

Lab Code 5041867B
Sample ID EP-2
Sample Matrix Air
Sample Date 12/28/2022

Organic

Air Samples

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Acetone	140	ug/m3	0.299	0.95	1	TO-15		1/4/2023	CJR	10
Benzene	1.18	ug/m3	0.136	0.433	1	TO-15		1/4/2023	CJR	1
Benzyl Chloride	< 0.209	ug/m3	0.209	0.665	1	TO-15		1/4/2023	CJR	1
Bromodichloromethane	< 0.374	ug/m3	0.374	1.19	1	TO-15		1/4/2023	CJR	1
Bromoform	< 0.414	ug/m3	0.414	1.32	1	TO-15		1/4/2023	CJR	1
Bromomethane	< 0.2	ug/m3	0.2	0.637	1	TO-15		1/4/2023	CJR	1
1,3-Butadiene	< 0.143	ug/m3	0.143	0.454	1	TO-15		1/4/2023	CJR	1
Carbon Disulfide	11	ug/m3	0.138	0.44	1	TO-15		1/4/2023	CJR	1
Carbon Tetrachloride	0.88 "J"	ug/m3	0.307	0.978	1	TO-15		1/4/2023	CJR	1
Chlorobenzene	< 0.251	ug/m3	0.251	0.798	1	TO-15		1/4/2023	CJR	1
Chloroethane	< 0.159	ug/m3	0.159	0.507	1	TO-15		1/4/2023	CJR	1
Chloroform	0.44 "J"	ug/m3	0.3	0.953	1	TO-15		1/4/2023	CJR	1
Chloromethane	1.28 "J"	ug/m3	0.831	2.64	1	TO-15		1/4/2023	CJR	1
Cyclohexane	1.58	ug/m3	0.212	0.674	1	TO-15		1/4/2023	CJR	1
Dibromochloromethane	< 0.376	ug/m3	0.376	1.2	1	TO-15		1/4/2023	CJR	1
1,4-Dichlorobenzene	< 0.302	ug/m3	0.302	0.96	1	TO-15		1/4/2023	CJR	1
1,3-Dichlorobenzene	< 0.302	ug/m3	0.302	0.96	1	TO-15		1/4/2023	CJR	1
1,2-Dichlorobenzene	< 0.235	ug/m3	0.235	0.749	1	TO-15		1/4/2023	CJR	1
Dichlorodifluoromethane	2.92	ug/m3	0.263	0.836	1	TO-15		1/4/2023	CJR	1
1,2-Dichloroethane	< 0.24	ug/m3	0.24	0.763	1	TO-15		1/4/2023	CJR	1
1,1-Dichloroethane	0.28 "J"	ug/m3	0.187	0.596	1	TO-15		1/4/2023	CJR	1
1,1-Dichloroethene	< 0.21	ug/m3	0.21	0.668	1	TO-15		1/4/2023	CJR	1
cis-1,2-Dichloroethene	0.44 "J"	ug/m3	0.197	0.626	1	TO-15		1/4/2023	CJR	1
trans-1,2-Dichloroethene	1.39	ug/m3	0.231	0.734	1	TO-15		1/4/2023	CJR	1
1,2-Dichloropropane	< 0.28	ug/m3	0.28	0.89	1	TO-15		1/4/2023	CJR	1
trans-1,3-Dichloropropene	< 0.198	ug/m3	0.198	0.63	1	TO-15		1/4/2023	CJR	1
cis-1,3-Dichloropropene	< 0.234	ug/m3	0.234	0.745	1	TO-15		1/4/2023	CJR	1
1,2-Dichlorotetrafluoroethane	< 0.446	ug/m3	0.446	1.42	1	TO-15		1/4/2023	CJR	1
1,4-Dioxane	< 0.157	ug/m3	0.157	0.5	1	TO-15		1/4/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.342	ug/m3	0.342	1.09	1	TO-15		1/4/2023	CJR	1
Ethanol	54	ug/m3	0.152	0.482	1	TO-15		1/4/2023	CJR	1
Ethyl Acetate	3.13	ug/m3	0.176	0.559	1	TO-15		1/4/2023	CJR	1
Ethylbenzene	2.73	ug/m3	0.203	0.645	1	TO-15		1/4/2023	CJR	1
4-Ethyltoluene	0.74	ug/m3	0.214	0.681	1	TO-15		1/4/2023	CJR	1
Heptane	4.5	ug/m3	0.265	0.845	1	TO-15		1/4/2023	CJR	1
Hexachlorobutadiene	< 0.489	ug/m3	0.489	1.56	1	TO-15		1/4/2023	CJR	1
Hexane	3.9	ug/m3	0.235	0.748	1	TO-15		1/4/2023	CJR	1
2-Hexanone	3.4	ug/m3	0.222	0.707	1	TO-15		1/4/2023	CJR	1
Isopropyl Alcohol	12.3	ug/m3	0.109	0.347	1	TO-15		1/4/2023	CJR	1
Methyl ethyl ketone (MEK)	47	ug/m3	0.178	0.567	1	TO-15		1/4/2023	CJR	1
Methyl isobutyl ketone (MIBK)	2.46	ug/m3	0.168	0.536	1	TO-15		1/4/2023	CJR	1
Methyl Methacrylate	< 0.217	ug/m3	0.217	0.69	1	TO-15		1/4/2023	CJR	1
Methylene chloride	< 15	ug/m3	0.159	0.506	1	TO-15		1/4/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.16	ug/m3	0.16	0.509	1	TO-15		1/4/2023	CJR	1
Naphthalene	< 0.675	ug/m3	0.675	2.15	1	TO-15		1/4/2023	CJR	1
Propene	< 0.079	ug/m3	0.079	0.251	1	TO-15		1/4/2023	CJR	1
Styrene	8.1	ug/m3	0.181	0.577	1	TO-15		1/4/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.325	ug/m3	0.325	1.03	1	TO-15		1/4/2023	CJR	1
Tetrachloroethene	1.43	ug/m3	0.278	0.884	1	TO-15		1/4/2023	CJR	1
Tetrahydrofuran	7.0	ug/m3	0.131	0.417	1	TO-15		1/4/2023	CJR	1

