

**QUARTERLY MONITORING REPORT
Springfield Street School Complex
Providence, Rhode Island**

**Project No. 081-12152-03
February 2007 Monitoring Round**

Prepared for
Providence School Department
797 Westminster Street
Providence, RI 02903

Prepared by
LFR Inc.
300 Metro Center Boulevard
Suite 250
Warwick, RI 02886
www.lfr.c



March 22, 2007

081-12152-03

Mr. Jeffrey Crawford
Rhode Island Department of Environmental Management
Office of Waste Management
235 Promenade Street
Providence, RI 02908-5767

Subject: Quarterly Monitoring for Springfield Street School Complex, 50 Springfield Street,
Providence, RI – February 2007 Monitoring Round

Dear Mr. Crawford:

Quarterly monitoring for soil gas, indoor air and system monitoring was conducted between February 12 and 22, 2007. As was discussed, groundwater samples were not able to be collected during this period due to the presence of thick ice over some of the wells. We delayed reporting while attempting to sample groundwater, but since those results are not yet available, we are submitting this report on the monitoring that is complete. The groundwater monitoring results will be submitted in an addendum.

The monitoring was performed in accordance with the *Long-Term Operation and Maintenance Plan and Site Contingency Plan (O&M Plan)* contained in the *Remedial Action Work Plan* prepared by ATC dated April 2, 1999, revised May 3, 1999 and May 9, 1999. The *Remedial Action Work Plan (RAWP)* was approved by the Rhode Island Department of Environmental Management (RIDEM) in a letter dated June 4, 1999.

Results of monitoring are provided in the following sections and in the attachments.

COVER MONITORING

LFR conducted a visual survey of the site for evidence of significant soil cover erosion, or for any areas where the orange snow fencing indicator barrier was visible. LFR did not observe any areas where the orange indicator barrier was visible during this monitoring event. Some areas of the site were covered by puddles or ice at the time of the inspection.

Some areas of asphalt and concrete have been disturbed by settling, as identified and discussed with RIDEM in separate correspondence. However, as noted previously, the asphalt in these areas does not act as the cap because the asphalt is underlain by at least two feet of clean fill.

SUB-SLAB VENTILATION SYSTEM

The sub-slab ventilation system was inspected by LFR during the quarterly monitoring on February 22, 2007. LFR personnel attempted to inspect the sub-slab monitoring system on February 15, but the locks on the doors to the sheds containing the blowers were frozen due to an ice storm the night before. All systems were operating upon arrival for the monitoring event on both days.

Influent and effluent air from the two blowers at the elementary school and the two blowers at the middle school was monitored. Samples of influent and effluent gas were collected in Tedlar bags at each location and screened for methane, carbon dioxide, carbon monoxide, hydrogen sulfide, and volatile organic compounds (VOC). Results are provided in Table 1.

Methane, carbon monoxide, hydrogen sulfide and organic vapor concentrations in the subslab ventilation system samples were all measured as zero during this monitoring event. Carbon dioxide readings at the elementary school ranged from 0.2 to 0.3 percent, and carbon dioxide readings at the middle school ranged from 0.0 to 0.3 percent. Five of the seven carbon dioxide readings exceeded the Remedial Action Work Plan Action Level of 1000 ppm (0.1%).

INDOOR AIR MONITORING

Indoor air monitoring was conducted on February 15, 2007 (while the building was occupied) using a Landtec Gem 2000 landfill gas monitor (methane, carbon dioxide, oxygen, carbon monoxide and hydrogen sulfide) and a Mini Rae photoionization detector (organic vapors). Results of monitoring are provided in the Table 2. Methane, carbon monoxide, hydrogen sulfide and organic vapor concentrations were not detected during the indoor air monitoring. Carbon dioxide was measured as 0.1 at every location in the buildings, as well as outside.

The methane monitors at the middle school and the elementary schools had stickers that indicated they were last calibrated by Diamond Calibration personnel on January 25, 2007. The sensors appeared to be functioning. Calibration Certificates from Diamond Calibration indicate that many of the sensors read above 0 when calibrated to the zero gas. This prevents the sensors from giving a fault alarm if the reading drops below zero due to a sudden temperature change, and still provides a conservative measure of protection because the alarm limit is still 10% LEL.

GROUNDWATER MONITORING

As noted above, groundwater monitoring was not performed in February due to the presence of ice over several of the wells. Monitoring will be completed when weather allows, and the results will be provided to RIDEM.

SOIL GAS MONITORING

Soil gas monitoring was conducted at 29 locations on February 12 and 13, 2007. The sampling was conducted by placing an air sampling gripper cap on each well and attaching a piece of tubing. A volume of air equivalent to approximately 3 well volumes was removed from each well using an SKC Airchek Sampling pump. Soil gas was then screened using a Landtec Gem 2000 Landfill Gas Analyzer & Extraction Monitor and a MiniRae Photoionization Detector (PID).

Air samples were also collected in Tedlar bags using the SKC Airchek Pump from wells WB-2 and MPL-6. The Tedlar bags were submitted to Con-test Analytical Laboratory for analysis for VOC via EPA method TO-14.

Soil Gas Field Monitoring Results

Soil gas samples were screened for methane, carbon monoxide, hydrogen sulfide, carbon dioxide, oxygen, and total VOCs. Soil gas survey results are provided in Table 3.

Carbon monoxide and hydrogen sulfide were not detected at any of the monitoring locations. Methane and organic vapors were detected at concentrations below the Remedial Action Work Plan Action Levels.

Carbon dioxide was detected at all 28 locations with detectable concentrations ranging from 0.1% to 4.8%. This maximum carbon dioxide concentration is lower than the maximum concentration of 11.1% detected during the last round of monitoring in November 2006. Concentrations of carbon dioxide were generally lower than during the November 2006 monitoring round. The carbon dioxide Remedial Action Work Plan Action Level is 0.1%, and 24 readings exceeded the action level. The presence of carbon dioxide in soil gas is an indicator of subsurface bacterial activity and does not represent a threat to users of the property. Graphs presenting carbon dioxide, oxygen, and methane concentrations over time for seven representative wells are presented in Attachment A.

Concentrations detected during this round of monitoring appear to be consistent with the patterns of rising carbon dioxide concentrations in the summer and fall, and falling carbon dioxide concentrations in the winter and spring.

Soil Gas Laboratory Results

Soil gas samples were collected from soil gas wells MPL-6 and WB-2 in Tedlar bags and submitted to Con-Test Analytical Laboratories for analysis by method TO-14. Results of the analysis are summarized in Table 4, and the laboratory report is provided in Attachment B. Only two compounds, toluene and xylene, were detected at low concentrations. The results were typical of the concentrations and compounds which have been detected in previous monitoring events.

The Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELs) are provided in Table 4 for comparison purposes even though they are not applicable to soil gas, because it does not represent exposure point concentrations. The PELs are the average concentrations that



OSHA allows to be present in a workplace without any respiratory protection or exposure controls. The concentrations detected in soil gas were well below the OSHA PELs.

CONCLUSIONS

Groundwater sampling was not completed during February 2007 due to the presence of ice over several of the groundwater monitoring wells. Groundwater monitoring wells will be sampled when weather allows and the results will be submitted to RIDEM as a report addendum.

Methane, carbon monoxide, hydrogen sulfide and organic vapor concentrations did not exceed RAWP action levels in any soil gas samples, indoor air or subslab ventilation system samples. Carbon dioxide concentrations exceeded the action level at some locations. The detection of carbon dioxide in soil gas is typical of what has been detected during previous monitoring events and appears to be a result of naturally occurring bacterial activity in the subsurface. Concentrations of carbon dioxide in the site building appeared to be within the range expected for occupied buildings, and were well below PELs.

Inspection of the cap did not reveal any evidence of exposure of the orange barrier or of breaches of the cap that would allow users of the Site to be exposed to the underlying capped soils.

If you have any questions or require any additional information, please contact the undersigned at 401-738-3887.

Sincerely,

Donna Holden Pallister, P.E.
Senior Engineer

cc: A. Sepe, City of Providence
Providence Public Building Authority
S. Tremblay, Providence School Department

TABLES

Table 1
System Monitoring Notes
Springfield Street School Complex
Providence, Rhode Island
February 22, 2007

Monitoring Location	Methane % by volume Landtec	Carbon Dioxide % by volume	Oxygen % by volume	Carbon Monoxide PPM	Hydrogen Sulfide PPM	Organic Vapors PPM
Elementary School inlet 1	0.0	0.3	22.9	0.0	0.0	0.0
Elementary School inlet 2	0.0	0.2	22.9	0.0	0.0	0.0
Elementary School Outlet	0.0	0.3	22.7	0.0	0.0	0.0
Middle School front shed inlet	0.0	0.0	22.9	0.0	0.0	0.0
Middle School front shed after 2 nd carbon	0.0	0.0	23.0	0.0	0.0	0.0
Middle School back shed inlet	0.0	0.3	22.5	0.0	0.0	0.0
Middle School back shed after 2 nd carbon	0.0	0.2	22.5	0.0	0.0	0.0
Remedial Action Work Plan Action Levels	0.5	1,000 ppm (0.1%)	NA	9 ppm	10 ppm	5 ppm

Measurements made with: Landtec Gem 2000, MiniRae 2000

Sampling date: February 22, 2007

Measured by: D.H. Pallister

Table 2
Indoor Air Monitoring Results
Springfield Street School Complex
Providence, Rhode Island
February 15, 2007

Monitoring Location	Methane % by volume Landtec	Carbon Dioxide % by volume	Oxygen % by volume	Carbon Monoxide PPM	Hydrogen Sulfide PPM	Organic Vapors PPM*
E.S. Front office	0.0	0.1	23.3	0	0	0.0
E.S. Elevator	0.0	0.1	23.5	0	0	0.0
E.S. Electrical closet in Mech. Room	0.0	0.1	23.6	0	0	0.0
E.S. Gym storage closet	0.0	0.1	23.5	0	0	0.0
E.S. Room 213	0.0	0.1	23.3	0	0	0.0
E.S. Library	0.0	0.1	23.5	0	0	0.0
E.S. Room 107	0.0	0.1	23.5	0	0	0.0
E.S. Stairway Stair C	0.0	0.1	23.3	0	0	0.0
E.S. Room 111	0.0	0.1	23.3	0	0	0.0
E.S. Cafeteria	0.0	0.1	23.2	0	0	0.0

