

May 5, 2003

RECEIVED
D.E.M. / OMM.

2003 MAY 27 P 12:41

Mr. Alan Sepe
City of Providence
Department of Public Property
City Hall
25 Dorrance Street
Providence, Rhode Island 02903

Subject: Springfield Street School Complex, Providence, Rhode Island

Dear Alan:

On Friday, April 25, 2003 LFR Levine-Fricke (LFR Inc.) conducted additional investigation at the above referenced site in accordance with our proposal dated April 23, 2003. Additional investigation was recommended in the monitoring report and requested by the Rhode Island Department of Environmental Management (RIDEM) in response to the results of the quarterly monitoring conducted in March, 2003. RIDEM personnel conducted monitoring with their own meter on April 24 and 25, 2003.

The scope of work for our investigation of carbon monoxide concentrations included the following:

- Monitored carbon monoxide (CO) concentrations at selected locations inside and outside the middle school and the elementary school located at the Springfield Street School complex (the site).
- Measured CO concentrations at selected locations at the site.
- Reviewed heating, ventilation and air-conditioning (HVAC) plans and performed measurements of air velocity and temperature at selected locations to evaluate if the HVAC system appears to be operating according to design parameters specified.
- Located air intake vents and evaluated their proximity to possible sources of CO.

In addition, we performed additional investigation of elevated methane concentrations at MPL-6. These activities consisted of the following:

- Monitored the concentration of methane at soil gas well MPL-6, the location where elevated methane concentrations were recorded during previous rounds of monitoring.
- Obtained additional information from New England Gas Co. personnel regarding a natural gas leak near MPL-6.

Carbon Monoxide Survey

LFR used five (5) Metrosonics aq-5000 Indoor Air Quality Monitor (aq-5000) with internal datalog capabilities to measure levels of CO, CO₂, temperature and relative humidity. The instruments were placed in the following locations:

- In the front office of the elementary school. This location corresponded to one of the quarterly indoor air monitoring locations. This location was chosen over other potential locations inside the building because the monitor could be observed by office personnel to ensure that it would not be disturbed during the day.
- In front of the elementary school outside adjacent to the pick-up and drop-off location for student bus and automobile transportation. This location was chosen because bus and automobile exhaust is a common source of CO.
- In the front office of the middle school. This location corresponded to one of the quarterly indoor air monitoring locations. This location was chosen over other potential locations inside the building because the monitor could be observed by office personnel to ensure that it would not be disturbed during the day.
- On the side of the middle school adjacent to where the buses drop off and pick up students. This location was chosen because bus and automobile exhaust is a common source of CO. During previous site visits we observed that buses sometimes idled in this location in the afternoon before school let out, and this is considered a potential source of carbon monoxide. After monitoring was completed, the batteries in this meter failed, and the data could not be downloaded.
- One meter was used in a general survey mode to measure CO at various locations inside and outside the schools to determine if there were any areas of elevated CO.

The meters were programmed to measure carbon monoxide readings continuously and record at one minute intervals, and to calculate the minimum, maximum and average concentrations throughout the day. Results of monitoring are presented below:

	Elementary School Main Office	Middle School Main Office	Outside (front) Elementary School	Outside Middle School while buses were present
Minimum CO Concentration (ppm)	0	0	0	0
Maximum CO Concentration (ppm)	10	24	8	5
Average CO Concentration (ppm)	0	0	0	3
Duration of Monitoring (hours:minutes)	6:17	5:53	6:15	0:26

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Duration of Monitoring (hours:minutes)	6:17	5:53	6:15	0:26

Copies of the data sheets from the monitoring are attached.

The readings outside the middle school were collected by LFR representative Paul Keitz, who walked between buses, along the sidewalk adjacent to the buses and stood inside the back main entrance adjacent to where most of the students exited the middle school. These readings should result in higher average concentrations than the meter which monitored this location for the whole day, because the readings were collected only during the time period when the buses were present. We observed that because the weather was warmer than on some previous occasions when we have visited the site, some drivers shut off the bus engines while waiting for the students.

All of the average measured concentrations of CO, based on a sampling time of approximately six (6) hours, were below applicable guidelines and standards as established for occupational exposure and/or general indoor air quality set forth by the following agencies:

1. Occupational Safety and Health Administration (OSHA)
2. American Conference of Governmental Industrial Hygienists (ACGIH)
3. National Institute of Occupational Health and Safety (NIOSH)
4. The American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE)

The average concentrations were well below the action level of 9 ppm set in the Remedial Action Plan for the site.

HVAC System Review

LFR obtained velocity measurements utilizing an Anemometer from the supply and return air conveyance system of both schools. Measurements were obtained from miscellaneous classrooms and common hallway areas. Temperatures ranged between 70°F and 74°F being distributed to the office, classrooms and common areas. Measurements and temperatures obtained appeared to reveal that the HVAC system is functioning properly and in accordance with the original design parameters.

The location of the main fresh air intake vent for the Elementary School is in the rear of the building. This area is not subject to vehicular traffic.

The main fresh air intake vent for the Middle School is located in the courtyard on the north side of the school. The fresh air vent is approximately one hundred (100) feet away from the bus drop-off and pick-up location. There is a small possibility, under some weather conditions, that CO could be mixed with the fresh air for the school.

Mr. Alan Sepe

May 5, 2003

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Methane in the Vicinity of MPL-6

LFR contacted Bob Young of the New England Gas Company to followup on our request for information about the gas lines in the vicinity, and to ask the results of the leak survey that we requested. Mr. Young provided a site plan that indicates that the Middle School is serviced by a plastic service line that enters the site from Springfield Street south of the building, then goes around the south side of the building. The Elementary School is serviced by a plastic line that enters the site north of the building. Both lines are connected to a plastic main in Springfield Street.

Mr. Young reported that the New England Gas Company performed a leak survey and discovered a leak in a cast iron main in Hartford Avenue, adjacent to the driveway from Hartford Avenue to the Middle School. Mr. Young reported that the leak was repaired in early April, and that followup measurements with an LEL (lower explosive level) meter had shown that levels were declining since the repair was made.

On April 25, 2003, we observed a new patch in Hartford Avenue at the entrance to the Middle School parking lot. This patch is within approximately 50 feet of MPL-6. We attached a SKC sampling pump to MPL-6 and evacuated approximately three well volumes. We then measured the concentration of methane using a Landtec GA-90. The methane concentration was 0, carbon dioxide was 6.6%, and oxygen was 5.1%. We believe that the decline in the methane concentration in MPL-6 is an indication that the methane detected at MPL-6 came from the gas line, not from an on-site source.

If you should have any questions and/or concerns please do not hesitate to call.

Sincerely,

A handwritten signature in black ink, appearing to read 'Donna Holden Pallister'.

Donna Holden Pallister, P.E., L.S.P.
Senior Engineer

A handwritten signature in black ink, appearing to read 'Thomas Daley'.

Thomas Daley
Office Manager

Phase 3 CO Monitoring-Elementary School, Inside Main Office

Metrosonics aq-5000 V1.12 SERIAL #2204
REPORT PRINTED ON 4/30/200 at 16:05:29

Filename
Test Location Springfield Street School
Building Elementary School
Room Number Main Office
Department
Conducted By Paul Keitz
Comments CO monitor set up in main office area.

Test Information

CO2 FULL SCALE RANGE 5,000 ppm
INSTRUMENT MODE Data Logging
MEMORY MODE Stop When Full
STORAGE PERIOD 1 minute sample
TEST STARTED ON 4/25/2003 at 8:15:00
TOTAL DURATION 0 DAYS 06:17:00
TOTAL DURATION (in periods) 377

Sensor Calibration Information

CO2

ZERO: 0 ppm 4/23/03 12:13:04
SPAN: 1,000 ppm 4/23/03 12:25:48

CO SN 770776

ZERO: 0 ppm 4/23/03 12:02:33 (aq-5000 2204)
SPAN: 50 ppm 4/23/03 12:16:33 (aq-5000 2204)

Overall Statistics For Test Number 1

CO2

MIN: 545 ppm 4/25/03 08:47:52
AVG: 697 ppm
MAX: 1,387 ppm 4/25/03 11:55:00

R.H.