Project Name CWC PILOT TEST/CWC EAST BLOCK **Invoice #** E41867
Project # 40441

Lab Code 5041867B
Sample ID EP-2
Sample Matrix Air
Sample Date 12/28/2022

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Toluene	6.4	ug/m3	0.184	0.585	1	TO-15		1/4/2023	CJR	1
1,2,4-Trichlorobenzene	< 0.657	ug/m3	0.657	2.09	1	TO-15		1/4/2023	CJR	1
1,1,1-Trichloroethane	1.47	ug/m3	0.249	0.793	1	TO-15		1/4/2023	CJR	1
1,1,2-Trichloroethane	< 0.258	ug/m3	0.258	0.822	1	TO-15		1/4/2023	CJR	1
Trichloroethene (TCE)	2.14	ug/m3	0.237	0.754	1	TO-15		1/4/2023	CJR	1
Trichlorofluoromethane	1.63	ug/m3	0.337	1.07	1	TO-15		1/4/2023	CJR	1
Trichlorotrifluoroethane	0.61 "J"	ug/m3	0.402	1.28	1	TO-15		1/4/2023	CJR	1
1,2,4-Trimethylbenzene	3.9	ug/m3	0.283	0.899	1	TO-15		1/4/2023	CJR	1
1,3,5-Trimethylbenzene	1.32	ug/m3	0.232	0.739	1	TO-15		1/4/2023	CJR	1
Vinyl acetate	< 0.203	ug/m3	0.203	0.645	1	TO-15		1/4/2023	CJR	1
Vinyl Chloride	< 0.148	ug/m3	0.148	0.472	1	TO-15		1/4/2023	CJR	1
m&p-Xylene	14	ug/m3	0.377	1.2	1	TO-15		1/4/2023	CJR	1
o-Xylene	7.3	ug/m3	0.218	0.695	1	TO-15		1/4/2023	CJR	1