Table 2
Indoor Air Monitoring Notes
Springfield Street School Complex
February 15, 2007

Monitoring Location	Methane % by volume Landtec	Carbon Dioxide % by volume	Oxygen % by volume	Carbon Monoxide PPM	Hydrogen Sulfide PPM	Organic Vapors PPM*
M.S. Front Office	0.0	0.1	22.9	0	0	0.0
M.S. Library	0.0	0.1	23.2	0	0	0.0
M.S. Stairway toward Hartford Ave.	0.0	0.1	23.1	0	0	0.0
M.S. Crack near door to outside near gym	0.0	0.1	23.2	0	0	0.0
M.S. Former Music Room (Rm # 2 practise)	0.0	0.1	23.0	0	0	0.0
M.S. Near Sensor in cafeteria	0.0	0.1	23.0	0	0	0.0
M.S. Faculty work room 2 nd floor	0.0	0.1	23.2	0	0	0.0

Table 2
Indoor Air Monitoring Notes
Springfield Street School Complex
February 15, 2007

Monitoring Location	Methane % by volume Landtec	Carbon Dioxide % by volume	Oxygen % by volume	Carbon Monoxide PPM	Hydrogen Sulfide PPM	Organic Vapors PPM*
M.S. Hall outside cafeteria next to Sensor	0.0	0.1	23.1	0	0	0.0
M.S. Faculty Work Room 1 st Floor	0.0	0.1	23.1	0	0	0.0
M.S. Elevator	0.0	0.1	23.1	0	0	0.0
Remedial Action Work Plan Action Levels	0.5	1,000 ppm (0.1%)	NA	9 ppm	10 ppm	5 ppm

Notes:

E.S. indicates Elementary School

M.S. indicates Middle School

Measurements made with: GEM 2000 Gas Analyzer & Extraction Monitor, MiniRae PID Meter

Table 3
Soil Gas Survey Field Notes
Springfield Street School Complex
Providence, RI
February 12 & 13, 2007

Monitoring Well	Methane % by volume	Carbon Dioxide % by volume	Oxygen % by volume	Carbon Monoxide PPM	Hydrogen Sulfide PPM	Organic Vapors PPM
WB-1	0.1	0.2	20.5	0	0	0.2
WB-2	0.4	0.5	20.1	0	0	0.7
WB-3	0.1	0.4	21.2	0	0	0.1
WB-4	0.2	0.2	20.2	0	0	0.2
WB-5	0.1	0.1	20.8	0	0	0.4
WB-6	0.1	0.5	20.1	0	0	0.6
WB-7	0.2	0.4	20.5	0	0	0.6
WB-8	0.4	0.3	20.5	0	0	0.6
WB-12	0.1	0.2	21.3	0	0	0.1
WB-13	0.2	0.3	21.1	0	0	0.0
WB-14	0.1	0.1	21.2	0	0	0.1
WB-15	0.1	0.1	21.3	0	0	0.1
EPL-1	0.1	1.3	21.2	0	0	0.1
EPL-2	0.1	1.9	21.7	0	0	0.1
EPL-3	0.3	2.0	21.1	0	0	0.1
EPL-4	0.1	2.4	20.8	0	0	0.2
EPL-5	0.2	4.4	19.4	0	0	0.4
ENE-1	0.4	0.8	20.8	0	0	0.5

Table 3
Soil Gas Survey Field Notes
Springfield Street School Complex
Providence, RI
February 12 & 13, 2007

Monitoring Well	Methane % by volume	Carbon Dioxide % by volume	Oxygen % by volume	Carbon Monoxide PPM	Hydrogen Sulfide PPM	Organic Vapors PPM
MG1	0.2	0.2	20.9	0	0	0.6
MG2	0.4	1.2	20.4	0	0	0.2
MG3	0.1	0.2	20.3	0	0	0.2
MG4	0.4	1.5	20.7	0	0	0.5
MG5	0.4	1.4	20.9	0	0	0.4
MPL2	0.2	0.1	23.5	0	0	0.2
MPL3	Well Frozen			0	0	
MPL5	0.2	4.8	18.7	0	0	0.3
MPL6	0.1	4.3	8.9	0	0	0.1
MPL7	0.1	4.7	15.3	0	0	0.2
MPL8	0.2	1.9	21.3	0	0	0.2
Remedial Action Work Plan Action Levels	0.5%	1,000 PPM	NA	9 PPM	10 PPM	5 PPM

Sampled by: Andrea J. Lang

Weather Conditions: raining, 50⁰'s

Sampling Equipment: Landtec Gem 2000 Plus Gas Analyzer (Methane, CO₂, O₂, H₂S and CO), and MiniRAE 2000 (organic vapors), SKC pump.

Table 4
Soil Gas Laboratory Analysis Results
Springfield Street School Complex
February 20, 2007

Parameter	OSHA PELs (PPBv)	Results of Analysis in parts per billion by volume (PPBv)	
		MPL-6	WB-2
Toluene	200,000	4.9	4.6
M/p-Xylene	100,000	1.4	1.2

Table lists only detected compounds. See laboratory report for full list of analytes.

Occupational Safety and Health Administration (OSHA) PELs = Permissible Exposure Limits from NIOSH Pocket Guide to Chemical Hazards

FIGURE

NOTES:

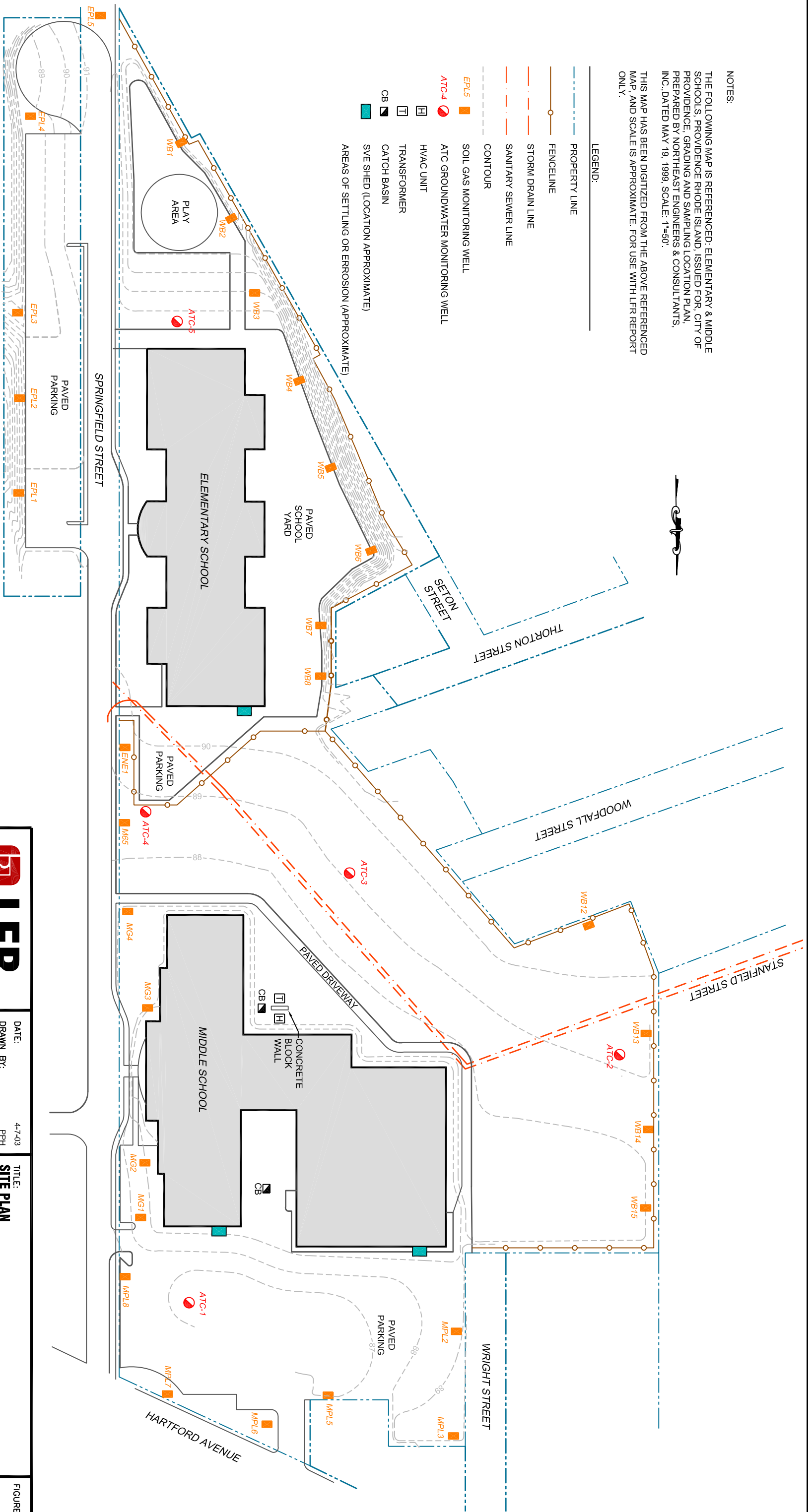
THE FOLLOWING MAP IS REFERENCED: ELEMENTARY & MIDDLE SCHOOLS, PROVIDENCE RHODE ISLAND, ISSUED FOR, CITY OF PROVIDENCE, GRADING AND SAMPLING LOCATION PLAN, PREPARED BY NORTHEAST ENGINEERS & CONSULTANTS, INC., DATED MAY 19, 1999, SCALE: 1"=50'.


THIS MAP HAS BEEN DIGITIZED FROM THE ABOVE REFERENCED MAP, AND SCALE IS APPROXIMATE. FOR USE WITH LFR REPORT ONLY.



