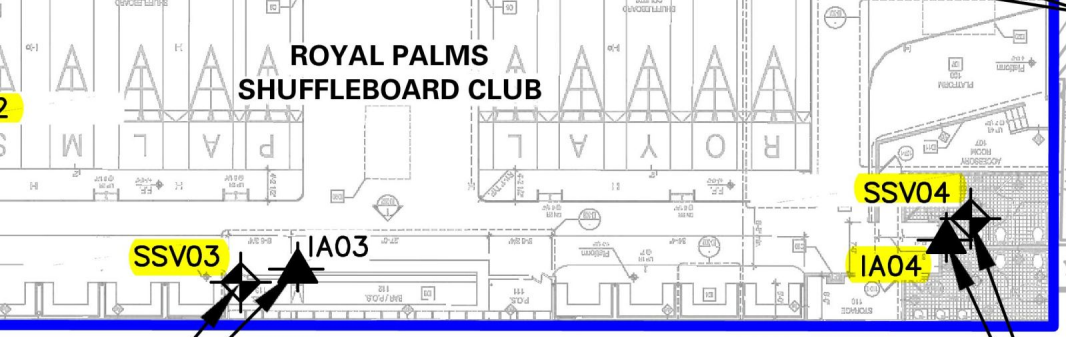
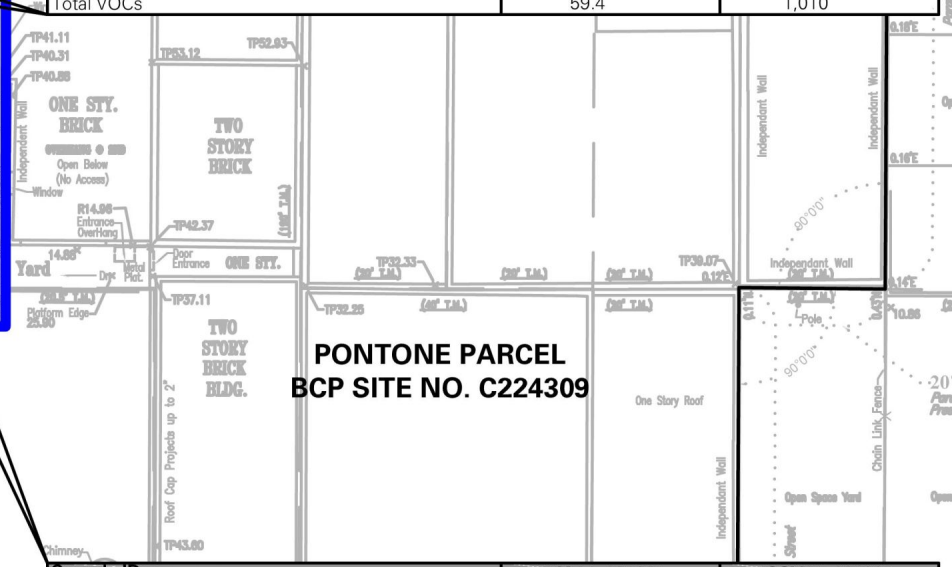