Project Name CWC PILOT TEST/CWC EAST BLOCK **Invoice #** E41867
Project # 40441

Lab Code 5041867C
Sample ID EP-3
Sample Matrix Air
Sample Date 12/28/2022

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
Air Samples										
Acetone	33	ug/m3	0.598	1.9	2	TO-15		1/10/2023	CJR	1
Benzene	1.79	ug/m3	0.272	0.866	2	TO-15		1/10/2023	CJR	1
Benzyl Chloride	< 0.418	ug/m3	0.418	1.33	2	TO-15		1/10/2023	CJR	1
Bromodichloromethane	< 0.748	ug/m3	0.748	2.38	2	TO-15		1/10/2023	CJR	1
Bromoform	< 0.828	ug/m3	0.828	2.64	2	TO-15		1/10/2023	CJR	1
Bromomethane	< 0.4	ug/m3	0.4	1.274	2	TO-15		1/10/2023	CJR	1
1,3-Butadiene	< 0.286	ug/m3	0.286	0.908	2	TO-15		1/10/2023	CJR	1
Carbon Disulfide	16.5	ug/m3	0.276	0.88	2	TO-15		1/10/2023	CJR	1
Carbon Tetrachloride	< 0.614	ug/m3	0.614	1.956	2	TO-15		1/10/2023	CJR	1
Chlorobenzene	< 0.502	ug/m3	0.502	1.596	2	TO-15		1/10/2023	CJR	1
Chloroethane	< 0.318	ug/m3	0.318	1.014	2	TO-15		1/10/2023	CJR	1
Chloroform	< 0.6	ug/m3	0.6	1.906	2	TO-15		1/10/2023	CJR	1
Chloromethane	< 1.662	ug/m3	1.662	5.28	2	TO-15		1/10/2023	CJR	1
Cyclohexane	3.4	ug/m3	0.424	1.348	2	TO-15		1/10/2023	CJR	1
Dibromochloromethane	< 0.752	ug/m3	0.752	2.4	2	TO-15		1/10/2023	CJR	1
1,4-Dichlorobenzene	< 0.604	ug/m3	0.604	1.92	2	TO-15		1/10/2023	CJR	1
1,3-Dichlorobenzene	< 0.604	ug/m3	0.604	1.92	2	TO-15		1/10/2023	CJR	1
1,2-Dichlorobenzene	< 0.47	ug/m3	0.47	1.498	2	TO-15		1/10/2023	CJR	1
Dichlorodifluoromethane	2.87	ug/m3	0.526	1.672	2	TO-15		1/10/2023	CJR	1
1,2-Dichloroethane	< 0.48	ug/m3	0.48	1.526	2	TO-15		1/10/2023	CJR	1
1,1-Dichloroethane	< 0.374	ug/m3	0.374	1.192	2	TO-15		1/10/2023	CJR	1
1,1-Dichloroethene	< 0.42	ug/m3	0.42	1.336	2	TO-15		1/10/2023	CJR	1
cis-1,2-Dichloroethene	< 0.394	ug/m3	0.394	1.252	2	TO-15		1/10/2023	CJR	1
trans-1,2-Dichloroethene	< 0.462	ug/m3	0.462	1.468	2	TO-15		1/10/2023	CJR	1
1,2-Dichloropropane	< 0.56	ug/m3	0.56	1.78	2	TO-15		1/10/2023	CJR	1
trans-1,3-Dichloropropene	< 0.396	ug/m3	0.396	1.26	2	TO-15		1/10/2023	CJR	1
cis-1,3-Dichloropropene	< 0.468	ug/m3	0.468	1.49	2	TO-15		1/10/2023	CJR	1
1,2-Dichlorotetrafluoroethane	< 0.892	ug/m3	0.892	2.84	2	TO-15		1/10/2023	CJR	1
1,4-Dioxane	< 0.314	ug/m3	0.314	1	2	TO-15		1/10/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.684	ug/m3	0.684	2.18	2	TO-15		1/10/2023	CJR	1
Ethanol	2.37	ug/m3	0.304	0.964	2	TO-15		1/10/2023	CJR	1
Ethyl Acetate	< 0.352	ug/m3	0.352	1.118	2	TO-15		1/10/2023	CJR	1
Ethylbenzene	1.39	ug/m3	0.406	1.29	2	TO-15		1/10/2023	CJR	1
4-Ethyltoluene	< 0.428	ug/m3	0.428	1.362	2	TO-15		1/10/2023	CJR	1
Heptane	8.6	ug/m3	0.53	1.69	2	TO-15		1/10/2023	CJR	1
Hexachlorobutadiene	< 0.978	ug/m3	0.978	3.12	2	TO-15		1/10/2023	CJR	1
Hexane	10.3	ug/m3	0.47	1.496	2	TO-15		1/10/2023	CJR	1
2-Hexanone	1.39 "J"	ug/m3	0.444	1.414	2	TO-15		1/10/2023	CJR	1
Isopropyl Alcohol	1.47	ug/m3	0.218	0.694	2	TO-15		1/10/2023	CJR	1
Methyl ethyl ketone (MEK)	6.0	ug/m3	0.356	1.134	2	TO-15		1/10/2023	CJR	1
Methyl isobutyl ketone (MIBK)	< 0.336	ug/m3	0.336	1.072	2	TO-15		1/10/2023	CJR	1
Methyl Methacrylate	< 0.434	ug/m3	0.434	1.38	2	TO-15		1/10/2023	CJR	1
Methylene chloride	< 30	ug/m3	0.318	1.012	2	TO-15		1/10/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.32	ug/m3	0.32	1.018	2	TO-15		1/10/2023	CJR	1
Naphthalene	< 1.35	ug/m3	1.35	4.3	2	TO-15		1/10/2023	CJR	1
Propene	21.6	ug/m3	0.158	0.502	2	TO-15		1/10/2023	CJR	1
Styrene	2.89	ug/m3	0.362	1.154	2	TO-15		1/10/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.65	ug/m3	0.65	2.06	2	TO-15		1/10/2023	CJR	1
Tetrachloroethene	1.63 "J"	ug/m3	0.556	1.768	2	TO-15		1/10/2023	CJR	1
Tetrahydrofuran	< 0.262	ug/m3	0.262	0.834	2	TO-15		1/10/2023	CJR	1