MIN: 26.2 % 4/25/03 09:13:07
AVG: 30.1 %
MAX: 34.4 % 4/25/03 12:50:37

TEMP

MIN: 67.0 degF 4/25/03 08:15:05
AVG: 71.1 degF
MAX: 72.6 degF 4/25/03 12:50:43

CO

MIN: 0 ppm 4/25/03 08:15:00
AVG: 0 ppm
MAX: 10 ppm 4/25/03 09:20:34

<u>Date And Time</u>	<u>CO2</u> <u>ppm</u>	<u>R.H.</u> <u>%</u>	<u>TEMP</u> <u>degF</u>	<u>CO</u> <u>ppm</u>
<u>Time History Data For Test Number</u>		1		377 Total Periods
4/25/03 08:15:00	624	31.8	67.3	0.00
4/25/03 08:16:00	613	31.3	67.0	0.00
4/25/03 08:17:00	606	31.2	67.2	0.00
4/25/03 08:18:00	600	30.7	67.2	0.00
4/25/03 08:19:00	604	30.7	67.4	0.00
4/25/03 08:20:00	594	30.7	67.4	0.00
4/25/03 08:21:00	598	30.6	67.5	0.00
4/25/03 08:22:00	599	30.4	67.5	0.00
4/25/03 08:23:00	619	30.8	67.8	0.00
4/25/03 08:24:00	620	30.8	67.9	0.00
4/25/03 08:25:00	607	30.5	67.9	0.00
4/25/03 08:26:00	611	30.4	68.0	0.00
4/25/03 08:27:00	605	30.5	68.1	0.00
4/25/03 08:28:00	604	30.3	68.2	0.00
4/25/03 08:29:00	609	30.3	68.2	0.00
4/25/03 08:30:00	598	30.1	68.3	0.00
4/25/03 08:31:00	586	29.9	68.3	0.00
4/25/03 08:32:00	596	29.9	68.3	0.00
4/25/03 08:33:00	596	29.6	68.4	0.00
4/25/03 08:34:00	592	29.6	68.4	0.00
4/25/03 08:35:00	593	30.1	68.5	0.00
4/25/03 08:36:00	600	30.1	68.6	0.00
4/25/03 08:37:00	600	29.8	68.6	0.00
4/25/03 08:38:00	600	30.1	68.7	0.00
4/25/03 08:39:00	601	30.1	68.7	0.00
4/25/03 08:40:00	613	30.3	68.8	0.00
4/25/03 08:41:00	596	29.6	68.8	0.00
4/25/03 08:42:00	589	29.7	68.8	0.00
4/25/03 08:43:00	582	29.5	68.8	0.00
4/25/03 08:44:00	576	29.4	68.9	0.00
4/25/03 08:45:00	570	29.3	68.9	0.00
4/25/03 08:46:00	551	29.2	68.8	0.00
4/25/03 08:47:00	546	29.0	68.8	0.00
4/25/03 08:48:00	556	29.2	68.8	0.00
4/25/03 08:49:00	567	29.4	68.9	0.00
4/25/03 08:50:00	578	29.7	68.9	0.00
4/25/03 08:51:00	585	29.6	68.9	0.00
4/25/03 08:52:00	594	29.7	69.0	0.00
4/25/03 08:53:00	604	29.3	69.0	0.00
4/25/03 08:54:00	609	29.5	69.0	0.00
4/25/03 08:55:00	620	29.6	69.0	0.00
4/25/03 08:56:00	642	30.2	69.1	0.00
4/25/03 08:57:00	702	30.8	69.2	0.00
4/25/03 08:58:00	736	31.0	69.3	0.00
4/25/03 08:59:00	751	30.8	69.3	0.00
4/25/03 09:00:00	775	30.9	69.4	0.00
4/25/03 09:01:00	766	30.9	69.4	0.00
4/25/03 09:02:00	767	30.5	69.5	0.00
4/25/03 09:03:00	765	30.5	69.5	0.00
4/25/03 09:04:00	760	30.2	69.5	0.00
4/25/03 09:05:00	758	30.3	69.5	0.00
4/25/03 09:06:00	736	29.7	69.6	0.00
4/25/03 09:07:00	703	28.8	69.5	0.00
4/25/03 09:08:00	673	28.4	69.5	0.00
4/25/03 09:09:00	652	27.0	69.3	0.00
4/25/03 09:10:00	635	26.3	69.3	0.00
4/25/03 09:11:00	625	26.4	69.4	0.00
4/25/03 09:12:00	613	26.2	69.4	0.00
4/25/03 09:13:00	618	26.5	69.4	0.00
4/25/03 09:14:00	662	28.9	69.4	0.00

<u>Date And Time</u>	CO2 <u>ppm</u>	R.H. <u>%</u>	TEMP <u>degF</u>	CO <u>ppm</u>
4/25/03 09:15:00	674	28.3	69.4	0.00
4/25/03 09:16:00	689	29.1	69.4	0.00
4/25/03 09:17:00	706	29.2	69.5	0.00
4/25/03 09:18:00	710	29.1	69.5	0.00
4/25/03 09:19:00	713	29.0	69.6	0.00
4/25/03 09:20:00	718	29.4	69.7	0.00
4/25/03 09:21:00	722	29.3	69.7	0.00
4/25/03 09:22:00	733	29.5	69.7	0.00
4/25/03 09:23:00	742	29.5	69.8	0.00
4/25/03 09:24:00	737	29.5	69.8	0.00
4/25/03 09:25:00	757	29.7	69.9	0.00
4/25/03 09:26:00	783	29.9	69.9	0.00
4/25/03 09:27:00	772	29.5	70.0	0.00
4/25/03 09:28:00	799	29.8	70.0	0.00
4/25/03 09:29:00	818	29.9	70.1	0.00
4/25/03 09:30:00	811	29.9	70.1	0.00
4/25/03 09:31:00	812	29.9	70.2	0.00
4/25/03 09:32:00	809	29.8	70.2	0.00
4/25/03 09:33:00	802	30.1	70.3	0.00
4/25/03 09:34:00	804	30.0	70.3	0.00
4/25/03 09:35:00	811	30.2	70.3	0.00
4/25/03 09:36:00	820	30.3	70.3	0.00
4/25/03 09:37:00	820	30.5	70.3	0.00
4/25/03 09:38:00	815	30.5	70.4	0.00
4/25/03 09:39:00	801	30.1	70.4	0.00
4/25/03 09:40:00	792	30.2	70.4	0.00
4/25/03 09:41:00	780	29.9	70.4	0.00
4/25/03 09:42:00	829	29.9	71.1	0.00
4/25/03 09:43:00	796	30.3	71.1	0.00
4/25/03 09:44:00	818	30.4	71.0	0.00
4/25/03 09:45:00	822	30.2	71.1	0.00
4/25/03 09:46:00	820	30.2	71.1	0.00
4/25/03 09:47:00	812	30.0	71.1	0.00
4/25/03 09:48:00	802	29.9	71.1	0.00
4/25/03 09:49:00	794	29.9	71.1	0.00
4/25/03 09:50:00	785	29.7	71.1	0.00
4/25/03 09:51:00	784	29.8	71.1	0.00
4/25/03 09:52:00	774	29.4	71.0	0.00
4/25/03 09:53:00	796	29.5	71.1	0.00
4/25/03 09:54:00	786	29.6	71.1	0.00
4/25/03 09:55:00	789	29.6	71.1	0.00
4/25/03 09:56:00	773	29.7	71.1	0.00
4/25/03 09:57:00	790	29.8	71.1	0.00
4/25/03 09:58:00	789	29.9	71.1	0.00
4/25/03 09:59:00	795	29.7	71.1	0.00
4/25/03 10:00:00	774	29.5	71.1	0.00
4/25/03 10:01:00	784	29.3	71.1	0.00
4/25/03 10:02:00	785	29.4	71.1	0.00
4/25/03 10:03:00	780	29.3	71.1	0.00
4/25/03 10:04:00	763	29.0	71.1	0.00
4/25/03 10:05:00	750	28.9	71.3	0.00
4/25/03 10:06:00	774	28.9	71.3	0.00
4/25/03 10:07:00	778	29.0	71.3	0.00
4/25/03 10:08:00	763	28.8	71.3	0.00
4/25/03 10:09:00	768	29.0	71.3	0.00
4/25/03 10:10:00	757	29.1	71.3	0.00
4/25/03 10:11:00	744	28.8	71.3	0.00
4/25/03 10:12:00	726	28.4	71.3	0.00
4/25/03 10:13:00	723	28.4	71.3	0.00
4/25/03 10:14:00	720	28.3	71.2	0.00
4/25/03 10:15:00	722	28.4	71.3	0.00
4/25/03 10:16:00	712	28.4	71.3	0.00

