

Table 4
Vapor Analytical Results
Former Chippewa Quick Mart
Glidden, Wisconsin
BRRTS #03-02-580226

Compound/Parameter	CAS Number	Residential VAL	Residential VRSL	Small Commercial VAL	Small Commercial VRSL	Sample Identifier and Date Collected			
						L1535547-01	L1535547-02	L1535547-03	L1535547-04
						SV-1	SV-2	SSVS-1	SSVS-2
						9/9/2022	9/9/2022	9/9/2022	9/9/2022
Volatile Organic Compounds (VOCs) reported in µg/m3									
Acetone	67-64-1	NS	NS	NS	NS	109	179	85.3	166
Allyl Chloride	107-05-01	1.0	35	4.4	150	<0.626	<0.626	<0.626	<0.626
Benzene	71-43-2	3.6	120	16	530	6.45	8.11	<0.639	1.53
Benzyl chloride	100-44-7	0.57	19	2.5	83	<1.04	<1.04	<1.04	<1.04
Bromodichloromethane	75-27-4	0.76	25	3.3	110	<1.34	<1.34	<1.34	<1.34
Bromoform	75-25-2	26	850	110	3,700	<6.21	<6.21	<6.21	<6.21
Bromomethane	74-83-9	5.2	170	22	730	<0.776	<0.776	<0.776	<0.776
1,3-Butadiene	106-99-0	0.94	31	4.1	140	19	33.2	<4.43	<4.43
Carbon disulfide	75-15-0	730	24,000	3,070	102,000	2.47	3.33	<0.622	1.29
Carbon tetrachloride	56-23-5	4.7	160	20	670	<1.26	<1.26	<1.26	<1.26
Chlorobenzene	108-90-7	52	1700	220	7,300	<0.924	<0.924	<0.924	<0.924
Chloroethane (ethyl chloride)	75-00-3	4,200	140,000	18,000	580,000	<0.528	<0.528	<0.528	<0.528
Chloroform	67-66-3	1.2	41	5.3	180	<0.973	<0.973	28.8	<0.973
Chloromethane (methyl chloride)	74-87-3	94	3100	390	13,000	0.814	1.35	<0.413	<0.413
2-Chlorotoluene	95-49-8	NS	NS	NS	NS	<1.03	<1.03	<1.03	<1.03
Cyclohexane	110-82-7	6,300	210,000	26,000	870,000	<0.689	<0.689	<0.689	31.8
Chlorodibromomethane	124-48-1	NS	NS	NS	NS	<1.70	<1.70	<1.70	<1.70
1,2-Dibromoethane (ethylene dibromide or EDB)	106-93-4	0.047	1.6	0.20	6.7	<1.54	<1.54	<1.54	<1.54
1,2-Dichlorobenzene	95-50-1	210	7,000	880	29,000	<1.20	<1.20	<1.20	<1.20
1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	<1.20	<1.20	<1.20	<1.20
1,4-Dichlorobenzene	106-46-7	2.6	85	11	370	<1.20	<1.20	<1.20	<1.20
1,2-Dichloroethane	107-06-2	1.1	36	4.7	160	<0.810	<0.810	<0.810	<0.810
1,1-Dichloroethane	75-34-3	18	590	77	2,600	<0.802	<0.802	<0.802	<0.802
1,1-Dichloroethene (DCE)	75-35-4	210	7,000	880	29,000	<0.793	<0.793	<0.793	<0.793
cis-1,2-Dichloroethene	156-59-2	NS	NS	NS	NS	<0.793	<0.793	<0.793	<0.793
trans-1,2-Dichloroethene	156-60-5	42	1,400	180	5,800	<0.793	<0.793	<0.793	<0.793
1,2-Dichloropropane	78-87-5	4.2	140	18	580	<0.924	<0.924	<0.924	<0.924
cis-1,3-Dichloropropene ²	10061-01-5	NS	NS	NS	NS	<0.908	<0.908	<0.908	<0.908
trans-1,3-Dichloropropene ²	10061-02-6	NS	NS	NS	NS	<0.908	<0.908	<0.908	<0.908
1,4-Dioxane	123-91-1	5.6	190	25	820	<0.721	<0.721	<0.721	<0.721
Ethanol	64-17-5	NS	NS	NS	NS	28.8	35.8	107	106
Ethylbenzene	100-41-4	11	370	49	1,600	11.9	9.02	<0.867	7.89
4-Ethyltoluene	622-96-8	NS	NS	NS	NS	9.33	6.28	<0.982	3.23
Trichlorofluoromethane (Freon 11) ¹	75-69-4	NS	NS	NS	NS	<1.12	1.76	1.45	1.7
Dichlorodifluoromethane (Freon 12)	75-71-8	100	3,500	440	15,000	6.13	2.64	2.57	3
1,1,2-Trichlorotrifluoroethane (CFC-113)	76-13-1	5,200	170,000	22,000	730,000	<1.53	<1.53	<1.53	<1.53
1,2-Dichlorotetrafluoroethane	76-14-2	NS	NS	NS	NS	<1.40	<1.40	<1.40	<1.40