Project Name CWC PILOT TEST/CWC EAST BLOCK **Invoice #** E41867
Project # 40441

Lab Code 5041867C
Sample ID EP-3
Sample Matrix Air
Sample Date 12/28/2022

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Toluene	6.0	ug/m3	0.368	1.17	2	TO-15		1/10/2023	CJR	1
1,2,4-Trichlorobenzene	< 1.314	ug/m3	1.314	4.18	2	TO-15		1/10/2023	CJR	1
1,1,1-Trichloroethane	< 0.498	ug/m3	0.498	1.586	2	TO-15		1/10/2023	CJR	1
1,1,2-Trichloroethane	< 0.516	ug/m3	0.516	1.644	2	TO-15		1/10/2023	CJR	1
Trichloroethene (TCE)	1.71	ug/m3	0.474	1.508	2	TO-15		1/10/2023	CJR	1
Trichlorofluoromethane	1.91 "J"	ug/m3	0.674	2.14	2	TO-15		1/10/2023	CJR	1
Trichlorotrifluoroethane	< 0.804	ug/m3	0.804	2.56	2	TO-15		1/10/2023	CJR	1
1,2,4-Trimethylbenzene	1.96	ug/m3	0.566	1.798	2	TO-15		1/10/2023	CJR	1
1,3,5-Trimethylbenzene	0.69 "J"	ug/m3	0.464	1.478	2	TO-15		1/10/2023	CJR	1
Vinyl acetate	< 0.406	ug/m3	0.406	1.29	2	TO-15		1/10/2023	CJR	1
Vinyl Chloride	< 0.296	ug/m3	0.296	0.944	2	TO-15		1/10/2023	CJR	1
m&p-Xylene	5.8	ug/m3	0.754	2.4	2	TO-15		1/10/2023	CJR	1
o-Xylene	2.86	ug/m3	0.436	1.39	2	TO-15		1/10/2023	CJR	1