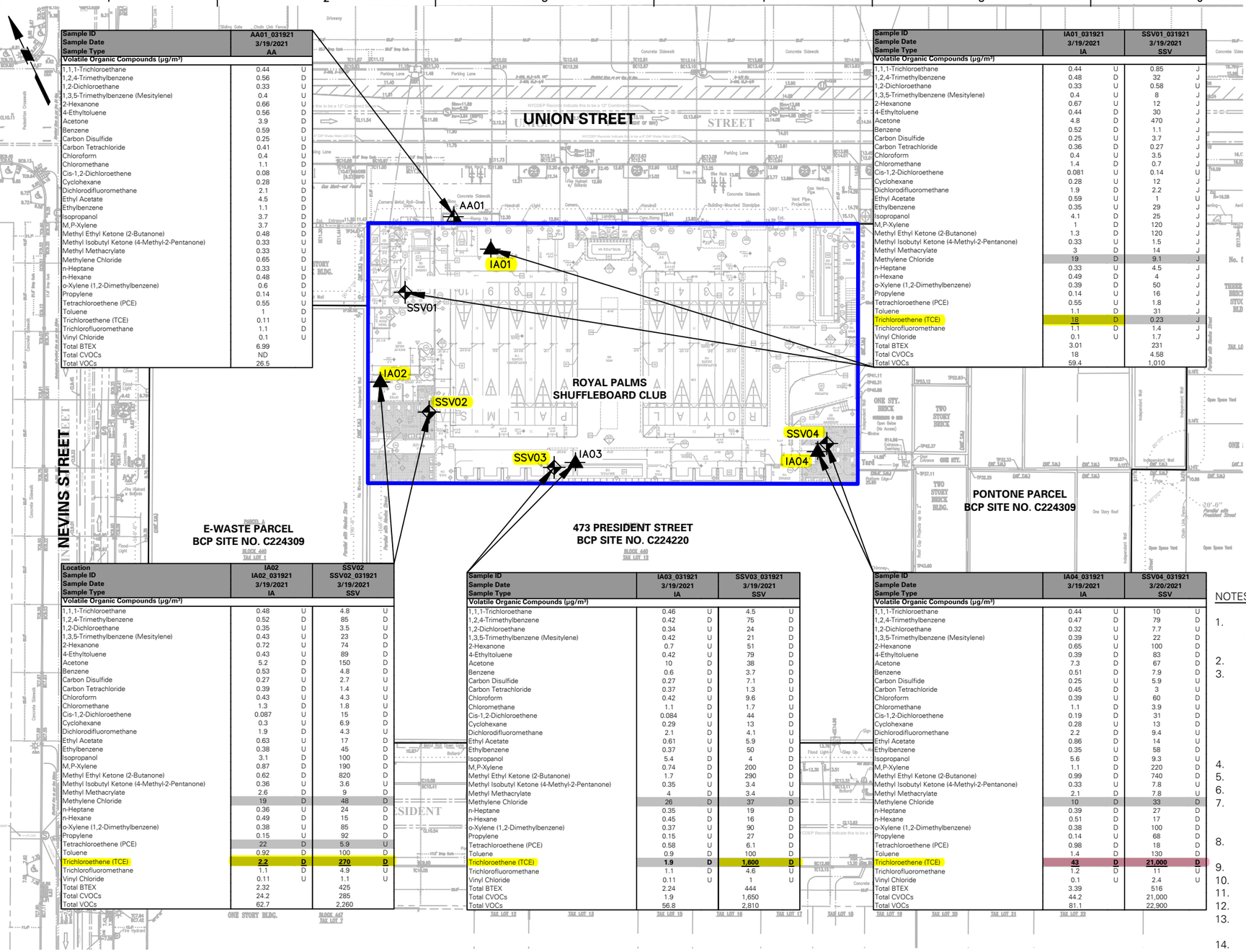


473 PRESIDENT STREET
BCP SITE NO. C224220

BLOCK 440
TAX LOT 12

Sample ID	IA03_031921		SSV03_031921	
Sample Date	3/19/2021		3/19/2021	
Sample Type	IA		SSV	
Volatile Organic Compounds (µg/m³)				
1,1,1-Trichloroethane	0.46	U	4.5	U
1,2,4-Trimethylbenzene	0.42	D	75	D
1,2-Dichloroethane	0.34	U	24	D
1,3,5-Trimethylbenzene (Mesitylene)	0.42	U	21	D
2-Hexanone	0.7	U	51	D
4-Ethyltoluene	0.42	U	79	D
Acetone	10	D	38	D
Benzene	0.6	D	3.7	D
Carbon Disulfide	0.27	U	7.1	D
Carbon Tetrachloride	0.37	D	1.3	U
Chloroform	0.42	U	9.6	D
Chloromethane	1.1	D	1.7	U
Cis-1,2-Dichloroethene	0.084	U	44	D
Cyclohexane	0.29	U	13	D
Dichlorodifluoromethane	2.1	D	4.1	U
Ethyl Acetate	0.61	U	5.9	U
Ethylbenzene	0.37	U	50	D
Isopropanol	5.4	D	4	D
M,P-Xylene	0.74	D	200	D
Methyl Ethyl Ketone (2-Butanone)	1.7	D	290	D
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	0.35	U	3.4	U
Methyl Methacrylate	4	D	3.4	U
Methylene Chloride	26	D	37	D
n-Heptane	0.35	U	19	D
n-Hexane	0.45	D	16	D
o-Xylene (1,2-Dimethylbenzene)	0.37	U	90	D
Propylene	0.15	U	27	D
Tetrachloroethene (PCE)	0.58	U	6.1	D
Toluene	0.9	D	100	D
Trichloroethene (TCE)	**1.9**	**D**	**1,600**	**D**
Trichlorofluoromethane	1.1	D	4.6	U
Vinyl Chloride	0.11	U	1	U
Total BTEX	2.24		444	
Total CVOCs	1.9		1,650	
Total VOCs	56.8		2,810	