LEGEND:

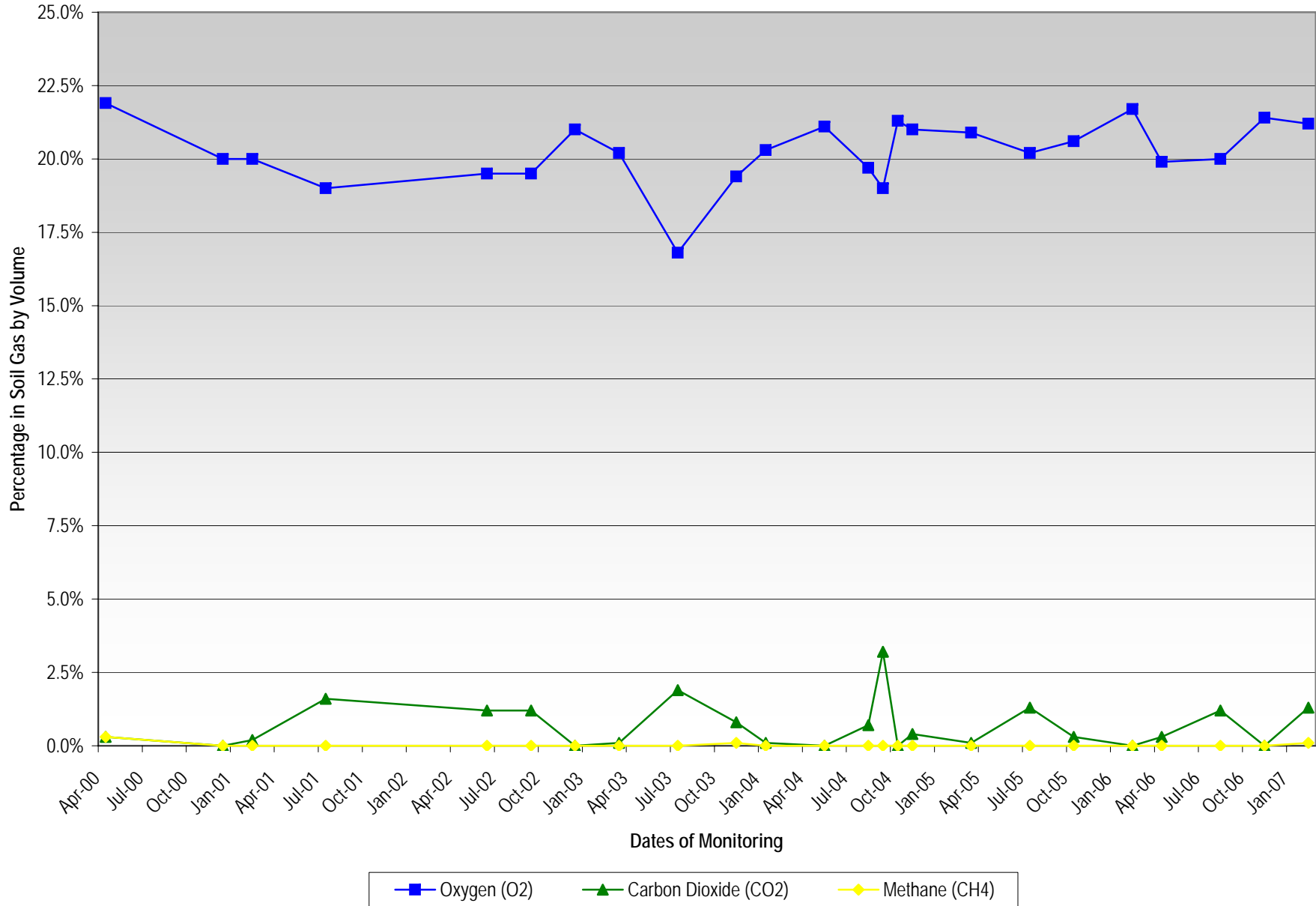
- PROPERTY LINE
- FENCELINE
- STORM DRAIN LINE
- SANITARY SEWER LINE
- CONTOUR
- SOIL GAS MONITORING WELL
- ATC-4
- ATC-5
- ATC-3
- ATC-2
- ATC-1
- WB1
- WB2
- WB3
- WB4
- WB5
- WB6
- WB7
- WB8
- WB12
- WB13
- WB14
- WB15
- MG1
- MG2
- MG3
- MG4
- MG5
- EN1
- MGL1
- MGL2
- MGL3
- MGL4
- MGL5
- MGL6
- MGL7
- MGL8
- HVAC UNIT
- TRANSFORMER
- CATCH BASIN
- SVE SHED (LOCATION APPROXIMATE)
- AREAS OF SETTLING OR EROSION (APPROXIMATE)



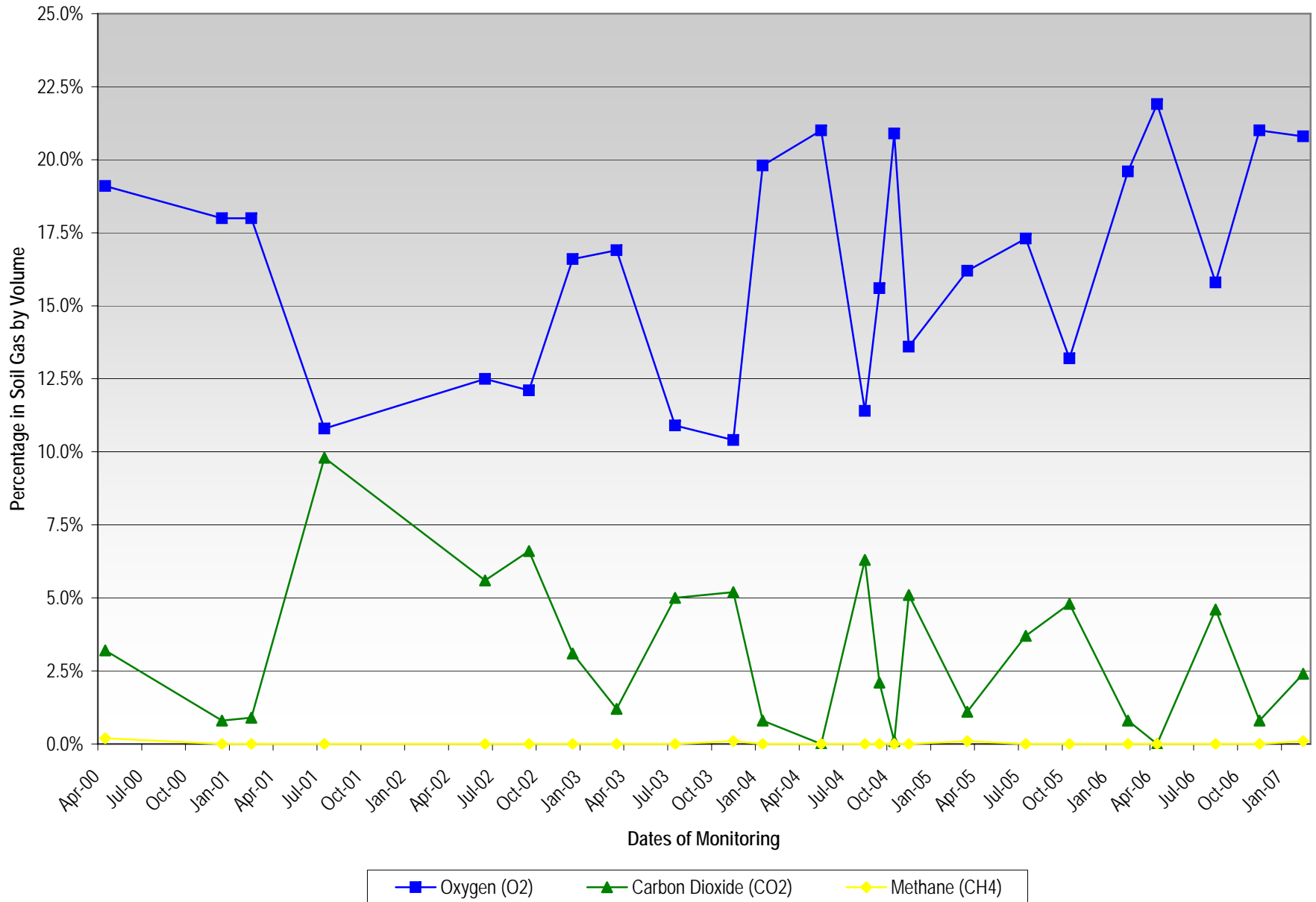
 <p>LFR</p> <p>250 Centerville Road Building E, Suite 12 Warwick, Rhode Island 02886 Phone: (401) 738-3887 Fax: (401) 732-1686</p>	<p>DATE: 4-7-03</p> <p>DRAWN BY: PPH</p> <p>REVIEWED BY: DP</p> <p>APPROVED BY: DP</p> <p>SCALE: AS NOTED</p> <p>FILE NO: 081-12027-00</p> <p>JOB NO: 081-12027-00</p>	<p>TITLE: SITE PLAN</p> <p>LOCATION: SPRINGFIELD STREET SCHOOL COMPLEX SPRINGFIELD STREET PROVIDENCE, RHODE ISLAND</p>	<p>FIGURE: 1</p>
	<p>SPRINGFIELD STREET SCHOOL COMPLEX</p>		