<u>Date And Time</u>	CO2 <u>ppm</u>	R.H. <u>%</u>	TEMP <u>degF</u>	CO <u>ppm</u>
4/25/03 10:17:00	737	28.8	71.4	0.00
4/25/03 10:18:00	729	28.9	71.3	0.00
4/25/03 10:19:00	748	28.9	71.4	0.00
4/25/03 10:20:00	756	29.0	71.4	0.00
4/25/03 10:21:00	855	29.7	71.7	0.00
4/25/03 10:22:00	799	29.2	71.6	0.00
4/25/03 10:23:00	788	29.2	71.5	0.00
4/25/03 10:24:00	796	29.2	71.4	0.00
4/25/03 10:25:00	787	29.1	71.4	0.00
4/25/03 10:26:00	795	29.3	71.4	0.00
4/25/03 10:27:00	787	29.3	71.4	0.00
4/25/03 10:28:00	797	29.4	71.3	0.00
4/25/03 10:29:00	792	29.3	71.4	0.00
4/25/03 10:30:00	780	29.1	71.4	0.00
4/25/03 10:31:00	775	29.0	71.4	0.00
4/25/03 10:32:00	775	29.1	71.4	0.00
4/25/03 10:33:00	772	28.8	71.4	0.00
4/25/03 10:34:00	763	28.8	71.4	0.00
4/25/03 10:35:00	760	28.9	71.4	0.00
4/25/03 10:36:00	756	28.9	71.3	0.00
4/25/03 10:37:00	749	28.7	71.3	0.00
4/25/03 10:38:00	738	28.2	71.3	0.00
4/25/03 10:39:00	749	28.6	71.3	0.00
4/25/03 10:40:00	751	28.5	71.3	0.00
4/25/03 10:41:00	755	28.8	71.4	0.00
4/25/03 10:42:00	768	29.1	71.3	0.00
4/25/03 10:43:00	760	29.1	71.3	0.00
4/25/03 10:44:00	768	29.2	71.4	0.00
4/25/03 10:45:00	781	29.4	71.4	0.00
4/25/03 10:46:00	778	29.3	71.4	0.00
4/25/03 10:47:00	774	29.3	71.3	0.00
4/25/03 10:48:00	778	29.3	71.3	0.00
4/25/03 10:49:00	779	29.4	71.4	0.00
4/25/03 10:50:00	774	29.4	71.4	0.00
4/25/03 10:51:00	765	29.2	71.4	0.00
4/25/03 10:52:00	756	28.8	71.4	0.00
4/25/03 10:53:00	753	29.0	71.4	0.00
4/25/03 10:54:00	735	28.8	71.4	0.00
4/25/03 10:55:00	728	28.6	71.6	0.00
4/25/03 10:56:00	732	28.6	71.5	0.00
4/25/03 10:57:00	725	28.6	71.7	0.00
4/25/03 10:58:00	731	28.9	71.6	0.00
4/25/03 10:59:00	730	28.8	71.5	0.00
4/25/03 11:00:00	719	28.4	71.5	0.00
4/25/03 11:01:00	710	28.6	71.4	0.00
4/25/03 11:02:00	714	28.6	71.5	0.00
4/25/03 11:03:00	713	28.3	71.5	0.00
4/25/03 11:04:00	710	28.2	71.5	0.00
4/25/03 11:05:00	715	28.6	71.5	0.00
4/25/03 11:06:00	714	28.7	71.5	0.00
4/25/03 11:07:00	716	28.8	71.5	0.00
4/25/03 11:08:00	725	29.0	71.5	0.00
4/25/03 11:09:00	710	28.7	71.5	0.00
4/25/03 11:10:00	719	28.9	71.5	0.00
4/25/03 11:11:00	725	29.0	71.5	0.00
4/25/03 11:12:00	727	29.1	71.6	0.00
4/25/03 11:13:00	723	29.0	71.6	0.00
4/25/03 11:14:00	726	29.3	71.6	0.00
4/25/03 11:15:00	732	29.2	71.6	0.00
4/25/03 11:16:00	745	29.2	71.6	0.00
4/25/03 11:17:00	732	29.2	71.6	0.00
4/25/03 11:18:00	719	29.0	71.6	0.00

<u>Date And Time</u>	<u>CO2</u> <u>ppm</u>	<u>R.H.</u> <u>%</u>	<u>TEMP</u> <u>degF</u>	<u>CO</u> <u>ppm</u>
4/25/03 12:21:00	712	30.8	71.8	0.00
4/25/03 12:22:00	709	30.8	71.8	0.00
4/25/03 12:23:00	711	31.0	71.8	0.00
4/25/03 12:24:00	721	31.0	71.8	0.00
4/25/03 12:25:00	713	30.7	71.7	0.00
4/25/03 12:26:00	710	30.5	71.8	0.00
4/25/03 12:27:00	710	30.4	71.8	0.00
4/25/03 12:28:00	726	30.9	71.9	0.00
4/25/03 12:29:00	725	30.9	71.9	0.00
4/25/03 12:30:00	729	30.8	71.9	0.00
4/25/03 12:31:00	736	30.6	71.9	0.00
4/25/03 12:32:00	731	30.6	71.9	0.00
4/25/03 12:33:00	734	30.7	71.9	0.00
4/25/03 12:34:00	723	30.6	71.9	0.00
4/25/03 12:35:00	726	30.7	71.9	0.00
4/25/03 12:36:00	737	31.0	71.9	0.00
4/25/03 12:37:00	737	31.1	71.9	0.00
4/25/03 12:38:00	757	31.2	71.9	0.00
4/25/03 12:39:00	755	31.2	71.9	0.00
4/25/03 12:40:00	764	31.3	71.9	0.00
4/25/03 12:41:00	757	31.0	71.9	0.00
4/25/03 12:42:00	755	31.1	71.9	0.00
4/25/03 12:43:00	773	31.0	71.9	0.00
4/25/03 12:44:00	774	31.6	71.9	0.00
4/25/03 12:45:00	769	31.7	71.9	0.00
4/25/03 12:46:00	764	31.5	71.9	0.00
4/25/03 12:47:00	757	31.5	71.9	0.00
4/25/03 12:48:00	743	31.7	71.9	0.00
4/25/03 12:49:00	736	31.7	71.9	0.00
4/25/03 12:50:00	851	32.8	72.2	0.00
4/25/03 12:51:00	754	31.8	72.1	0.00
4/25/03 12:52:00	742	31.5	72.0	0.00
4/25/03 12:53:00	741	31.6	72.0	0.00
4/25/03 12:54:00	737	31.6	72.0	0.00
4/25/03 12:55:00	723	31.6	72.0	0.00
4/25/03 12:56:00	712	31.6	72.0	0.00
4/25/03 12:57:00	718	31.6	72.0	0.00
4/25/03 12:58:00	714	31.6	72.0	0.00
4/25/03 12:59:00	713	31.7	72.0	0.00
4/25/03 13:00:00	712	31.7	72.0	0.00
4/25/03 13:01:00	713	31.7	72.0	0.00
4/25/03 13:02:00	713	31.8	72.0	0.00
4/25/03 13:03:00	707	31.8	72.0	0.00
4/25/03 13:04:00	699	31.7	72.0	0.00
4/25/03 13:05:00	701	31.8	72.0	0.00
4/25/03 13:06:00	695	31.6	72.0	0.00
4/25/03 13:07:00	686	31.4	72.0	0.00
4/25/03 13:08:00	685	31.4	72.0	0.00
4/25/03 13:09:00	675	31.6	72.0	0.00
4/25/03 13:10:00	668	31.6	71.9	0.00
4/25/03 13:11:00	668	31.3	71.9	0.00
4/25/03 13:12:00	671	31.4	72.0	0.00
4/25/03 13:13:00	673	31.4	72.0	0.00
4/25/03 13:14:00	678	31.6	72.0	0.00
4/25/03 13:15:00	678	31.8	72.0	0.00
4/25/03 13:16:00	674	31.5	72.0	0.00
4/25/03 13:17:00	661	31.2	72.0	0.00
4/25/03 13:18:00	650	31.0	72.0	0.00
4/25/03 13:19:00	646	31.3	72.0	0.00
4/25/03 13:20:00	652	31.4	72.0	0.00
4/25/03 13:21:00	651	31.7	72.0	0.00
4/25/03 13:22:00	646	31.6	72.0	0.00