Sample ID	IA04_031921		SSV04_031921	
Sample Date	3/19/2021		3/20/2021	
Sample Type	IA		SSV	
Volatile Organic Compounds (µg/m³)				
1,1,1-Trichloroethane	0.44	U	10	U
1,2,4-Trimethylbenzene	0.47	D	79	D
1,2-Dichloroethane	0.32	U	7.7	U
1,3,5-Trimethylbenzene (Mesitylene)	0.39	U	22	D
2-Hexanone	0.65	U	100	D
4-Ethyltoluene	0.39	D	83	D
Acetone	7.3	D	67	D
Benzene	0.51	D	7.9	D
Carbon Disulfide	0.25	U	5.9	U
Carbon Tetrachloride	0.45	D	3	U
Chloroform	0.39	U	60	D
Chloromethane	1.1	D	3.9	U
Cis-1,2-Dichloroethene	0.19	D	31	D
Cyclohexane	0.28	U	13	D
Dichlorodifluoromethane	2.2	D	9.4	U
Ethyl Acetate	0.86	D	14	U
Ethylbenzene	0.35	U	58	D
Isopropanol	5.6	D	9.3	U
M,P-Xylene	1.1	D	220	D
Methyl Ethyl Ketone (2-Butanone)	0.99	D	740	D
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	0.33	U	7.8	U
Methyl Methacrylate	2.1	D	7.8	U
Methylene Chloride	10	D	33	D
n-Heptane	0.39	D	27	D
n-Hexane	0.51	D	17	D
o-Xylene (1,2-Dimethylbenzene)	0.38	D	100	D
Propylene	0.14	U	68	D
Tetrachloroethene (PCE)	0.98	D	18	D
Toluene	1.4	D	130	D
Trichloroethene (TCE)	**43**	**D**	**21,000**	**D**
Trichlorofluoromethane	1.2	D	11	U
Vinyl Chloride	0.1	U	2.4	U
Total BTEX	3.39		516	
Total CVOCs	44.2		21,000	
Total VOCs	81.1		22,900	



Sample ID	AA01_031921	
Sample Date	3/19/2021	
Sample Type	AA	
Volatile Organic Compounds (µg/m³)		
1,1,1-Trichloroethane	0.44	U
1,2,4-Trimethylbenzene	0.56	D
1,2-Dichloroethane	0.33	U
1,3,5-Trimethylbenzene (Mesitylene)	0.4	U
2-Hexanone	0.66	U
4-Ethyltoluene	0.56	D
Acetone	3.9	D
Benzene	0.59	D
Carbon Disulfide	0.25	U
Carbon Tetrachloride	0.41	D
Chloroform	0.4	U
Chloromethane	1.1	D
Cis-1,2-Dichloroethene	0.08	U
Cyclohexane	0.28	U
Dichlorodifluoromethane	2.1	D
Ethyl Acetate	4.5	D
Ethylbenzene	1.1	D
Isopropanol	3.7	D
M,P-Xylene	3.7	D
Methyl Ethyl Ketone (2-Butanone)	0.48	D
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	0.33	U
Methyl Methacrylate	0.33	U
Methylene Chloride	0.65	D
n-Heptane	0.33	U
n-Hexane	0.48	D
o-Xylene (1,2-Dimethylbenzene)	0.6	D
Propylene	0.14	U
Tetrachloroethene (PCE)	0.55	U
Toluene	1	D
Trichloroethene (TCE)	0.11	U
Trichlorofluoromethane	1.1	D
Vinyl Chloride	0.1	U
Total BTEX	6.99	
Total CVOCs	ND	
Total VOCs	26.5	