Attachment A
Soil Gas Graphs

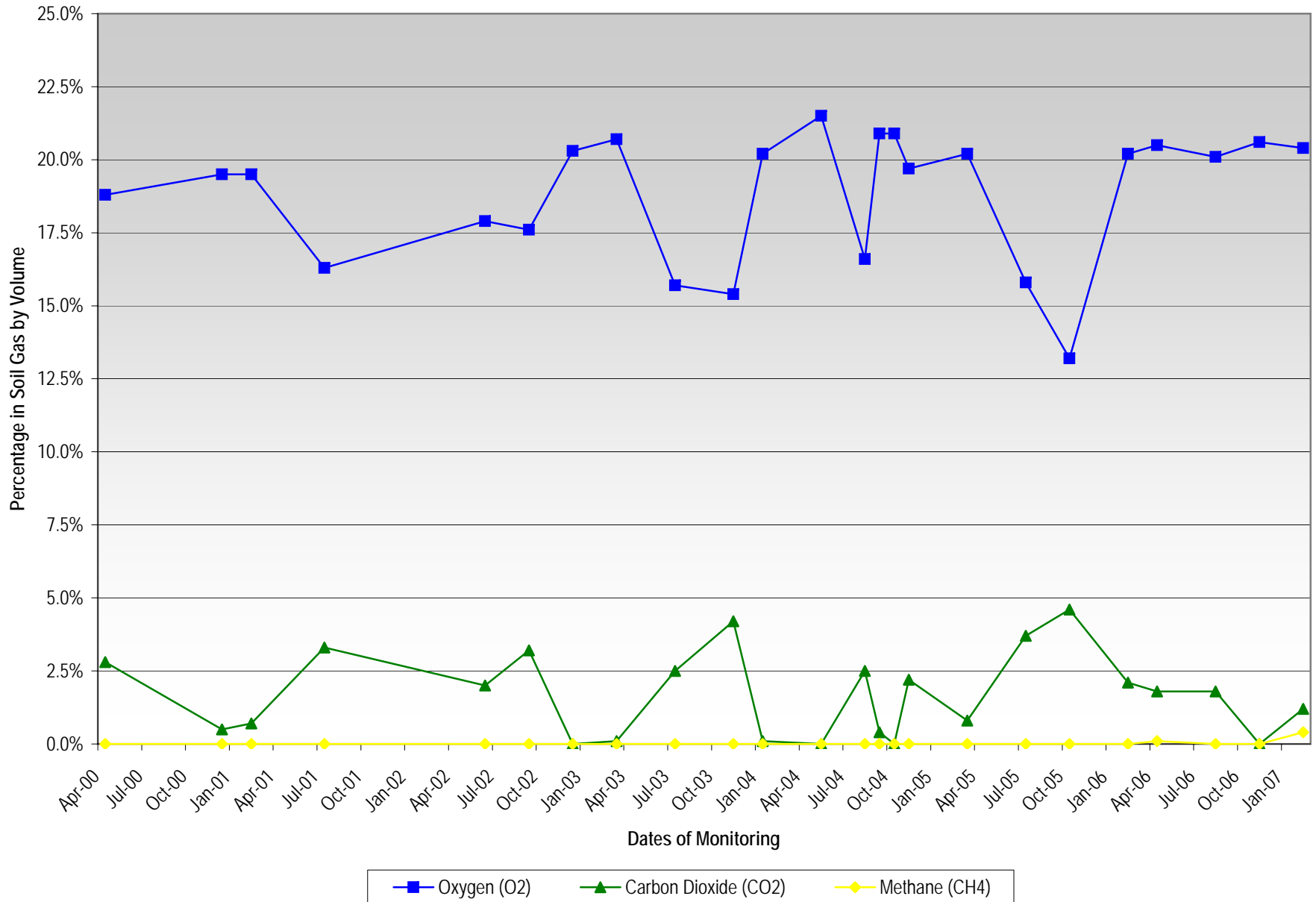
Soil Gas Well EPL1
 Fluctuation in Methane, Oxygen, and Carbon Dioxide Percentages over Time
 Springfield Street School Complex
 Providence, Rhode Island



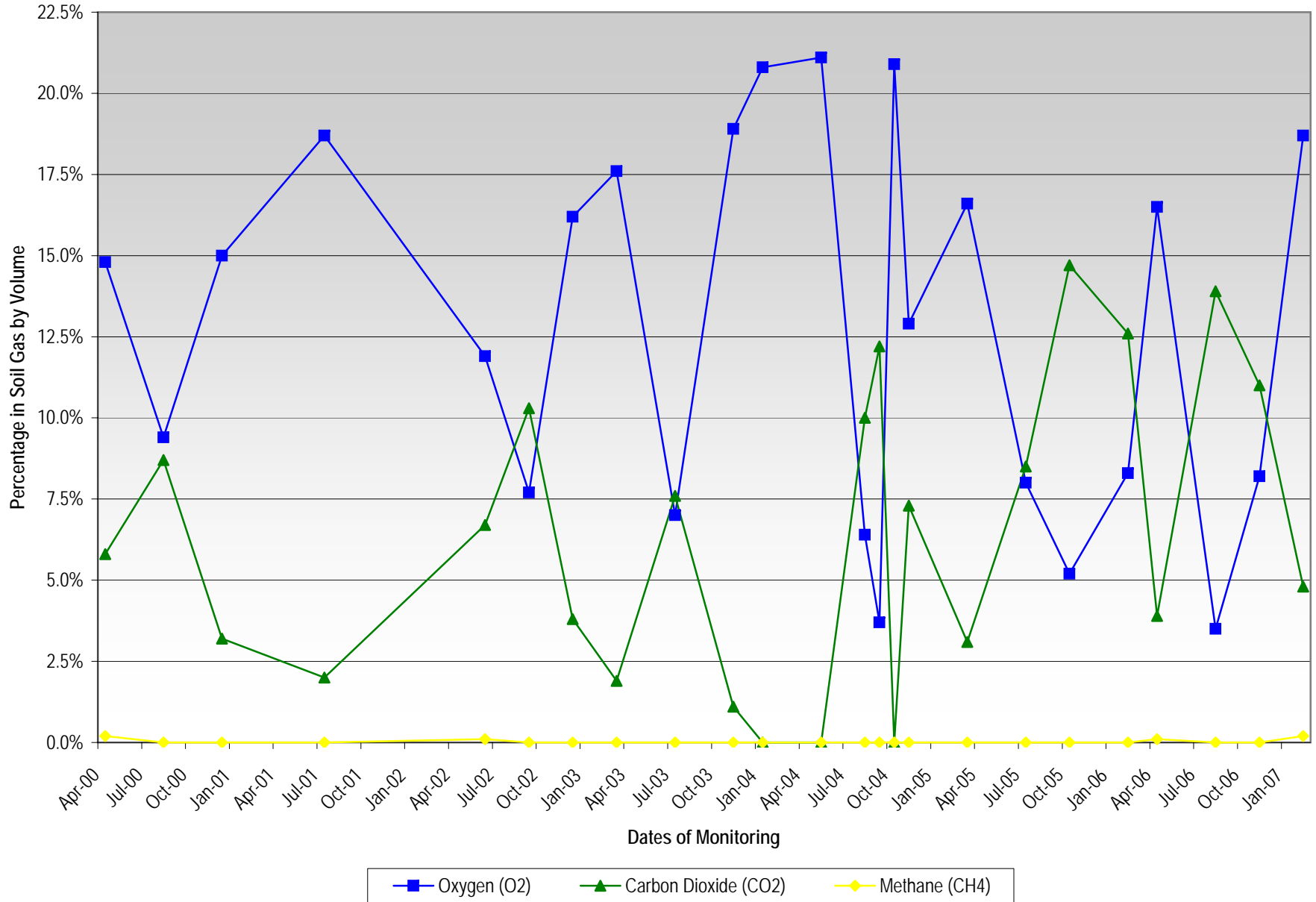
Soil Gas Well EPL4
 Fluctuation in Methane, Oxygen, and Carbon Dioxide Percentages over Time
 Springfield Street School Complex
 Providence, Rhode Island



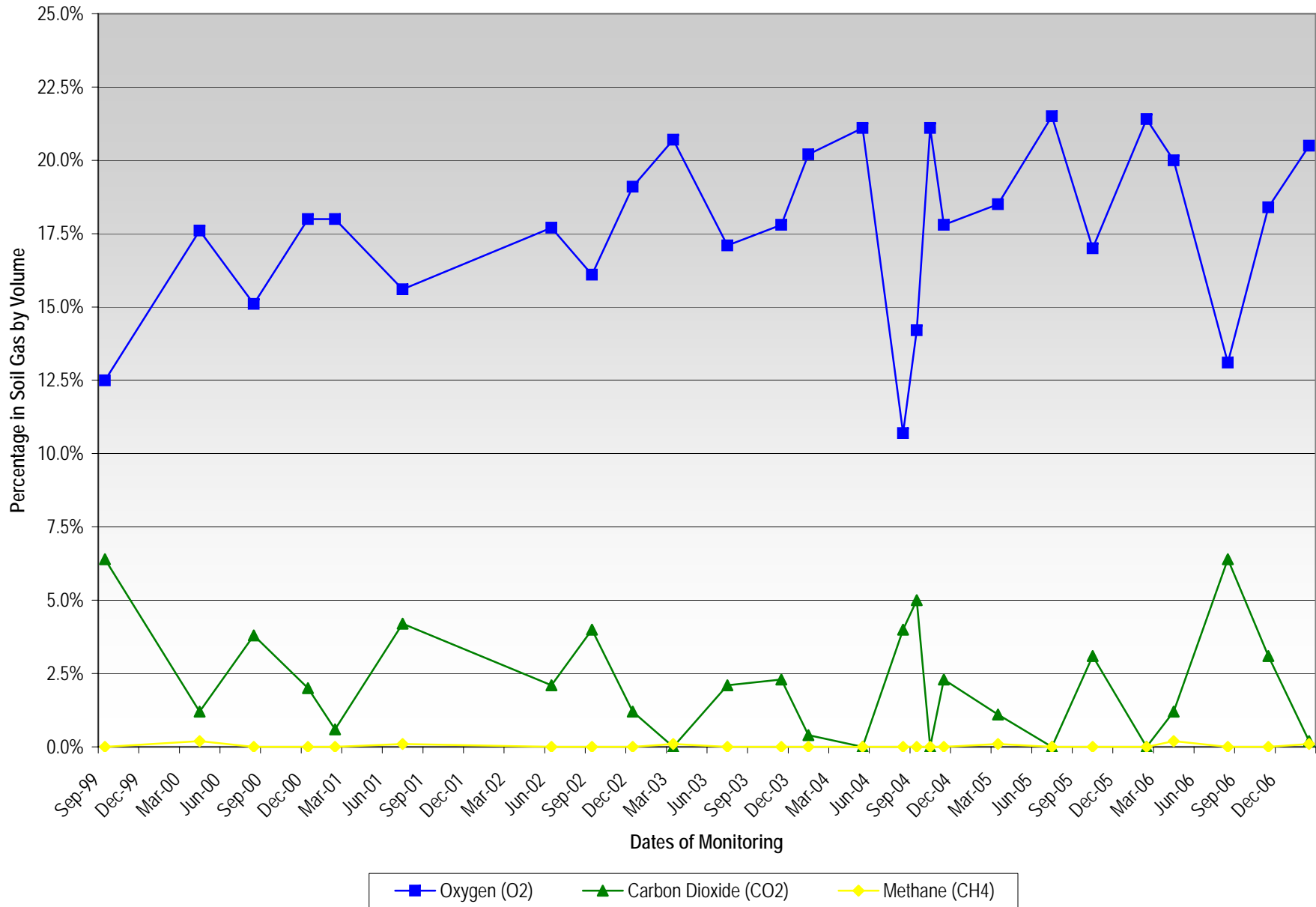
Soil Gas Well MG2
 Fluctuation in Methane, Oxygen, and Carbon Dioxide Percentages over Time
 Springfield Street School Complex
 Providence, Rhode Island