Project Name CWC PILOT TEST/CWC EAST BLOCK **Invoice #** E41867
Project # 40441

Lab Code 5041867D
Sample ID EP-4
Sample Matrix Air
Sample Date 12/28/2022

Organic

Air Samples

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Acetone	36	ug/m3	0.598	1.9	2	TO-15		1/10/2023	CJR	1
Benzene	1.4	ug/m3	0.272	0.866	2	TO-15		1/10/2023	CJR	1
Benzyl Chloride	< 0.418	ug/m3	0.418	1.33	2	TO-15		1/10/2023	CJR	1
Bromodichloromethane	< 0.748	ug/m3	0.748	2.38	2	TO-15		1/10/2023	CJR	1
Bromoform	< 0.828	ug/m3	0.828	2.64	2	TO-15		1/10/2023	CJR	1
Bromomethane	< 0.4	ug/m3	0.4	1.274	2	TO-15		1/10/2023	CJR	1
1,3-Butadiene	< 0.286	ug/m3	0.286	0.908	2	TO-15		1/10/2023	CJR	1
Carbon Disulfide	17.3	ug/m3	0.276	0.88	2	TO-15		1/10/2023	CJR	1
Carbon Tetrachloride	< 0.614	ug/m3	0.614	1.956	2	TO-15		1/10/2023	CJR	1
Chlorobenzene	< 0.502	ug/m3	0.502	1.596	2	TO-15		1/10/2023	CJR	1
Chloroethane	< 0.318	ug/m3	0.318	1.014	2	TO-15		1/10/2023	CJR	1
Chloroform	< 0.6	ug/m3	0.6	1.906	2	TO-15		1/10/2023	CJR	1
Chloromethane	< 1.662	ug/m3	1.662	5.28	2	TO-15		1/10/2023	CJR	1
Cyclohexane	1.72	ug/m3	0.424	1.348	2	TO-15		1/10/2023	CJR	1
Dibromochloromethane	< 0.752	ug/m3	0.752	2.4	2	TO-15		1/10/2023	CJR	1
1,4-Dichlorobenzene	< 0.604	ug/m3	0.604	1.92	2	TO-15		1/10/2023	CJR	1
1,3-Dichlorobenzene	< 0.604	ug/m3	0.604	1.92	2	TO-15		1/10/2023	CJR	1
1,2-Dichlorobenzene	< 0.47	ug/m3	0.47	1.498	2	TO-15		1/10/2023	CJR	1
Dichlorodifluoromethane	2.77	ug/m3	0.526	1.672	2	TO-15		1/10/2023	CJR	1
1,2-Dichloroethane	< 0.48	ug/m3	0.48	1.526	2	TO-15		1/10/2023	CJR	1
1,1-Dichloroethane	< 0.374	ug/m3	0.374	1.192	2	TO-15		1/10/2023	CJR	1
1,1-Dichloroethene	< 0.42	ug/m3	0.42	1.336	2	TO-15		1/10/2023	CJR	1
cis-1,2-Dichloroethene	< 0.394	ug/m3	0.394	1.252	2	TO-15		1/10/2023	CJR	1
trans-1,2-Dichloroethene	< 0.462	ug/m3	0.462	1.468	2	TO-15		1/10/2023	CJR	1
1,2-Dichloropropane	< 0.56	ug/m3	0.56	1.78	2	TO-15		1/10/2023	CJR	1
trans-1,3-Dichloropropene	< 0.396	ug/m3	0.396	1.26	2	TO-15		1/10/2023	CJR	1
cis-1,3-Dichloropropene	< 0.468	ug/m3	0.468	1.49	2	TO-15		1/10/2023	CJR	1
1,2-Dichlorotetrafluoroethane	< 0.892	ug/m3	0.892	2.84	2	TO-15		1/10/2023	CJR	1
1,4-Dioxane	< 0.314	ug/m3	0.314	1	2	TO-15		1/10/2023	CJR	1
EDB (1,2-Dibromoethane)	< 0.684	ug/m3	0.684	2.18	2	TO-15		1/10/2023	CJR	1
Ethanol	< 0.304	ug/m3	0.304	0.964	2	TO-15		1/10/2023	CJR	1
Ethyl Acetate	< 0.352	ug/m3	0.352	1.118	2	TO-15		1/10/2023	CJR	1
Ethylbenzene	1.47	ug/m3	0.406	1.29	2	TO-15		1/10/2023	CJR	1
4-Ethyltoluene	< 0.428	ug/m3	0.428	1.362	2	TO-15		1/10/2023	CJR	1
Heptane	4.8	ug/m3	0.53	1.69	2	TO-15		1/10/2023	CJR	1
Hexachlorobutadiene	< 0.978	ug/m3	0.978	3.12	2	TO-15		1/10/2023	CJR	1
Hexane	4.9	ug/m3	0.47	1.496	2	TO-15		1/10/2023	CJR	1
2-Hexanone	1.06 "J"	ug/m3	0.444	1.414	2	TO-15		1/10/2023	CJR	1
Isopropyl Alcohol	< 0.218	ug/m3	0.218	0.694	2	TO-15		1/10/2023	CJR	1
Methyl ethyl ketone (MEK)	4.4	ug/m3	0.356	1.134	2	TO-15		1/10/2023	CJR	1
Methyl isobutyl ketone (MIBK)	< 0.336	ug/m3	0.336	1.072	2	TO-15		1/10/2023	CJR	1
Methyl Methacrylate	< 0.434	ug/m3	0.434	1.38	2	TO-15		1/10/2023	CJR	1
Methylene chloride	< 30	ug/m3	0.318	1.012	2	TO-15		1/10/2023	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.32	ug/m3	0.32	1.018	2	TO-15		1/10/2023	CJR	1
Naphthalene	< 1.35	ug/m3	1.35	4.3	2	TO-15		1/10/2023	CJR	1
Propene	12	ug/m3	0.158	0.502	2	TO-15		1/10/2023	CJR	1
Styrene	3.4	ug/m3	0.362	1.154	2	TO-15		1/10/2023	CJR	1
1,1,2,2-Tetrachloroethane	< 0.65	ug/m3	0.65	2.06	2	TO-15		1/10/2023	CJR	1
Tetrachloroethene	< 0.556	ug/m3	0.556	1.768	2	TO-15		1/10/2023	CJR	1
Tetrahydrofuran	< 0.262	ug/m3	0.262	0.834	2	TO-15		1/10/2023	CJR	1