Sample ID	IA01_031921		SSV01_031921	
Sample Date	3/19/2021		3/19/2021	
Sample Type	IA		SSV	
Volatile Organic Compounds (µg/m³)				
1,1,1-Trichloroethane	0.44	U	0.85	J
1,2,4-Trimethylbenzene	0.48	D	32	J
1,2-Dichloroethane	0.33	U	0.58	U
1,3,5-Trimethylbenzene (Mesitylene)	0.4	U	8	J
2-Hexanone	0.67	U	12	J
4-Ethyltoluene	0.44	D	30	J
Acetone	4.8	D	470	J
Benzene	0.52	D	1.1	J
Carbon Disulfide	0.25	U	3.7	J
Carbon Tetrachloride	0.36	D	0.27	J
Chloroform	0.4	U	3.5	J
Chloromethane	1.4	D	0.7	J
Cis-1,2-Dichloroethene	0.081	U	0.14	U
Cyclohexane	0.28	U	12	J
Dichlorodifluoromethane	1.9	D	2.2	J
Ethyl Acetate	0.59	U	1	U
Ethylbenzene	0.35	U	29	J
Isopropanol	4.1	D	25	J
M,P-Xylene	1	D	120	J
Methyl Ethyl Ketone (2-Butanone)	1.3	D	120	J
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	0.33	U	1.5	J
Methyl Methacrylate	3	D	14	J
Methylene Chloride	19	D	9.1	J
n-Heptane	0.33	U	4.5	J
n-Hexane	0.49	D	4	J
o-Xylene (1,2-Dimethylbenzene)	0.39	D	50	J
Propylene	0.14	U	16	J
Tetrachloroethene (PCE)	0.55	U	1.8	J
Toluene	1.1	D	31	J
Trichloroethene (TCE)	18	D	0.23	J
Trichlorofluoromethane	1.1	D	1.4	J
Vinyl Chloride	0.1	U	1.7	J
Total BTEX	3.01		231	
Total CVOCs	18		4.58	
Total VOCs	59.4		1,010	

Location	IA02		SSV02	
Sample ID	IA02_031921		SSV02_031921	
Sample Date	3/19/2021		3/19/2021	
Sample Type	IA		SSV	
Volatile Organic Compounds (µg/m³)				
1,1,1-Trichloroethane	0.48	U	4.8	U
1,2,4-Trimethylbenzene	0.52	D	85	D
1,2-Dichloroethane	0.35	U	3.5	U
1,3,5-Trimethylbenzene (Mesitylene)	0.43	U	23	D
2-Hexanone	0.72	U	74	D
4-Ethyltoluene	0.43	U	89	D
Acetone	5.2	D	150	D
Benzene	0.53	D	4.8	D
Carbon Disulfide	0.27	U	2.7	U
Carbon Tetrachloride	0.39	D	1.4	U
Chloroform	0.43	U	4.3	U
Chloromethane	1.3	D	1.8	U
Cis-1,2-Dichloroethene	0.087	U	15	D
Cyclohexane	0.3	U	6.9	D
Dichlorodifluoromethane	1.9	D	4.3	U
Ethyl Acetate	0.63	U	17	D
Ethylbenzene	0.38	U	45	D
Isopropanol	3.1	D	100	D
M,P-Xylene	0.87	D	190	D
Methyl Ethyl Ketone (2-Butanone)	0.62	D	820	D
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	0.36	U	3.6	U
Methyl Methacrylate	2.6	D	9	D
Methylene Chloride	19	D	48	D
n-Heptane	0.36	U	24	D
n-Hexane	0.49	D	15	D
o-Xylene (1,2-Dimethylbenzene)	0.38	U	85	D
Propylene	0.15	U	92	D
Tetrachloroethene (PCE)	22	D	5.9	U
Toluene	0.92	D	100	D
Trichloroethene (TCE)	2.2	D	270	D
Trichlorofluoromethane	1.1	D	4.9	U
Vinyl Chloride	0.11	U	1.1	U
Total BTEX	2.32		425	
Total CVOCs	24.2		285	
Total VOCs	62.7		2,260	