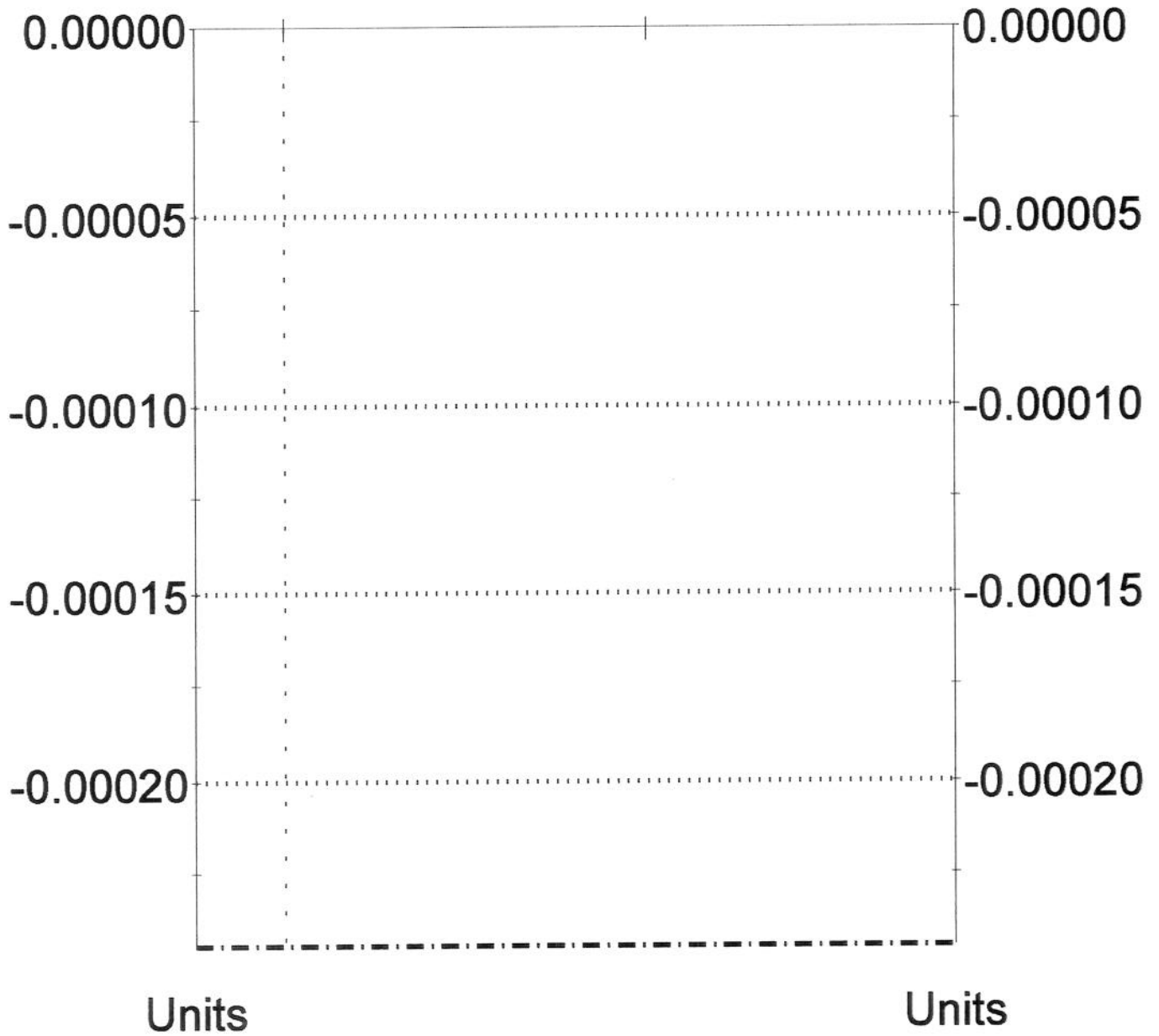
<u>Date And Time</u>	<u>CO2</u> <u>ppm</u>	<u>R.H.</u> <u>%</u>	<u>TEMP</u> <u>degF</u>	<u>CO</u> <u>ppm</u>
4/25/03 13:23:00	647	31.4	72.0	0.00
4/25/03 13:24:00	646	31.8	72.0	0.00
4/25/03 13:25:00	643	31.7	72.0	0.00
4/25/03 13:26:00	640	31.7	72.0	0.00
4/25/03 13:27:00	631	31.3	72.0	0.00
4/25/03 13:28:00	622	31.4	72.0	0.00
4/25/03 13:29:00	628	31.2	72.0	0.00
4/25/03 13:30:00	626	31.3	71.9	0.00
4/25/03 13:31:00	649	31.7	72.0	0.00
4/25/03 13:32:00	641	31.5	72.0	0.00
4/25/03 13:33:00	642	31.4	72.0	0.00
4/25/03 13:34:00	622	31.6	72.0	0.00
4/25/03 13:35:00	619	31.6	72.0	0.00
4/25/03 13:36:00	620	31.2	72.0	0.00
4/25/03 13:37:00	617	31.4	72.0	0.00
4/25/03 13:38:00	610	31.4	72.0	0.00
4/25/03 13:39:00	613	31.4	72.0	0.00
4/25/03 13:40:00	611	31.7	72.0	0.00
4/25/03 13:41:00	609	31.6	72.0	0.00
4/25/03 13:42:00	612	31.5	72.0	0.00
4/25/03 13:43:00	613	31.4	72.0	0.00
4/25/03 13:44:00	611	31.4	72.0	0.00
4/25/03 13:45:00	600	31.3	71.9	0.00
4/25/03 13:46:00	602	31.4	72.0	0.00
4/25/03 13:47:00	616	31.4	72.0	0.00
4/25/03 13:48:00	620	31.3	72.0	0.00
4/25/03 13:49:00	641	31.6	72.0	0.00
4/25/03 13:50:00	666	31.9	72.0	0.00
4/25/03 13:51:00	675	32.0	72.0	0.00
4/25/03 13:52:00	659	31.6	72.0	0.00
4/25/03 13:53:00	631	30.9	72.0	0.00
4/25/03 13:54:00	622	30.9	72.0	0.00
4/25/03 13:55:00	632	31.2	72.0	0.00
4/25/03 13:56:00	638	31.3	72.0	0.00
4/25/03 13:57:00	605	30.4	72.0	0.00
4/25/03 13:58:00	601	31.2	72.0	0.00
4/25/03 13:59:00	607	31.1	72.0	0.00
4/25/03 14:00:00	591	30.8	72.0	0.00
4/25/03 14:01:00	596	30.6	72.0	0.00
4/25/03 14:02:00	597	30.7	72.0	0.00
4/25/03 14:03:00	610	31.2	72.0	0.00
4/25/03 14:04:00	605	31.1	72.0	0.00
4/25/03 14:05:00	613	31.4	72.0	0.00
4/25/03 14:06:00	606	30.8	72.0	0.00
4/25/03 14:07:00	602	31.0	72.0	0.00
4/25/03 14:08:00	591	30.8	72.0	0.00
4/25/03 14:09:00	586	30.5	72.0	0.00
4/25/03 14:10:00	575	30.5	72.0	0.00
4/25/03 14:11:00	598	30.9	72.0	0.00
4/25/03 14:12:00	601	31.3	72.0	0.00
4/25/03 14:13:00	609	31.3	72.0	0.00
4/25/03 14:14:00	603	30.8	72.0	0.00
4/25/03 14:15:00	612	31.3	72.0	0.00
4/25/03 14:16:00	622	31.5	72.0	0.00
4/25/03 14:17:00	620	31.3	72.0	0.00
4/25/03 14:18:00	610	31.3	72.0	0.00
4/25/03 14:19:00	613	31.5	72.0	0.00
4/25/03 14:20:00	607	30.9	72.0	0.00
4/25/03 14:21:00	615	31.4	72.0	0.00
4/25/03 14:22:00	622	31.7	72.1	0.00
4/25/03 14:23:00	639	32.0	72.1	0.00
4/25/03 14:24:00	645	31.9	72.1	0.00

