

Kaden Law
ENGR 115
28-Oct-16

Input Parameters:

Measured Coutdoor (ppm)	800
Assumed Coutdoor (ppm)	400
Correction Factor (ppm)	400
Room Volume (ft3)	1287
Room Capacity (people)	2

Calculations:

Air Exchange Rate	0.2591
Time to remove non-reactive chemical (hr)	3.8595
Ventilation Rate (ft3/min/person)	2.7788

Analysis:

Measurement	Time	Concentration(	Concentration	Time (hr)	Coutdoor)/(Co-Coutdoor
0	9:20:57 AM	1625.8	1225.8	0.000	0.000
1	9:21:57 AM	1616.6	1216.6	0.017	0.011
2	9:22:57 AM	1606.8	1206.8	0.033	0.023
3	9:23:57 AM	1595.2	1195.2	0.050	0.038
4	9:24:57 AM	1589.1	1189.1	0.067	0.045
5	9:25:57 AM	1592.2	1192.2	0.083	0.042
6	9:26:57 AM	1594.6	1194.6	0.100	0.039
7	9:27:57 AM	1591	1191	0.117	0.043
8	9:28:57 AM	1582.4	1182.4	0.133	0.054
9	9:29:57 AM	1584.2	1184.2	0.150	0.052
10	9:30:57 AM	1582.4	1182.4	0.167	0.054
11	9:31:57 AM	1584.9	1184.9	0.183	0.051
12	9:32:57 AM	1588.5	1188.5	0.200	0.046
13	9:33:57 AM	1586.7	1186.7	0.217	0.049
14	9:34:57 AM	1573.3	1173.3	0.233	0.066
15	9:35:57 AM	1567.8	1167.8	0.250	0.073
16	9:36:57 AM	1563.5	1163.5	0.267	0.078
17	9:37:57 AM	1563.5	1163.5	0.283	0.078
18	9:38:57 AM	1564.1	1164.1	0.300	0.078
19	9:39:57 AM	1560.4	1160.4	0.317	0.083
20	9:40:57 AM	1553.7	1153.7	0.333	0.091
21	9:41:57 AM	1536	1136	0.350	0.115
22	9:42:57 AM	1534.2	1134.2	0.367	0.118
23	9:43:57 AM	1531.1	1131.1	0.383	0.122
24	9:44:57 AM	1531.7	1131.7	0.400	0.121
25	9:45:57 AM	1531.1	1131.1	0.417	0.122
26	9:46:57 AM	1529.3	1129.3	0.433	0.124
27	9:47:57 AM	1528.7	1128.7	0.450	0.125
28	9:48:57 AM	1523.8	1123.8	0.467	0.132
29	9:49:57 AM	1520.8	1120.8	0.483	0.136
30	9:50:57 AM	1522.6	1122.6	0.500	0.133
31	9:51:57 AM	1522	1122	0.517	0.134
32	9:52:57 AM	1520.8	1120.8	0.533	0.136
33	9:53:57 AM	1520.8	1120.8	0.550	0.136
34	9:54:57 AM	1520.8	1120.8	0.567	0.136
35	9:55:57 AM	1521.4	1121.4	0.583	0.135
36	9:56:57 AM	1522	1122	0.600	0.134
37	9:57:57 AM	1514.7	1114.7	0.617	0.144
38	9:58:57 AM	1511.6	1111.6	0.633	0.149
39	9:59:57 AM	1506.1	1106.1	0.650	0.157
40	10:00:57 AM	1504.3	1104.3	0.667	0.159
41	10:01:57 AM	1504.3	1104.3	0.683	0.159

Concentration Analysis Plot