Sample ID	IA03_031921		SSV03_031921	
Sample Date	3/19/2021		3/19/2021	
Sample Type	IA		SSV	
Volatile Organic Compounds (µg/m³)				
1,1,1-Trichloroethane	0.46	U	4.5	U
1,2,4-Trimethylbenzene	0.42	D	75	D
1,2-Dichloroethane	0.34	U	24	D
1,3,5-Trimethylbenzene (Mesitylene)	0.42	U	21	D
2-Hexanone	0.7	U	51	D
4-Ethyltoluene	0.42	U	79	D
Acetone	10	D	38	D
Benzene	0.6	D	3.7	D
Carbon Disulfide	0.27	U	7.1	D
Carbon Tetrachloride	0.37	D	1.3	U
Chloroform	0.42	U	9.6	D
Chloromethane	1.1	D	1.7	U
Cis-1,2-Dichloroethene	0.084	U	44	D
Cyclohexane	0.29	U	13	D
Dichlorodifluoromethane	2.1	D	4.1	U
Ethyl Acetate	0.61	U	5.9	U
Ethylbenzene	0.37	U	50	D
Isopropanol	5.4	D	4	D
M,P-Xylene	0.74	D	200	D
Methyl Ethyl Ketone (2-Butanone)	1.7	D	290	D
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	0.35	U	3.4	U
Methyl Methacrylate	4	D	3.4	U
Methylene Chloride	26	D	37	D
n-Heptane	0.35	U	19	D
n-Hexane	0.45	D	16	D
o-Xylene (1,2-Dimethylbenzene)	0.37	U	90	D
Propylene	0.15	U	27	D
Tetrachloroethene (PCE)	0.58	U	6.1	D
Toluene	0.9	D	100	D
Trichloroethene (TCE)	1.9	D	1,600	D
Trichlorofluoromethane	1.1	D	4.6	U
Vinyl Chloride	0.11	U	1	U
Total BTEX	2.24		444	
Total CVOCs	1.9		1,650	
Total VOCs	56.8		2,810	

Sample ID	IA04_031921		SSV04_031921	
Sample Date	3/19/2021		3/20/2021	
Sample Type	IA		SSV	
Volatile Organic Compounds (µg/m³)				
1,1,1-Trichloroethane	0.44	U	10	U
1,2,4-Trimethylbenzene	0.47	D	79	D
1,2-Dichloroethane	0.32	U	7.7	U
1,3,5-Trimethylbenzene (Mesitylene)	0.39	U	22	D
2-Hexanone	0.65	U	100	D
4-Ethyltoluene	0.39	D	83	D
Acetone	7.3	D	67	D
Benzene	0.51	D	7.9	D
Carbon Disulfide	0.25	U	5.9	U
Carbon Tetrachloride	0.45	D	3	U
Chloroform	0.39	U	60	D
Chloromethane	1.1	D	3.9	U
Cis-1,2-Dichloroethene	0.19	D	31	D
Cyclohexane	0.28	U	13	D
Dichlorodifluoromethane	2.2	D	9.4	U
Ethyl Acetate	0.86	D	14	U
Ethylbenzene	0.35	U	58	D
Isopropanol	5.6	D	9.3	U
M,P-Xylene	1.1	D	220	D
Methyl Ethyl Ketone (2-Butanone)	0.99	D	740	D
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	0.33	U	7.8	U
Methyl Methacrylate	2.1	D	7.8	U
Methylene Chloride	10	D	33	D
n-Heptane	0.39	D	27	D
n-Hexane	0.51	D	17	D
o-Xylene (1,2-Dimethylbenzene)	0.38	D	100	D
Propylene	0.14	U	68	D
Tetrachloroethene (PCE)	0.98	D	18	D
Toluene	1.4	D	130	D
Trichloroethene (TCE)	43	D	21,000	D
Trichlorofluoromethane	1.2	D	11	U
Vinyl Chloride	0.1	U	2.4	U
Total BTEX	3.39		516	
Total CVOCs	44.2		21,000	
Total VOCs	81.1		22,900	

LEGEND:

- SITE BOUNDARY
- LOT BOUNDARY
- SB01 — SUB-SLAB VAPOR POINT SAMPLE LOCATION
- IA01 — INDOOR AIR SAMPLE LOCATION
- AA01 — AMBIENT AIR SAMPLE LOCATION

Analyte	NYSDOH AGVs
Volatile Organic Compounds (µg/m³)	
1,1,1-Trichloroethane	~
1,2,4-Trimethylbenzene	~
1,2-Dichloroethane	~
1,3,5-Trimethylbenzene (Mesitylene)	~
2-Hexanone	~
4-Ethyltoluene	~
Acetone	~
Benzene	~
Carbon Disulfide	~
Carbon Tetrachloride	~
Chloroform	~
Chloromethane	~
Cis-1,2-Dichloroethene	~
Cyclohexane	~
Dichlorodifluoromethane	~
Ethyl Acetate	~
Ethylbenzene	~
Isopropanol	~
M,P-Xylene	~
Methyl Ethyl Ketone (2-Butanone)	~
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	~
Methyl Methacrylate	~
Methylene Chloride	60
n-Heptane	~
n-Hexane	~
o-Xylene (1,2-Dimethylbenzene)	~
Propylene	~
Tetrachloroethene (PCE)	30
Toluene	~
Trichloroethene (TCE)	2
Trichlorofluoromethane	~
Vinyl Chloride	~
Total BTEX	~
Total CVOCs	~
Total VOCs	~