<u>Date And Time</u>	<u>CO2</u> <u>ppm</u>	<u>R.H.</u> <u>%</u>	<u>TEMP</u> <u>degF</u>	<u>CO</u> <u>ppm</u>
4/25/03 14:25:00	652	32.0	72.1	0.00
4/25/03 14:26:00	654	31.9	72.1	0.00
4/25/03 14:27:00	649	31.9	72.1	0.00
4/25/03 14:28:00	615	31.3	72.1	0.00
4/25/03 14:29:00	607	31.4	72.1	0.00
4/25/03 14:30:00	602	31.3	72.1	0.00
4/25/03 14:31:00	843	32.1	72.4	0.00

Phase 3 CO Monitoring-Elementary School, Inside Main Office

Date/Time

04/25/03 09:00:00



-- CO

Phase 3 CO monitoring-Inside Middle School

Metrosonics aq-5000 V1.12 SERIAL #2191
REPORT PRINTED ON 4/30/200 at 15:59:14

Filename
Test Location Springfield Street School
Building Middle School
Room Number Main Office
Department
Conducted By Paul Keitz
Comments

Test Information

CO2 FULL SCALE RANGE 5,000 ppm
INSTRUMENT MODE Data Logging
MEMORY MODE Stop When Full
STORAGE PERIOD 1 minute sample
TEST STARTED ON 4/25/20 at 8:44:00
TOTAL DURATION 0 DAYS 05:53:00
TOTAL DURATION (in periods) 353

Sensor Calibration Information

CO2

ZERO: 0 ppm 4/23/03 14:11:08
SPAN: 1,000 ppm 4/23/03 14:24:00

CO SN 774137

ZERO: 0 ppm 4/23/03 14:03:57 (aq-5000 2191)
SPAN: 50 ppm 4/23/03 14:17:58 (aq-5000 2191)

Overall Statistics For Test Number 1

CO2

MIN: 548 ppm 4/25/03 12:11:41
AVG: 706 ppm
MAX: 2,075 ppm 4/25/03 09:36:53

R.H.

MIN: 22.8 % 4/25/03 09:17:19
AVG: 26.3 %
MAX: 38.0 % 4/25/03 08:44:36

TEMP

MIN: 67.0 degF 4/25/03 08:44:00
AVG: 75.1 degF
MAX: 78.5 degF 4/25/03 09:21:07

CO

MIN: 0 ppm 4/25/03 08:44:00
AVG: 0 ppm
MAX: 24 ppm 4/25/03 13:50:58

<u>Date And Time</u>	<u>CO2</u> <u>ppm</u>	<u>R.H.</u> <u>%</u>	<u>TEMP</u> <u>degF</u>	<u>CO</u> <u>ppm</u>
<u>Time History Data For Test Number</u>		1		353 Total Periods
4/25/03 08:44:00	1,006	33.6	69.5	0.00
4/25/03 08:45:00	911	30.7	70.7	0.00
4/25/03 08:46:00	852	28.5	71.9	0.00
4/25/03 08:47:00	815	27.4	72.5	0.00
4/25/03 08:48:00	811	26.9	72.9	0.00
4/25/03 08:49:00	804	26.4	73.9	0.00
4/25/03 08:50:00	806	26.1	74.4	0.00
4/25/03 08:51:00	785	25.5	74.9	0.00
4/25/03 08:52:00	777	25.0	75.0	0.00
4/25/03 08:53:00	778	24.8	75.4	0.00
4/25/03 08:54:00	765	24.5	75.6	0.00
4/25/03 08:55:00	770	24.5	75.3	0.00
4/25/03 08:56:00	768	24.5	75.4	0.00
4/25/03 08:57:00	769	24.5	75.8	0.00
4/25/03 08:58:00	792	24.7	75.8	0.00
4/25/03 08:59:00	780	24.5	75.9	0.00
4/25/03 09:00:00	793	24.6	76.2	0.00
4/25/03 09:01:00	803	24.3	76.5	0.00
4/25/03 09:02:00	776	24.0	76.5	0.00
4/25/03 09:03:00	758	23.7	76.7	0.00
4/25/03 09:04:00	772	23.8	76.7	0.00
4/25/03 09:05:00	752	23.4	77.1	0.00
4/25/03 09:06:00	784	23.7	76.6	0.00
4/25/03 09:07:00	770	23.6	77.1	0.00
4/25/03 09:08:00	760	23.2	77.5	0.00
4/25/03 09:09:00	786	23.4	77.3	0.00
4/25/03 09:10:00	788	23.3	77.4	0.00
4/25/03 09:11:00	806	23.5	77.4	0.00
4/25/03 09:12:00	773	23.2	77.7	0.00
4/25/03 09:13:00	773	23.1	77.8	0.00
4/25/03 09:14:00	775	23.1	78.0	0.00
4/25/03 09:15:00	768	22.9	78.0	0.00
4/25/03 09:16:00	765	22.8	78.1	0.00
4/25/03 09:17:00	785	23.2	77.9	0.00
4/25/03 09:18:00	789	23.2	78.0	0.00
4/25/03 09:19:00	797	23.4	78.0	0.00
4/25/03 09:20:00	811	23.3	78.3	0.00
4/25/03 09:21:00	792	23.0	78.4	0.00
4/25/03 09:22:00	783	23.0	78.1	0.00
4/25/03 09:23:00	783	23.1	77.9	0.00
4/25/03 09:24:00	800	23.6	77.5	0.00
4/25/03 09:25:00	799	23.8	77.7	0.00
4/25/03 09:26:00	814	23.7	77.6	0.00
4/25/03 09:27:00	819	23.8	77.2	0.00
4/25/03 09:28:00	802	23.8	77.3	0.00
4/25/03 09:29:00	795	23.8	77.2	0.00
4/25/03 09:30:00	782	23.8	77.1	0.00
4/25/03 09:31:00	776	23.9	77.0	0.00
4/25/03 09:32:00	767	23.8	76.8	0.00
4/25/03 09:33:00	772	23.9	76.7	0.00
4/25/03 09:34:00	771	24.1	76.7	0.00
4/25/03 09:35:00	1,288	26.6	76.1	0.00
4/25/03 09:36:00	1,703	26.3	76.3	0.00
4/25/03 09:37:00	1,295	25.5	76.5	0.00
4/25/03 09:38:00	919	24.6	76.3	0.00
4/25/03 09:39:00	832	24.4	76.0	0.00
4/25/03 09:40:00	786	24.3	75.8	0.00
4/25/03 09:41:00	775	24.5	75.5	0.00
4/25/03 09:42:00	778	24.7	75.8	0.00
4/25/03 09:43:00	758	24.6	75.8	0.00