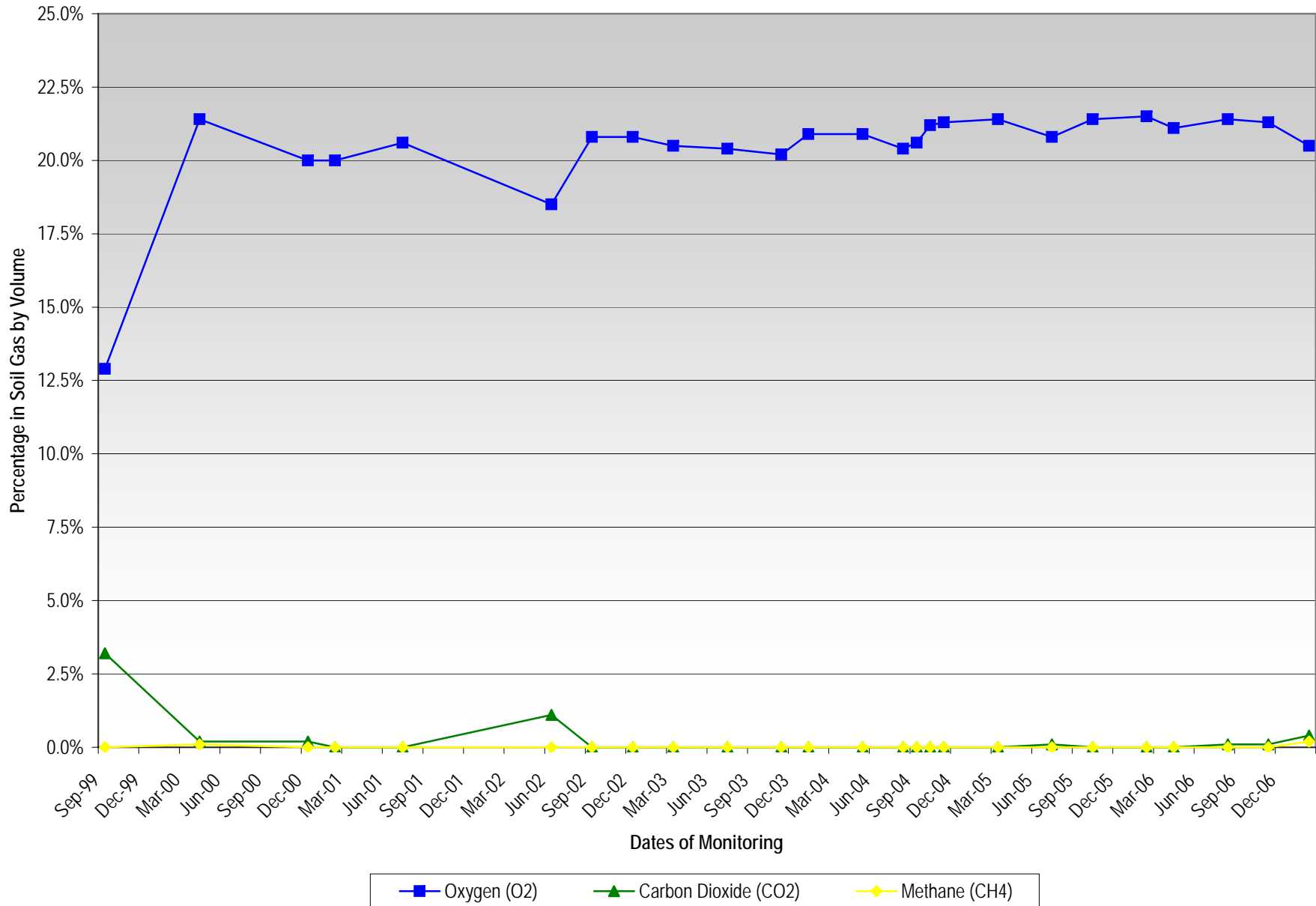
Soil Gas Well MPL5
 Fluctuation in Methane, Oxygen, and Carbon Dioxide Percentages over Time
 Springfield Street School Complex
 Providence, Rhode Island



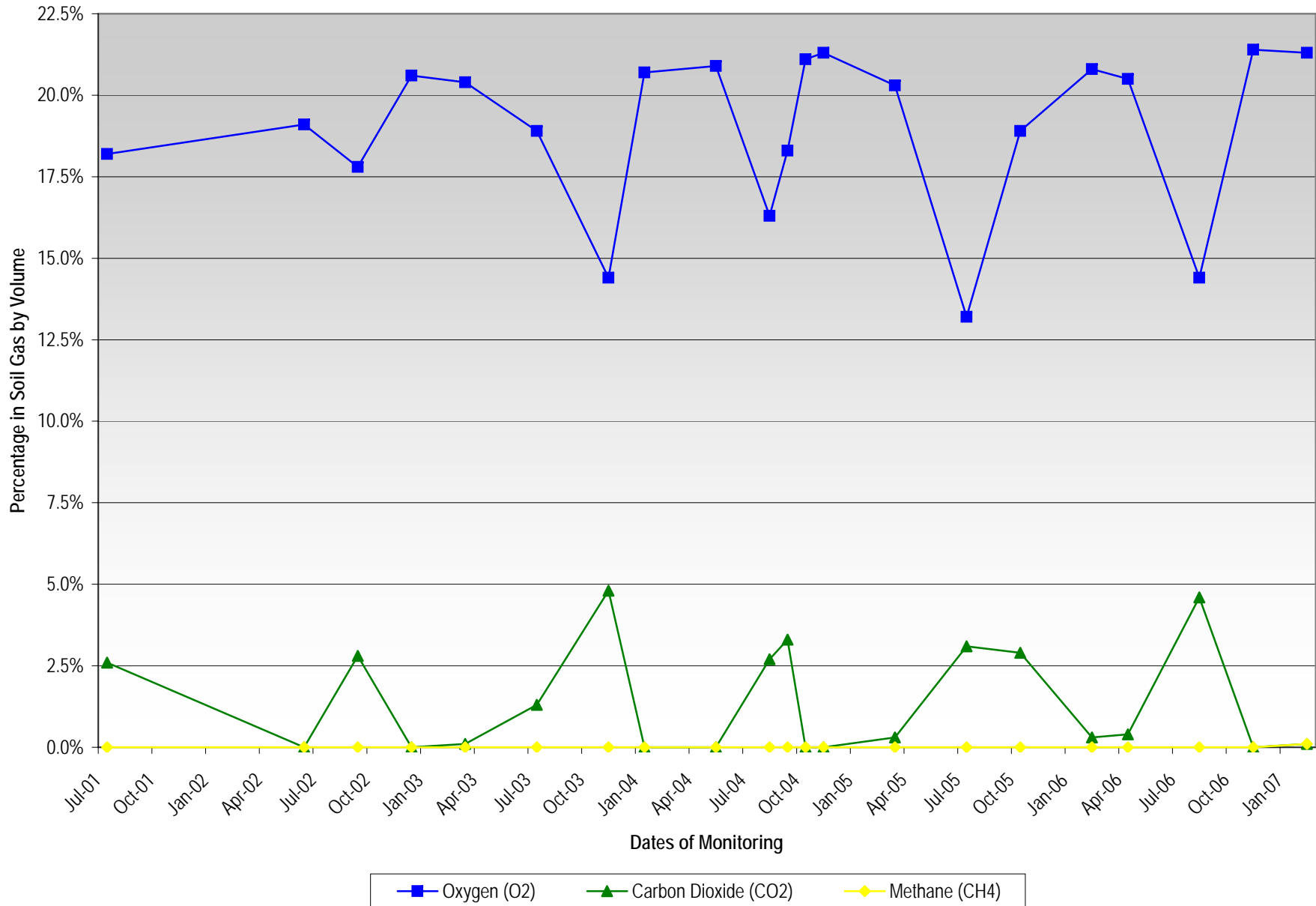
Soil Gas Well WB1
 Fluctuation in Methane, Oxygen, and Carbon Dioxide Percentages over Time
 Springfield Street School Complex
 Providence, Rhode Island