n-Heptane	142-82-5	420	14,000	1800	58,000	6.05	6.18	<0.818	45.4
Hexachloro-1,3-butadiene	87-68-3	1.3	43	5.6	190	<6.73	<6.73	<6.73	<6.73
n-Hexane	110-54-3	730	24,000	3,100	100,000	7.69	9.2	<2.22	36.3
Isopropylbenzene (Cumene)	98-82-8	420	14,000	NS	NS	<0.983	<0.983	<0.983	8.36
Methylene chloride (Dichloromethane)	75-09-2	630	21,000	2,600	87,000	0.91	1.51	<0.694	1.57
Methyl butyl ketone (2-Hexanone)	591-78-6	31	1,000	130	4,300	<5.11	<5.11	<5.11	<5.11
Methyl ethyl ketone (MEK, 2-Butanone) ³	78-93-3	5,200	170,000	22,000	730,000	27.8	35.7	5.19	17.6
4-Methyl-2-pentanone (MIBK)	108-10-1	3,100	100,000	13,000	430,000	<5.12	<5.12	85.6	<5.12
Methyl Methacrylate	80-62-6	730	24,000	3,100	100,000	<0.819	<0.819	<0.819	<0.819
Methyl-tert-butyl ether (Isopropyl ether)	1634-04-4	110	3,600	470	16,000	<0.721	<0.721	<0.721	<0.721
Naphthalene	91-20-3	0.83	28	3.6	120	<3.30	<3.30	<3.30	<3.30
2-Propanol (Isopropyl alcohol)	67-63-0	210	7,000	880	29,000	4.57	10.1	49.9	20.2
Propene (Propylene or Methylene)	115-07-1	3,100	100,000	13,000	430,000	112	133	<2.15	3.05
Styrene	100-42-5	1,000	35,000	4,400	147,000	<0.851	<0.851	<0.851	<0.851
1,1,1,2-Tetrachloroethane	79-34-5	0.48	16	2.1	70	<1.37	<1.37	<1.37	<1.37
Tetrachloroethene (PCE)	127-18-4	42	1,400	180	6,000	1.960	2.190	4.21	2.19
Tetrahydrofuran	109-99-9	2,100	70,000	8,800	290,000	<0.590	<0.590	<0.590	<0.590
Toluene (Methylbenzene)	108-88-3	5,200	170,000	22,000	730,000	25.1	22.3	<1.88	3.6
1,2,4-Trichlorobenzene	120-82-1	2.1	70	8.8	290	<4.66	<4.66	<4.66	<4.66
1,1,1-Trichloroethane (Methyl chloroform)	71-55-6	5,200	170,000	22,000	730,000	<1.09	<1.09	<1.09	<1.09
1,1,2-Trichloroethane	79-00-5	0.21	7.0	0.88	29	<1.09	<1.09	<1.09	<1.09
Trichloroethylene (TCE) ⁴	79-01-6	2.1	70	8.8	290	<1.07	<1.07	<1.07	<1.07
1,2,4-Trimethylbenzene	95-63-6	63	2,100	260	8,700	42.80	26.40	<0.982	2.12
1,3,5-Trimethylbenzene	108-67-8	63	2,100	260	8,700	10.7	7.51	<0.982	<0.982
2,2,4-Trimethylpentane	540-84-1	NS	NS	NS	NS	4.2	4.44	1.21	<0.934
Vinyl chloride ⁵	75-01-4	1.7	56	28	930	<0.511	<0.511	<0.511	<0.511
Vinyl bromide	593-60-2	1.9	62	8.2	280	<0.875	<0.875	<0.875	<0.875
Vinyl acetate	108-05-4	210	7,000	880	29,000	<0.704	<0.704	<0.704	<0.704
m&p-Xylene ⁶	179601-23-1	100	3,500	440	15,000	24.9	17.7	<1.73	5.38
o-Xylene ⁶	95-47-6	100	3,500	440	15,000	14.2	10.2	<0.867	1.9
1,1-Difluoroethane	75-37-6	42,000	1,400,000	180,000	5,800,000	<2.70	19.2	<2.70	26
1,2,3-Trimethylbenzene	526-73-8	63	2,100	260	8,800	12.6	7.42	<0.982	1.88
Chlorodifluoromethane	75-45-6	52,000	1,700,000	220,000	7,300,000	1.04	4.92	0.948	5.91
Ethyl acetate	141-78-6	73	2,400	310	10,000	<0.720	<0.720	<0.720	<0.720
Methyl cyclohexane	108-87-2	NS	NS	NS	NS	3	3.43	<0.803	79.5
Tert-amyl ethyl ether	919-94-8	NS	NS	NS	NS	<0.951	<0.951	<0.951	<0.951

Notes:

Bold = Detected Concentration

Exceedance

EPA = Environmental Protection Agency

MPCA = Minnesota Pollution Control Agency

ISV = Intrusion Screening Value

VOCs = Volatile Organic Compounds

NE = Not Established

All VAL/VRSL values from USEPA Vapor Intrusion Screening Levels (VISL) calculator