<u>Date And Time</u>	CO2 <u>ppm</u>	R.H. <u>%</u>	TEMP <u>degF</u>	CO <u>ppm</u>
4/25/03 09:44:00	755	24.5	75.6	0.00
4/25/03 09:45:00	753	24.5	75.7	0.00
4/25/03 09:46:00	746	24.5	75.6	0.00
4/25/03 09:47:00	734	24.4	75.6	0.00
4/25/03 09:48:00	726	24.4	75.5	0.00
4/25/03 09:49:00	728	24.5	75.4	0.00
4/25/03 09:50:00	724	24.4	75.5	0.00
4/25/03 09:51:00	715	24.3	75.3	0.00
4/25/03 09:52:00	719	24.4	75.4	0.00
4/25/03 09:53:00	715	24.5	75.4	0.00
4/25/03 09:54:00	727	24.6	75.5	0.00
4/25/03 09:55:00	748	24.7	75.8	0.00
4/25/03 09:56:00	745	24.7	75.9	0.00
4/25/03 09:57:00	725	24.3	75.7	0.00
4/25/03 09:58:00	757	24.6	76.0	0.00
4/25/03 09:59:00	751	24.4	76.0	0.00
4/25/03 10:00:00	739	24.5	75.9	0.00
4/25/03 10:01:00	737	24.4	75.8	0.00
4/25/03 10:02:00	731	24.4	75.8	0.00
4/25/03 10:03:00	746	24.7	75.7	0.00
4/25/03 10:04:00	744	24.7	75.6	0.00
4/25/03 10:05:00	741	24.5	75.4	0.00
4/25/03 10:06:00	752	24.7	75.5	0.00
4/25/03 10:07:00	759	24.8	75.6	0.00
4/25/03 10:08:00	753	24.7	75.6	0.00
4/25/03 10:09:00	749	24.7	75.4	0.00
4/25/03 10:10:00	751	24.8	75.5	0.00
4/25/03 10:11:00	749	24.8	75.4	0.00
4/25/03 10:12:00	752	24.9	75.3	0.00
4/25/03 10:13:00	748	24.9	75.4	0.00
4/25/03 10:14:00	741	24.9	75.4	0.00
4/25/03 10:15:00	944	26.7	75.4	0.00
4/25/03 10:16:00	807	24.9	75.4	0.00
4/25/03 10:17:00	748	24.8	75.3	0.00
4/25/03 10:18:00	731	24.7	75.3	0.00
4/25/03 10:19:00	732	24.8	75.3	0.00
4/25/03 10:20:00	734	24.8	75.2	0.00
4/25/03 10:21:00	737	25.0	74.9	0.00
4/25/03 10:22:00	737	25.0	75.2	0.00
4/25/03 10:23:00	730	25.0	75.3	0.00
4/25/03 10:24:00	719	24.9	75.1	0.00
4/25/03 10:25:00	724	24.9	75.1	0.00
4/25/03 10:26:00	711	24.9	75.1	0.00
4/25/03 10:27:00	702	24.8	75.2	0.00
4/25/03 10:28:00	707	24.9	75.1	0.00
4/25/03 10:29:00	705	25.0	75.1	0.00
4/25/03 10:30:00	703	25.0	75.1	0.00
4/25/03 10:31:00	701	25.0	75.1	0.00
4/25/03 10:32:00	699	25.0	75.1	0.00
4/25/03 10:33:00	698	25.1	75.1	0.00
4/25/03 10:34:00	694	24.9	74.9	0.00
4/25/03 10:35:00	694	25.0	75.0	0.00
4/25/03 10:36:00	704	25.1	75.1	0.00
4/25/03 10:37:00	698	25.1	75.1	0.00
4/25/03 10:38:00	690	25.0	75.1	0.00
4/25/03 10:39:00	687	25.0	75.0	0.00
4/25/03 10:40:00	686	25.1	74.9	0.00
4/25/03 10:41:00	682	25.0	74.8	0.00
4/25/03 10:42:00	679	25.0	74.9	0.00
4/25/03 10:43:00	683	25.1	74.6	0.00
4/25/03 10:44:00	693	25.3	74.9	0.00
4/25/03 10:45:00	692	25.3	74.8	0.00