Project Name CWC PILOT TEST/CWC EAST BLOCK **Invoice #** E41867
Project # 40441

Lab Code 5041867D
Sample ID EP-4
Sample Matrix Air
Sample Date 12/28/2022

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Toluene	4.7	ug/m3	0.368	1.17	2	TO-15		1/10/2023	CJR	1
1,2,4-Trichlorobenzene	< 1.314	ug/m3	1.314	4.18	2	TO-15		1/10/2023	CJR	1
1,1,1-Trichloroethane	0.87 "J"	ug/m3	0.498	1.586	2	TO-15		1/10/2023	CJR	1
1,1,2-Trichloroethane	< 0.516	ug/m3	0.516	1.644	2	TO-15		1/10/2023	CJR	1
Trichloroethene (TCE)	1.93	ug/m3	0.474	1.508	2	TO-15		1/10/2023	CJR	1
Trichlorofluoromethane	2.02 "J"	ug/m3	0.674	2.14	2	TO-15		1/10/2023	CJR	1
Trichlorotrifluoroethane	< 0.804	ug/m3	0.804	2.56	2	TO-15		1/10/2023	CJR	1
1,2,4-Trimethylbenzene	2.35	ug/m3	0.566	1.798	2	TO-15		1/10/2023	CJR	1
1,3,5-Trimethylbenzene	0.78 "J"	ug/m3	0.464	1.478	2	TO-15		1/10/2023	CJR	1
Vinyl acetate	< 0.406	ug/m3	0.406	1.29	2	TO-15		1/10/2023	CJR	1
Vinyl Chloride	< 0.296	ug/m3	0.296	0.944	2	TO-15		1/10/2023	CJR	1
m&p-Xylene	6.5	ug/m3	0.754	2.4	2	TO-15		1/10/2023	CJR	1
o-Xylene	3.3	ug/m3	0.436	1.39	2	TO-15		1/10/2023	CJR	1

"J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

Code	*Comment*
1	Laboratory QC within limits.
10	Linear range of calibration curve exceeded.

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

Authorized Signature