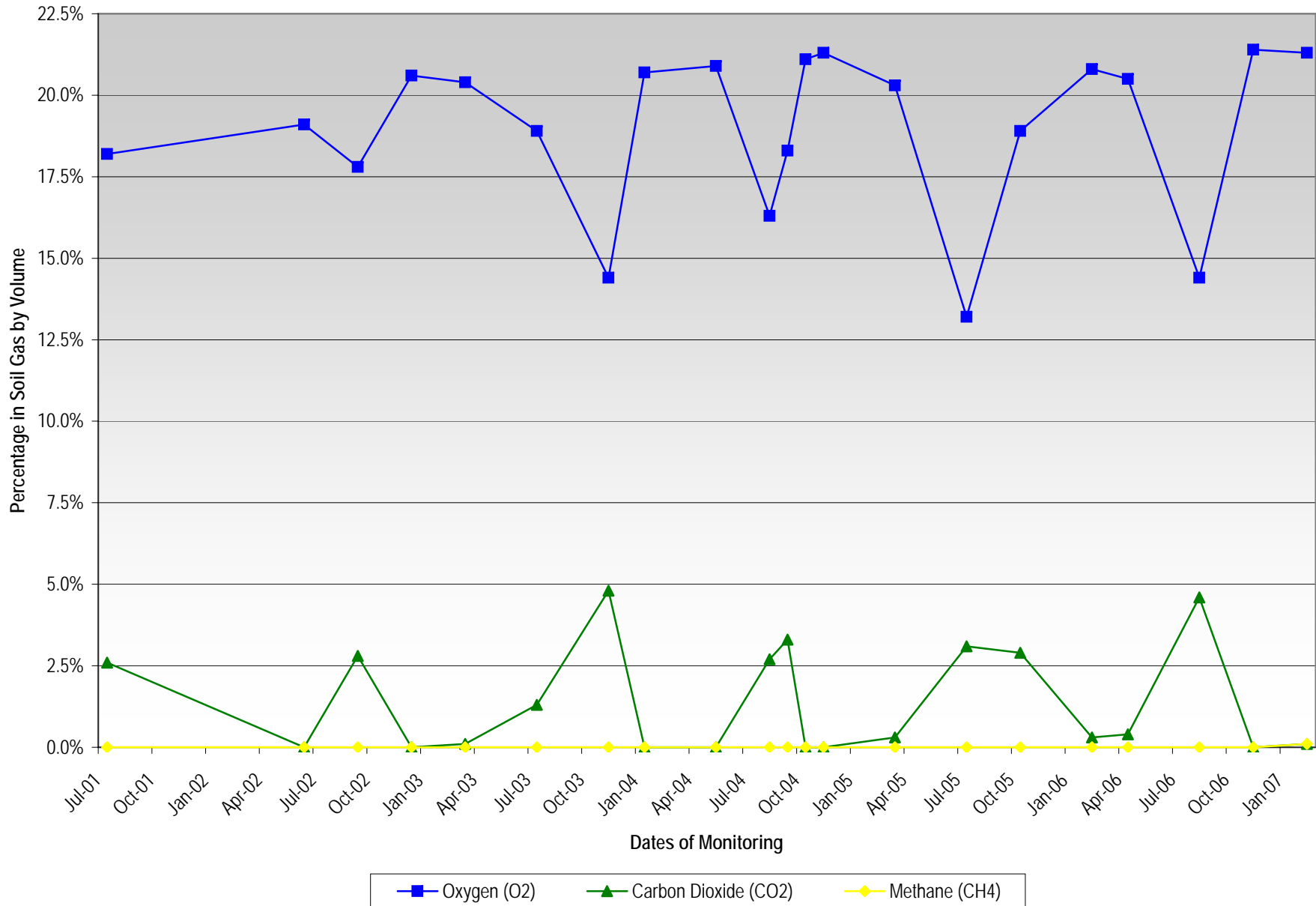
Soil Gas Well WB7
 Fluctuation in Methane, Oxygen, and Carbon Dioxide Percentages over Time
 Springfield Street School Complex
 Providence, Rhode Island



Soil Gas Well WB15
 Fluctuation in Methane, Oxygen, and Carbon Dioxide Percentages over Time
 Springfield Street School Complex
 Providence, Rhode Island



Soil Gas Well WB15
 Fluctuation in Methane, Oxygen, and Carbon Dioxide Percentages over Time
 Springfield Street School Complex
 Providence, Rhode Island



Attachment B

Laboratory Report for Soil Gas



39 Spruce Street ° East Longmeadow, MA 01028 ° FAX 413/525-6405 ° TEL. 413/525-2332

REPORT DATE 2/27/2007

LFR, INC. - RI
350 METRO CENTER BLVD., SUITE 250
WARWICK, RI 02886
ATTN: DONNA PALLISTER

CONTRACT NUMBER:
PURCHASE ORDER NUMBER:

PROJECT NUMBER: 681-12152-03

ANALYTICAL SUMMARY

LIMS BAT #: LIMT-04042
JOB NUMBER: 681-12152.03

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: SPRINGFIELD ST SCHOOL, PROVIDENCE, RI

FIELD SAMPLE #	LAB ID	MATRIX	SAMPLE DESCRIPTION	TEST
MPL-6	07B05533	AIR	NOT SPECIFIED	to-14 ppbv
MPL-6	07B05533	AIR	NOT SPECIFIED	to-14 ug/m3
WB-2	07B05532	AIR	NOT SPECIFIED	to-14 ppbv
WB-2	07B05532	AIR	NOT SPECIFIED	to-14 ug/m3

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations :

AIHA 100033	AIHA ELLAP (LEAD) 100033	
MASSACHUSETTS MA0100	NEW HAMPSHIRE NELAP 2516	NEW JERSEY NELAP NJ MA007 (AIR)
CONNECTICUT PH-0567	VERMONT DOH (LEAD) No. LL015036	
NEW YORK ELAP/NELAP 10899	RHODE ISLAND (LIC. No. 112)	

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Sondra L. Slesinski 02/27/07
SIGNATURE DATE

Tod Kopyscinski
Director of Operations

Sondra L. Slesinski
Quality Assurance Officer

Edward Denson
Technical Director

DONNA PALLISTER
 LFR, INC. - RI
 350 METRO CENTER BLVD., SUITE 250
 WARWICK, RI 02886

Purchase Order No.:

2/27/2007

Page 1 of 9

Project Location: SPRINGFIELD ST SCHOOL, PROVIDENCE, RI

Project Number: 681-12152-03

Date Received: 2/21/2007

LIMS-BAT #: LIMIT-04042

Job Number: 681-12152.03

Field Sample #: MPL-6

Sample ID : 07B05533

Sampled : 2/20/2007

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : TEDLAR BAG

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Benzene	PPBv	ND	02/21/07	WSD	0.50			
Bromomethane	PPBv	ND	02/21/07	WSD	0.50			
Carbon Tetrachloride	PPBv	ND	02/21/07	WSD	0.50			
Chlorobenzene	PPBv	ND	02/21/07	WSD	0.50			
Chloroethane	PPBv	ND	02/21/07	WSD	0.50			
Chloroform	PPBv	ND	02/21/07	WSD	0.50			
Chloromethane	PPBv	ND	02/21/07	WSD	0.50			
1,2-Dibromoethane	PPBv	ND	02/21/07	WSD	0.50			
1,2-Dichlorobenzene	PPBv	ND	02/21/07	WSD	0.50			
1,3-Dichlorobenzene	PPBv	ND	02/21/07	WSD	0.50			
1,4-Dichlorobenzene	PPBv	ND	02/21/07	WSD	0.50			
Dichlorodifluoromethane	PPBv	ND	02/21/07	WSD	0.50			
1,1-Dichloroethane	PPBv	ND	02/21/07	WSD	0.50			
1,2-Dichloroethane	PPBv	ND	02/21/07	WSD	0.50			
cis-1,2-Dichloroethylene	PPBv	ND	02/21/07	WSD	0.50			
1,2-Dichloropropane	PPBv	ND	02/21/07	WSD	0.50			
cis-1,3-Dichloropropene	PPBv	ND	02/21/07	WSD	0.50			
trans-1,3-Dichloropropene	PPBv	ND	02/21/07	WSD	0.50			
1,2-Dichlorotetrafluoroethane (114)	PPBv	ND	02/21/07	WSD	0.50			
Ethylbenzene	PPBv	ND	02/21/07	WSD	0.50			
Hexachlorobutadiene	PPBv	ND	02/21/07	WSD	0.50			
Methylene Chloride	PPBv	ND	02/21/07	WSD	0.50			
Styrene	PPBv	ND	02/21/07	WSD	0.50			
1,1,2,2-Tetrachloroethane	PPBv	ND	02/21/07	WSD	0.50			
Tetrachloroethylene	PPBv	ND	02/21/07	WSD	0.50			
Toluene	PPBv	4.9	02/21/07	WSD	0.50			
1,2,4-Trichlorobenzene	PPBv	ND	02/21/07	WSD	0.50			
1,1,1-Trichloroethane	PPBv	ND	02/21/07	WSD	0.50			
1,1,2-Trichloroethane	PPBv	ND	02/21/07	WSD	0.50			
Trichloroethylene	PPBv	ND	02/21/07	WSD	0.50			

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

NM = Not Measured

SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

* = See end of report for comments and notes applying to this sample

DONNA PALLISTER
 LFR, INC. - RI
 350 METRO CENTER BLVD., SUITE 250
 WARWICK, RI 02886

Purchase Order No.:

2/27/2007

Page 2 of 9

Project Location: SPRINGFIELD ST SCHOOL, PROVIDENCE, RI

Project Number: 681-12152-03

Date Received: 2/21/2007

LIMS-BAT #: LIMIT-04042

Job Number: 681-12152.03

Field Sample #: MPL-6

Sample ID: 07B05533

Sampled: 2/20/2007

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : TEDLAR BAG

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit Lo Hi	P/ F
Trichlorofluoromethane (Freon 11)	PPBv	ND	02/21/07	WSD	0.50		
1,1,2-Trichloro-1,2,2-Trifluoroethane	PPBv	ND	02/21/07	WSD	0.50		
1,2,4-Trimethylbenzene	PPBv	ND	02/21/07	WSD	0.50		
1,3,5-Trimethylbenzene	PPBv	ND	02/21/07	WSD	0.50		
Vinyl Chloride	PPBv	ND	02/21/07	WSD	0.50		
m/p-Xylene	PPBv	1.4	02/21/07	WSD	1.0		
o-Xylene	PPBv	ND	02/21/07	WSD	0.50		

Analytical Method:

EPA TO-14A

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

RL = Reporting Limit

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NM = Not Measured

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* = See end of report for comments and notes applying to this sample

DONNA PALLISTER
 LFR, INC. - RI
 350 METRO CENTER BLVD., SUITE 250
 WARWICK, RI 02886

Purchase Order No.:

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Project Location: SPRINGFIELD ST SCHOOL, PROVIDENCE, RI
 Date Received: 2/21/2007
 Field Sample #: MPL-6

Project Number: 681-12152-03
 LIMS-BAT #: LIMIT-04042
 Job Number: 681-12152.03

Sample ID : 07B05533 Sampled : 2/20/2007
 NOT SPECIFIED
 Sample Matrix: AIR Sample Medium : TEDLAR BAG

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Benzene	ug/m3	ND	02/21/07	WSD	1.6			
Bromomethane	ug/m3	ND	02/21/07	WSD	2.0			
Carbon Tetrachloride	ug/m3	ND	02/21/07	WSD	3.1			
Chlorobenzene	ug/m3	ND	02/21/07	WSD	2.3			
Chloroethane	ug/m3	ND	02/21/07	WSD	1.4			
Chloroform	ug/m3	ND	02/21/07	WSD	2.5			
Chloromethane	ug/m3	ND	02/21/07	WSD	1.1			
1,2-Dibromoethane	ug/m3	ND	02/21/07	WSD	3.9			
1,2-Dichlorobenzene	ug/m3	ND	02/21/07	WSD	3.1			
1,3-Dichlorobenzene	ug/m3	ND	02/21/07	WSD	3.1			
1,4-Dichlorobenzene	ug/m3	ND	02/21/07	WSD	3.1			
Dichlorodifluoromethane	ug/m3	ND	02/21/07	WSD	2.5			
1,1-Dichloroethane	ug/m3	ND	02/21/07	WSD	2.1			
1,2-Dichloroethane	ug/m3	ND	02/21/07	WSD	2.1			
1,1-Dichloroethylene	ug/m3	ND	02/21/07	WSD	2.0			
cis-1,2-Dichloroethylene	ug/m3	ND	02/21/07	WSD	2.0			
1,2-Dichloropropane	ug/m3	ND	02/21/07	WSD	2.4			
cis-1,3-Dichloropropene	ug/m3	ND	02/21/07	WSD	2.3			
trans-1,3-Dichloropropene	ug/m3	ND	02/21/07	WSD	2.3			
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	02/21/07	WSD	3.5			
Ethylbenzene	ug/m3	ND	02/21/07	WSD	2.2			
Hexachlorobutadiene	ug/m3	ND	02/21/07	WSD	5.4			
Methylene Chloride	ug/m3	ND	02/21/07	WSD	1.8			
Styrene	ug/m3	ND	02/21/07	WSD	2.2			
1,1,2,2-Tetrachloroethane	ug/m3	ND	02/21/07	WSD	3.5			
Tetrachloroethylene	ug/m3	ND	02/21/07	WSD	3.4			
Toluene	ug/m3	19	02/21/07	WSD	1.9			
1,2,4-Trichlorobenzene	ug/m3	ND	02/21/07	WSD	3.8			
1,1,1-Trichloroethane	ug/m3	ND	02/21/07	WSD	2.8			
1,1,2-Trichloroethane	ug/m3	ND	02/21/07	WSD	2.8			

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Project Location: SPRINGFIELD ST SCHOOL, PROVIDENCE, RI
 Date Received: 2/21/2007

Project Number: 681-12152-03
 LIMS-BAT #: LIMIT-04042
 Job Number: 681-12152.03

Field Sample #: MPL-6

Sample ID : 07B05533

Sampled : 2/20/2007
 NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : TEDLAR BAG

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Trichloroethylene	ug/m3	ND	02/21/07	WSD	2.7			
Trichlorofluoromethane	ug/m3	ND	02/21/07	WSD	2.9			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	ND	02/21/07	WSD	3.9			
1,2,4-Trimethylbenzene	ug/m3	ND	02/21/07	WSD	2.5			
1,3,5-Trimethylbenzene	ug/m3	ND	02/21/07	WSD	2.5			
Vinyl Chloride	ug/m3	ND	02/21/07	WSD	1.3			
m/p-Xylene	ug/m3	6.0	02/21/07	WSD	4.4			
o-Xylene	ug/m3	ND	02/21/07	WSD	2.2			

Analytical Method:
 EPA TO-14A

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

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Purchase Order No.:

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Project Location: SPRINGFIELD ST SCHOOL, PROVIDENCE, RI
 Date Received: 2/21/2007
 Field Sample #: WB-2

Project Number: 681-12152-03
 LIMS-BAT #: LIMIT-04042
 Job Number: 681-12152.03

Sample ID : 07B05532 Sampled : 2/20/2007
 NOT SPECIFIED
 Sample Matrix: AIR Sample Medium : TEDLAR BAG

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Benzene	ug/m3	ND	02/21/07	WSD	1.6			
Bromomethane	ug/m3	ND	02/21/07	WSD	2.0			
Carbon Tetrachloride	ug/m3	ND	02/21/07	WSD	3.1			
Chlorobenzene	ug/m3	ND	02/21/07	WSD	2.3			
Chloroethane	ug/m3	ND	02/21/07	WSD	1.4			
Chloroform	ug/m3	ND	02/21/07	WSD	2.5			
Chloromethane	ug/m3	ND	02/21/07	WSD	1.1			
1,2-Dibromoethane	ug/m3	ND	02/21/07	WSD	3.9			
1,2-Dichlorobenzene	ug/m3	ND	02/21/07	WSD	3.1			
1,3-Dichlorobenzene	ug/m3	ND	02/21/07	WSD	3.1			
1,4-Dichlorobenzene	ug/m3	ND	02/21/07	WSD	3.1			
Dichlorodifluoromethane	ug/m3	ND	02/21/07	WSD	2.5			
1,1-Dichloroethane	ug/m3	ND	02/21/07	WSD	2.1			
1,2-Dichloroethane	ug/m3	ND	02/21/07	WSD	2.1			
1,1-Dichloroethylene	ug/m3	ND	02/21/07	WSD	2.0			
cis-1,2-Dichloroethylene	ug/m3	ND	02/21/07	WSD	2.0			
1,2-Dichloropropane	ug/m3	ND	02/21/07	WSD	2.4			
cis-1,3-Dichloropropene	ug/m3	ND	02/21/07	WSD	2.3			
trans-1,3-Dichloropropene	ug/m3	ND	02/21/07	WSD	2.3			
1,2-Dichlorotetrafluoroethane (114)	ug/m3	ND	02/21/07	WSD	3.5			
Ethylbenzene	ug/m3	ND	02/21/07	WSD	2.2			
Hexachlorobutadiene	ug/m3	ND	02/21/07	WSD	5.4			
Methylene Chloride	ug/m3	ND	02/21/07	WSD	1.8			
Styrene	ug/m3	ND	02/21/07	WSD	2.2			
1,1,2,2-Tetrachloroethane	ug/m3	ND	02/21/07	WSD	3.5			
Tetrachloroethylene	ug/m3	ND	02/21/07	WSD	3.4			
Toluene	ug/m3	17	02/21/07	WSD	1.9			
1,2,4-Trichlorobenzene	ug/m3	ND	02/21/07	WSD	3.8			
1,1,1-Trichloroethane	ug/m3	ND	02/21/07	WSD	2.8			
1,1,2-Trichloroethane	ug/m3	ND	02/21/07	WSD	2.8			

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Purchase Order No.:

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Project Location: SPRINGFIELD ST SCHOOL, PROVIDENCE, RI

Project Number: 681-12152-03

Date Received: 2/21/2007

LIMS-BAT #: LIMIT-04042

Job Number: 681-12152.03

Field Sample #: WB-2

Sample ID : 07B05532

Sampled : 2/20/2007

NOT SPECIFIED

Sample Matrix: AIR

Sample Medium : TEDLAR BAG

	Units	Results	Date Analyzed	Analyst	RL	SPEC Limit		P/ F
						Lo	Hi	
Trichloroethylene	ug/m3	ND	02/21/07	WSD	2.7			
Trichlorofluoromethane	ug/m3	ND	02/21/07	WSD	2.9			
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	ND	02/21/07	WSD	3.9			
1,2,4-Trimethylbenzene	ug/m3	ND	02/21/07	WSD	2.5			
1,3,5-Trimethylbenzene	ug/m3	ND	02/21/07	WSD	2.5			
Vinyl Chloride	ug/m3	ND	02/21/07	WSD	1.3			
m/p-Xylene	ug/m3	5.4	02/21/07	WSD	4.4			
o-Xylene	ug/m3	ND	02/21/07	WSD	2.2			

Analytical Method:

EPA TO-14A

SAMPLES ARE TAKEN IN SUMMA CANISTERS AND ANALYZED BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY DETECTION. (GC/MS)

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350 METRO CENTER BLVD., SUITE 250
WARWICK, RI 02886

Purchase Order No.:

Project Location: SPRINGFIELD ST SCHOOL, PROVIDENCE, RI
Date Received: 2/21/2007

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Project Number: 681-12152-03
LIMS-BAT #: LIMIT-04042
Job Number: 681-12152.03

** END OF REPORT **

RL = Reporting Limit

ND = Not Detected at or above the Reporting Limit

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SPEC LIMIT = a client specified recommended or regulatory level for comparison with data to determine PASS (P) or FAIL (F) condition of results.