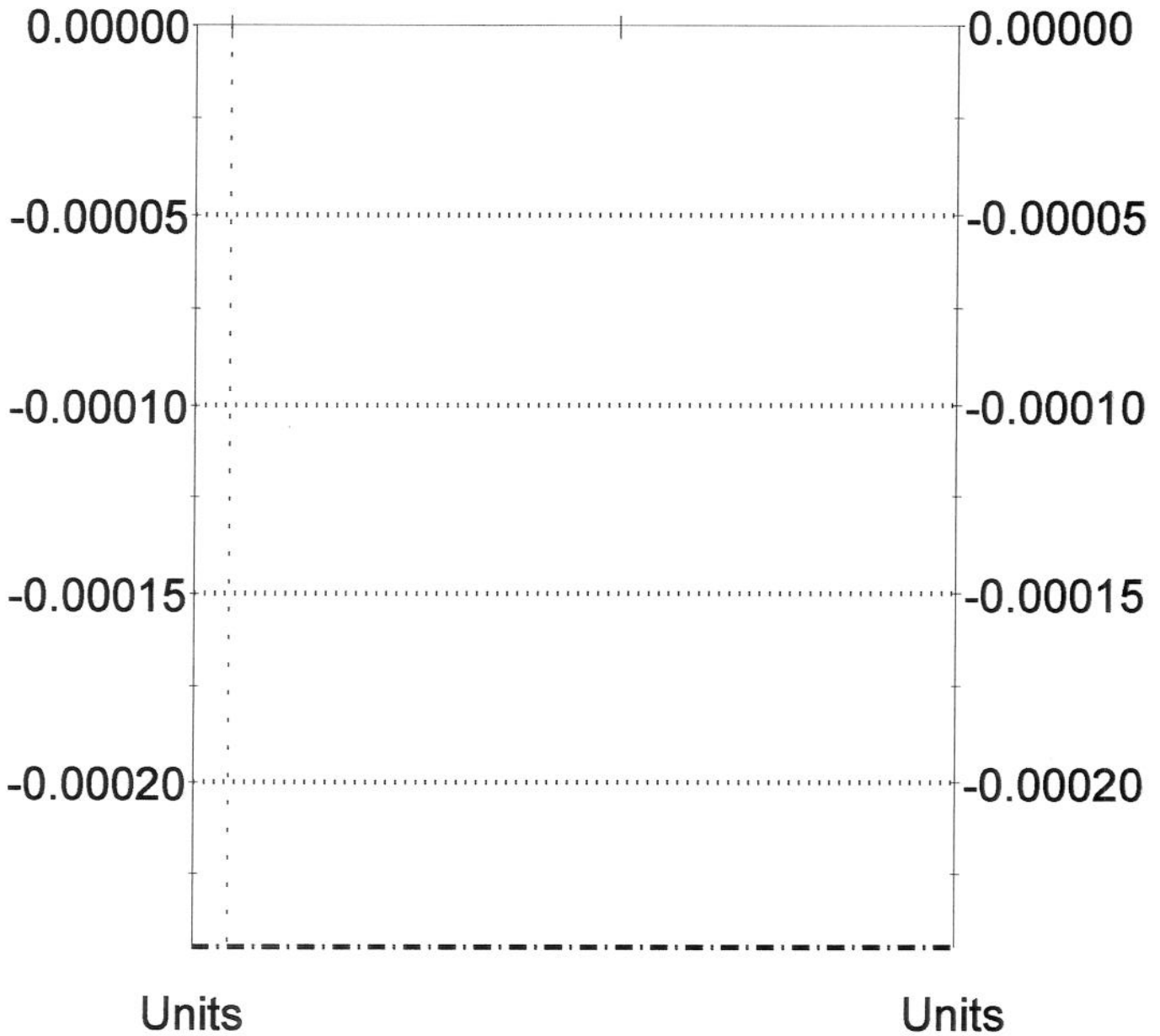
<u>Date And Time</u>	<u>CO2</u> <u>ppm</u>	<u>R.H.</u> <u>%</u>	<u>TEMP</u> <u>degF</u>	<u>CO</u> <u>ppm</u>
4/25/03 10:46:00	714	25.5	74.9	0.00
4/25/03 10:47:00	709	25.4	74.9	0.00
4/25/03 10:48:00	707	25.3	74.9	0.00
4/25/03 10:49:00	711	25.4	74.9	0.00
4/25/03 10:50:00	760	25.6	75.1	0.00
4/25/03 10:51:00	748	25.6	75.1	0.00
4/25/03 10:52:00	742	25.5	75.0	0.00
4/25/03 10:53:00	736	25.2	74.8	0.00
4/25/03 10:54:00	740	25.3	74.9	0.00
4/25/03 10:55:00	738	25.5	74.9	0.00
4/25/03 10:56:00	740	25.5	75.0	0.00
4/25/03 10:57:00	741	25.5	74.8	0.00
4/25/03 10:58:00	733	25.5	75.0	0.00
4/25/03 10:59:00	731	25.5	74.9	0.00
4/25/03 11:00:00	721	25.6	75.0	0.00
4/25/03 11:01:00	721	25.5	74.8	0.00
4/25/03 11:02:00	714	25.5	74.9	0.00
4/25/03 11:03:00	715	25.6	74.4	0.00
4/25/03 11:04:00	711	25.7	74.8	0.00
4/25/03 11:05:00	705	25.7	74.6	0.00
4/25/03 11:06:00	714	25.8	74.8	0.00
4/25/03 11:07:00	695	25.6	74.8	0.00
4/25/03 11:08:00	689	25.7	74.8	0.00
4/25/03 11:09:00	678	25.7	74.8	0.00
4/25/03 11:10:00	676	25.7	74.8	0.00
4/25/03 11:11:00	673	25.7	74.8	0.00
4/25/03 11:12:00	665	25.7	74.7	0.00
4/25/03 11:13:00	659	25.7	75.0	0.00
4/25/03 11:14:00	675	25.8	75.1	0.00
4/25/03 11:15:00	685	25.8	75.3	0.00
4/25/03 11:16:00	685	25.5	75.3	0.00
4/25/03 11:17:00	670	25.7	75.4	0.00
4/25/03 11:18:00	665	25.6	75.2	0.00
4/25/03 11:19:00	677	25.8	75.4	0.00
4/25/03 11:20:00	680	25.8	75.3	0.00
4/25/03 11:21:00	659	25.8	75.4	0.00
4/25/03 11:22:00	644	25.6	75.3	0.00
4/25/03 11:23:00	636	25.6	75.3	0.00
4/25/03 11:24:00	636	25.7	75.3	0.00
4/25/03 11:25:00	635	25.7	75.3	0.00
4/25/03 11:26:00	633	25.7	75.3	0.00
4/25/03 11:27:00	635	25.7	75.2	0.00
4/25/03 11:28:00	640	25.9	75.2	0.00
4/25/03 11:29:00	639	25.9	75.1	0.00
4/25/03 11:30:00	637	25.9	75.1	0.00
4/25/03 11:31:00	636	25.9	75.1	0.00
4/25/03 11:32:00	645	26.1	75.1	0.00
4/25/03 11:33:00	650	26.0	75.0	0.00
4/25/03 11:34:00	657	26.1	75.0	0.00
4/25/03 11:35:00	654	26.0	75.1	0.00
4/25/03 11:36:00	650	26.4	75.0	0.00
4/25/03 11:37:00	664	26.4	74.9	0.00
4/25/03 11:38:00	646	26.2	74.8	0.00
4/25/03 11:39:00	644	26.2	74.4	0.00
4/25/03 11:40:00	624	26.2	74.9	0.00
4/25/03 11:41:00	616	26.1	74.7	0.00
4/25/03 11:42:00	611	26.2	74.9	0.00
4/25/03 11:43:00	606	26.2	74.9	0.00
4/25/03 11:44:00	602	26.2	74.8	0.00
4/25/03 11:45:00	598	26.2	74.8	0.00
4/25/03 11:46:00	594	26.2	74.8	0.00
4/25/03 11:47:00	592	26.1	74.8	0.00

<u>Date And Time</u>	<u>CO2</u> <u>ppm</u>	<u>R.H.</u> <u>%</u>	<u>TEMP</u> <u>degF</u>	<u>CO</u> <u>ppm</u>
4/25/03 12:50:00	593	27.0	74.3	0.00
4/25/03 12:51:00	603	27.2	74.1	0.00
4/25/03 12:52:00	592	27.1	74.2	0.00
4/25/03 12:53:00	596	27.1	74.3	0.00
4/25/03 12:54:00	601	27.2	73.8	0.00
4/25/03 12:55:00	725	28.1	74.4	0.00
4/25/03 12:56:00	624	27.3	74.1	0.00
4/25/03 12:57:00	617	27.3	74.3	0.00
4/25/03 12:58:00	621	27.4	74.6	0.00
4/25/03 12:59:00	624	27.2	74.9	0.00
4/25/03 13:00:00	625	27.0	75.0	0.00
4/25/03 13:01:00	625	26.9	75.1	0.00
4/25/03 13:02:00	623	26.9	75.1	0.00
4/25/03 13:03:00	634	27.0	75.2	0.00
4/25/03 13:04:00	624	26.9	75.2	0.00
4/25/03 13:05:00	628	26.9	75.1	0.00
4/25/03 13:06:00	633	27.0	75.2	0.00
4/25/03 13:07:00	637	27.1	75.1	0.00
4/25/03 13:08:00	641	27.2	75.1	0.00
4/25/03 13:09:00	648	27.2	75.1	0.00
4/25/03 13:10:00	660	27.3	75.0	0.00
4/25/03 13:11:00	661	27.4	75.0	0.00
4/25/03 13:12:00	659	27.4	74.9	0.00
4/25/03 13:13:00	663	27.4	74.8	0.00
4/25/03 13:14:00	681	27.6	74.8	0.00
4/25/03 13:15:00	668	27.5	74.9	0.00
4/25/03 13:16:00	667	27.6	74.8	0.00
4/25/03 13:17:00	669	27.7	74.7	0.00
4/25/03 13:18:00	666	27.6	74.7	0.00
4/25/03 13:19:00	669	27.7	74.6	0.00
4/25/03 13:20:00	668	27.6	74.5	0.00
4/25/03 13:21:00	668	27.7	74.5	0.00
4/25/03 13:22:00	689	28.1	74.3	0.00
4/25/03 13:23:00	685	28.1	74.6	0.00
4/25/03 13:24:00	691	28.1	74.5	0.00
4/25/03 13:25:00	693	28.1	74.6	0.00
4/25/03 13:26:00	707	28.2	74.5	0.00
4/25/03 13:27:00	717	28.3	74.6	0.00
4/25/03 13:28:00	718	28.3	74.4	0.00
4/25/03 13:29:00	744	28.5	74.6	0.00
4/25/03 13:30:00	777	28.7	74.7	0.00
4/25/03 13:31:00	776	28.6	74.7	0.00
4/25/03 13:32:00	773	28.5	74.6	0.00
4/25/03 13:33:00	764	28.5	74.7	0.00
4/25/03 13:34:00	764	28.4	74.7	0.00
4/25/03 13:35:00	749	28.4	74.7	0.00
4/25/03 13:36:00	743	28.3	74.7	0.00
4/25/03 13:37:00	758	28.5	74.7	0.00
4/25/03 13:38:00	777	28.6	74.8	0.00
4/25/03 13:39:00	789	28.7	74.8	0.00
4/25/03 13:40:00	766	28.4	74.7	0.00
4/25/03 13:41:00	760	28.4	74.7	0.00
4/25/03 13:42:00	769	28.7	74.6	0.00
4/25/03 13:43:00	747	28.5	74.5	0.00
4/25/03 13:44:00	746	28.7	74.6	0.00
4/25/03 13:45:00	746	28.7	74.5	0.00
4/25/03 13:46:00	745	28.6	74.6	0.00
4/25/03 13:47:00	748	28.7	74.6	0.00
4/25/03 13:48:00	971	29.1	75.0	0.00
4/25/03 13:49:00	823	28.8	75.0	0.00
4/25/03 13:50:00	806	28.6	75.3	0.00
4/25/03 13:51:00	775	28.4	75.3	0.00