NOTES:

1. BASE MAP ADAPTED FROM DRAWING NO. A-001.00, TITLED "PROPOSED GROUND FLOOR PLAN" BY ANDRE TCHELISTCHEFF ARCHITECTS, DATED 13 AUGUST 2013 AND SURVEY BY NEW YORK CITY LAND SURVEYORS, PC, DATED 14 JUNE 2019.
2. ALL LOCATIONS SHOWN WERE MEASURED IN THE FIELD AND ARE APPROXIMATE.
3. CO-LOCATED SUB-SLAB VAPOR AND INDOOR AIR SAMPLE ANALYTICAL RESULTS ARE EVALUATED USING THE NEW YORK STATE DEPARTMENT OF HEALTH (NYSDOH) OCTOBER 2006 GUIDANCE FOR EVALUATING SOIL VAPOR INTRUSION IN THE STATE OF NEW YORK DECISION MATRICES FOR SUB-SLAB VAPOR AND INDOOR AIR AND SUBSEQUENT UPDATE (2017) AND TO THE NYSDOH AIR GUIDELINE VALUES (AGVs) AS SET FORTH IN THE NYSDOH OCTOBER 2006 GUIDANCE FOR EVALUATING SOIL VAPOR INTRUSION IN THE STATE OF NEW YORK AND SUBSEQUENT UPDATES (2013, 2015).
4. ONLY DETECTED ANALYTES ARE SHOWN.
5. AMBIENT AIR SAMPLE ANALYTICAL RESULTS ARE SHOWN FOR REFERENCE ONLY.
6. DETECTED ANALYTICAL RESULTS ABOVE THE NYSDOH AGVs SAMPLE ARE UNDERLINED.
7. DETECTED ANALYTICAL RESULTS ABOVE THE MINIMUM THRESHOLD FOR WHICH IDENTIFICATION OF SOURCE(S) AND RESAMPLING OR MITIGATION IS RECOMMENDED ARE SHADED.
8. DETECTED ANALYTICAL RESULTS ABOVE THE MINIMUM THRESHOLD FOR WHICH MITIGATION IS RECOMMENDED ARE BOLDED AND SHADED.
9. ~ = REGULATORY LIMIT FOR THIS ANALYTE DOES NOT EXIST.
10. µg/m³ = MICROGRAMS PER CUBIC METER
11. AA = AMBIENT AIR; IA = INDOOR AIR; SSV = SUB-SLAB VAPOR
12. D = THE CONCENTRATION REPORTED IS A RESULT OF A DILUTED SAMPLE.
13. J = THE ANALYTE WAS POSITIVELY IDENTIFIED AND THE ASSOCIATED NUMERICAL VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANALYTE IN THE SAMPLE.
14. U = THE ANALYTE WAS ANALYZED FOR, BUT WAS NOT DETECTED AT A LEVEL GREATER THAN OR EQUAL TO THE LEVEL OF THE REPORTING LIMIT (RL) OR THE SAMPLE CONCENTRATION FOR RESULTS IMPACTED BY BLANK CONTAMINATION.

40 0 20 40

SCALE: 1 INCH = 40 FEET

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Project: 514 UNION STREET
BLOCK No. 440, LOT No. 12
BROOKLYN
KINGS NEW YORK

Figure Title: SUB-SLAB VAPOR AND INDOOR AIR SAMPLE RESULTS MAP

Project No. 170361305
Date 04/13/2021
Drawn By MA
Checked By VDP

Figure No. 3
Sheet 3 of 4

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Filename: \\langan.com\data\NY\data3\170361301\Cadd Data - 170361301\SheetFiles\Environmental\514 Union Street\IRMWP\Figure 3 - Soil Vapor Sample Locations and Results Map.dwg Date: 3/22/2022 Time: 13:54 User: bkoontz Style Table: Langan.stb Layout: ANSIB-BL