Phase 3 CO monitoring-Inside Middle School

Date/Time

04/25/03 09:00:00



-- CO

Phase 3 CO Monitoring- Elementary School, Outside Front Entrance

Metrosonics aq-5000 V1.12 SERIAL #2089
REPORT PRINTED ON 4/30/200 at 16:07:15

Filename
Test Location Springfield Street School
Building Elementary School
Room Number Outside
Department
Conducted By Paul Keitz
Comments The carbon monoxide monitor was placed directly between the main entrance and were the buses drop off students.

Test Information

CO2 FULL SCALE RANGE 5,000 ppm
INSTRUMENT MODE Data Logging
MEMORY MODE Stop When Full
STORAGE PERIOD 1 minute sample
TEST STARTED ON 4/25/20 at 8:18:00
TOTAL DURATION 0 DAYS 06:15:00
TOTAL DURATION (in periods) 375

Sensor Calibration Information

CO2

ZERO: 0 ppm 12/30/99 00:00:00
SPAN: 1,000 ppm 12/30/99 00:00:00

CO SN 743701

ZERO: 0 ppm 12/30/99 00:00:00 (aq-5000 2089)
SPAN: 50 ppm 12/30/99 00:00:00 (aq-5000 2089)

Overall Statistics For Test Number 1

CO2

MIN: 359 ppm 4/25/03 09:26:17
AVG: 456 ppm
MAX: 545 ppm 4/25/03 08:18:00

R.H.

MIN: 18.5 % 4/25/03 10:21:50
AVG: 36.0 %
MAX: 48.7 % 4/25/03 13:56:35

TEMP

MIN: 46.7 degF 4/25/03 08:20:40
AVG: 58.4 degF
MAX: 73.5 degF 4/25/03 10:20:21

CO

MIN: 0 ppm 4/25/03 08:18:00
AVG: 0 ppm
MAX: 8 ppm 4/25/03 14:32:41

<u>Date And Time</u>	CO2 <u>ppm</u>	R.H. <u>%</u>	TEMP <u>degF</u>	CO <u>ppm</u>
4/25/03 14:28:00	497	43.2	55.1	0.00
4/25/03 14:29:00	495	43.0	55.5	0.00
4/25/03 14:30:00	499	44.9	56.8	0.00
4/25/03 14:31:00	492	42.5	56.2	0.00
4/25/03 14:32:00	479	42.0	55.9	0.00

General Monitoring

Metrosonics aq-5000 V1.12 SERIAL #2184
REPORT PRINTED ON 4/28/200 at 13:18:22

Filename General Monitoring
Test Location Springfield Street School
Building Middle School and Elementary
Room Number Outside Schools
Department
Conducted By Paul Keitz
Comments Readings obtained outside schools in misc locations and while buses were picking up students.

Test Information

CO2 FULL SCALE RANGE 5,000 ppm
INSTRUMENT MODE Data Logging
MEMORY MODE Stop When Full
STORAGE PERIOD 1 minute sample
TEST STARTED ON 4/25/20 at 14:04:00
TOTAL DURATION 0 DAYS 00:26:00
TOTAL DURATION (in periods) 26

Sensor Calibration Information

CO2

ZERO: 0 ppm 4/25/03 09:36:07
SPAN: 1,000 ppm 4/25/03 09:59:34

CO SN 773981

ZERO: 0 ppm 4/25/03 09:51:28 (aq-5000 2184)
SPAN: 50 ppm 4/25/03 10:00:15 (aq-5000 2184)

Overall Statistics For Test Number 1

CO2

MIN: 368 ppm 4/25/03 14:07:28
AVG: 416 ppm
MAX: 658 ppm 4/25/03 14:15:16

R.H.

MIN: 32.9 % 4/25/03 14:14:00
AVG: 36.0 %
MAX: 44.4 % 4/25/03 14:15:20

TEMP

MIN: 54.9 degF 4/25/03 14:04:15
AVG: 61.1 degF
MAX: 65.8 degF 4/25/03 14:24:35

CO

MIN: 0 ppm 4/25/03 14:24:50
AVG: 3 ppm
MAX: 5 ppm 4/25/03 14:21:39

<u>Date And Time</u>	<u>CO2</u> <u>ppm</u>	<u>R.H.</u> <u>%</u>	<u>TEMP</u> <u>degF</u>	<u>CO</u> <u>ppm</u>
<u>Time History Data For Test Number</u>		1		26 Total Periods
4/25/03 14:04:00	427	36.0	62.1	3.44
4/25/03 14:05:00	377	37.2	58.7	2.67
4/25/03 14:06:00	378	35.7	62.3	3.37
4/25/03 14:07:00	390	37.3	60.3	2.60
4/25/03 14:08:00	401	37.1	62.4	2.93
4/25/03 14:09:00	412	37.4	58.5	3.96
4/25/03 14:10:00	391	37.5	60.3	2.82
4/25/03 14:11:00	397	35.9	63.2	3.19
4/25/03 14:12:00	393	35.8	61.8	3.00
4/25/03 14:13:00	395	32.9	57.5	2.82
4/25/03 14:14:00	395	35.8	59.7	3.44
4/25/03 14:15:00	447	36.3	60.8	3.19
4/25/03 14:16:00	450	35.7	63.1	3.11
4/25/03 14:17:00	437	35.5	61.2	4.51
4/25/03 14:18:00	399	35.7	60.1	3.96
4/25/03 14:19:00	387	34.6	61.1	2.75
4/25/03 14:20:00	378	33.9	61.1	2.12
4/25/03 14:21:00	377	37.7	59.2	4.14
4/25/03 14:22:00	393	37.1	63.4	3.00
4/25/03 14:23:00	409	36.4	61.9	3.88
4/25/03 14:24:00	463	33.9	62.9	0.00
4/25/03 14:25:00	453	35.1	60.3	0.00
4/25/03 14:26:00	450	33.7	60.5	0.00
4/25/03 14:27:00	448	34.9	60.4	0.00
4/25/03 14:28:00	452	35.3	60.0	0.00
4/25/03 14:29:00	444	35.5	59.8	0.00