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates
Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates
Standard Reference Materials and Duplicates
Method Blanks

Report Date: 2/27/2007 Lims Bat #: LIMT-04042 Page 1 of 5

QC Batch Number: BATCH-12014

Sample Id	Analysis	QC Analysis	Values	Units	Limits
07B05532	4-Bromofluorobenzene	Surrogate Recovery	100.00	%	70-130
07B05533	4-Bromofluorobenzene	Surrogate Recovery	100.12	%	70-130
BLANK-98715	Benzene	Blank	<1.6	ug/m3	
	Carbon Tetrachloride	Blank	<3.1	ug/m3	
	Chloroform	Blank	<2.5	ug/m3	
	1,2-Dichloroethane	Blank	<2.1	ug/m3	
	1,4-Dichlorobenzene	Blank	<3.1	ug/m3	
	Ethylbenzene	Blank	<2.2	ug/m3	
	Styrene	Blank	<2.2	ug/m3	
	Tetrachloroethylene	Blank	<3.4	ug/m3	
	Toluene	Blank	<1.9	ug/m3	
	1,1,1-Trichloroethane	Blank	<2.8	ug/m3	
	Trichloroethylene	Blank	<2.7	ug/m3	
	1,1,2-Trichloro-1,2,2-Trifluoroethane	Blank	<3.9	ug/m3	
	Trichlorofluoromethane	Blank	<2.9	ug/m3	
	o-Xylene	Blank	<2.2	ug/m3	
	m/p-Xylene	Blank	<4.4	ug/m3	
	1,2-Dichlorobenzene	Blank	<3.1	ug/m3	
	1,3-Dichlorobenzene	Blank	<3.1	ug/m3	
	1,1-Dichloroethane	Blank	<2.1	ug/m3	
	1,1-Dichloroethylene	Blank	<2.0	ug/m3	
	Vinyl Chloride	Blank	<1.3	ug/m3	
	Methylene Chloride	Blank	<1.8	ug/m3	
	Chlorobenzene	Blank	<2.3	ug/m3	
	Chloromethane	Blank	<1.1	ug/m3	
	Bromomethane	Blank	<2.0	ug/m3	
	Chloroethane	Blank	<1.4	ug/m3	
	cis-1,3-Dichloropropene	Blank	<2.3	ug/m3	
	trans-1,3-Dichloropropene	Blank	<2.3	ug/m3	
	1,1,2-Trichloroethane	Blank	<2.8	ug/m3	
	1,1,2,2-Tetrachloroethane	Blank	<3.5	ug/m3	
	Hexachlorobutadiene	Blank	<5.4	ug/m3	
	1,2,4-Trichlorobenzene	Blank	<3.8	ug/m3	
	1,2,4-Trimethylbenzene	Blank	<2.5	ug/m3	
	1,3,5-Trimethylbenzene	Blank	<2.5	ug/m3	
	cis-1,2-Dichloroethylene	Blank	<2.0	ug/m3	
	1,2-Dichloropropane	Blank	<2.4	ug/m3	
	Dichlorodifluoromethane	Blank	<2.5	ug/m3	
	1,2-Dibromoethane	Blank	<3.9	ug/m3	
	1,2-Dichlorotetrafluoroethane (114)	Blank	<3.5	ug/m3	



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QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 2/27/2007

Lims Bat #: LIMT-04042

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QC Batch Number: BATCH-12014

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-59915	Benzene	Lab Fort Blank Amt.	15.95	ug/m3	
		Lab Fort Blk. Found	16.04	ug/m3	
		Lab Fort Blk. % Rec.	100.60	%	70-130
	Carbon Tetrachloride	Lab Fort Blank Amt.	31.45	ug/m3	
		Lab Fort Blk. Found	34.21	ug/m3	
		Lab Fort Blk. % Rec.	108.80	%	70-130
	Chloroform	Lab Fort Blank Amt.	24.33	ug/m3	
		Lab Fort Blk. Found	24.14	ug/m3	
		Lab Fort Blk. % Rec.	99.19	%	70-130
1,2-Dichloroethane		Lab Fort Blank Amt.	20.24	ug/m3	
		Lab Fort Blk. Found	20.93	ug/m3	
		Lab Fort Blk. % Rec.	103.40	%	70-130
1,4-Dichlorobenzene		Lab Fort Blank Amt.	30.06	ug/m3	
		Lab Fort Blk. Found	30.06	ug/m3	
		Lab Fort Blk. % Rec.	100.00	%	70-130
Ethylbenzene		Lab Fort Blank Amt.	21.67	ug/m3	
		Lab Fort Blk. Found	23.36	ug/m3	
		Lab Fort Blk. % Rec.	107.80	%	70-130
Styrene		Lab Fort Blank Amt.	21.26	ug/m3	
		Lab Fort Blk. Found	23.90	ug/m3	
		Lab Fort Blk. % Rec.	112.40	%	70-130
Tetrachloroethylene		Lab Fort Blank Amt.	33.90	ug/m3	
		Lab Fort Blk. Found	33.36	ug/m3	
		Lab Fort Blk. % Rec.	98.39	%	70-130
Toluene		Lab Fort Blank Amt.	18.81	ug/m3	
		Lab Fort Blk. Found	19.15	ug/m3	
		Lab Fort Blk. % Rec.	101.80	%	70-130
1,1,1-Trichloroethane		Lab Fort Blank Amt.	27.28	ug/m3	
		Lab Fort Blk. Found	29.46	ug/m3	
		Lab Fort Blk. % Rec.	108.00	%	70-130
Trichloroethylene		Lab Fort Blank Amt.	26.87	ug/m3	
		Lab Fort Blk. Found	27.78	ug/m3	
		Lab Fort Blk. % Rec.	103.40	%	70-130
1,1,2-Trichloro-1,2,2-Trifluoroethane		Lab Fort Blank Amt.	38.31	ug/m3	
		Lab Fort Blk. Found	38.62	ug/m3	
		Lab Fort Blk. % Rec.	100.80	%	70-130
Trichlorofluoromethane		Lab Fort Blank Amt.	28.09	ug/m3	
		Lab Fort Blk. Found	28.93	ug/m3	
		Lab Fort Blk. % Rec.	103.00	%	70-130
o-Xylene		Lab Fort Blank Amt.	21.71	ug/m3	
		Lab Fort Blk. Found	23.71	ug/m3	
		Lab Fort Blk. % Rec.	109.20	%	70-130
m/p-Xylene		Lab Fort Blank Amt.	43.43	ug/m3	



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QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 2/27/2007

Lims Bat #: LIMT-04042

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QC Batch Number: BATCH-12014

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-59915					
	m/p-Xylene	Lab Fort Blk. Found	47.34	ug/m3	
		Lab Fort Blk. % Rec.	109.00	%	70-130
	1,2-Dichlorobenzene	Lab Fort Blank Amt.	30.06	ug/m3	
		Lab Fort Blk. Found	23.80	ug/m3	
		Lab Fort Blk. % Rec.	79.20	%	70-130
	1,3-Dichlorobenzene	Lab Fort Blank Amt.	30.06	ug/m3	
		Lab Fort Blk. Found	30.12	ug/m3	
		Lab Fort Blk. % Rec.	100.20	%	70-130
	1,1-Dichloroethane	Lab Fort Blank Amt.	20.24	ug/m3	
		Lab Fort Blk. Found	18.78	ug/m3	
		Lab Fort Blk. % Rec.	92.80	%	70-130
	1,1-Dichloroethylene	Lab Fort Blank Amt.	19.83	ug/m3	
		Lab Fort Blk. Found	20.51	ug/m3	
		Lab Fort Blk. % Rec.	103.40	%	70-130
	Vinyl Chloride	Lab Fort Blank Amt.	12.78	ug/m3	
		Lab Fort Blk. Found	11.86	ug/m3	
		Lab Fort Blk. % Rec.	92.80	%	70-130
	Methylene Chloride	Lab Fort Blank Amt.	17.36	ug/m3	
		Lab Fort Blk. Found	16.63	ug/m3	
		Lab Fort Blk. % Rec.	95.80	%	70-130
	Chlorobenzene	Lab Fort Blank Amt.	23.02	ug/m3	
		Lab Fort Blk. Found	23.21	ug/m3	
		Lab Fort Blk. % Rec.	100.80	%	70-130
	Chloromethane	Lab Fort Blank Amt.	10.32	ug/m3	
		Lab Fort Blk. Found	9.74	ug/m3	
		Lab Fort Blk. % Rec.	94.40	%	70-130
	Bromomethane	Lab Fort Blank Amt.	19.40	ug/m3	
		Lab Fort Blk. Found	18.94	ug/m3	
		Lab Fort Blk. % Rec.	97.59	%	70-130
	Chloroethane	Lab Fort Blank Amt.	13.19	ug/m3	
		Lab Fort Blk. Found	12.63	ug/m3	
		Lab Fort Blk. % Rec.	95.79	%	70-130
	cis-1,3-Dichloropropene	Lab Fort Blank Amt.	22.69	ug/m3	
		Lab Fort Blk. Found	25.01	ug/m3	
		Lab Fort Blk. % Rec.	110.20	%	70-130
	trans-1,3-Dichloropropene	Lab Fort Blank Amt.	22.69	ug/m3	
		Lab Fort Blk. Found	25.55	ug/m3	
		Lab Fort Blk. % Rec.	112.60	%	70-130
	1,1,2-Trichloroethane	Lab Fort Blank Amt.	27.28	ug/m3	
		Lab Fort Blk. Found	27.11	ug/m3	
		Lab Fort Blk. % Rec.	99.40	%	70-130
	1,1,2,2-Tetrachloroethane	Lab Fort Blank Amt.	34.33	ug/m3	
		Lab Fort Blk. Found	35.43	ug/m3	

QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates

BATCH QC: Lab fortified Blanks and Duplicates

Sample Matrix Spikes and Matrix Spike Duplicates

Standard Reference Materials and Duplicates

Method Blanks

Report Date: 2/27/2007

Lims Bat #: LIMT-04042

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QC Batch Number: BATCH-12014

Sample Id	Analysis	QC Analysis	Values	Units	Limits
LFBLANK-59915	1,1,2,2-Tetrachloroethane	Lab Fort Blk. % Rec.	103.20	%	70-130
	Hexachlorobutadiene	Lab Fort Blank Amt.	53.33	ug/m3	
		Lab Fort Blk. Found	54.93	ug/m3	
	1,2,4-Trichlorobenzene	Lab Fort Blk. % Rec.	103.00	%	70-130
		Lab Fort Blank Amt.	37.10	ug/m3	
		Lab Fort Blk. Found	34.50	ug/m3	
	1,2,4-Trimethylbenzene	Lab Fort Blk. % Rec.	93.00	%	70-130
		Lab Fort Blank Amt.	24.58	ug/m3	
		Lab Fort Blk. Found	25.90	ug/m3	
	1,3,5-Trimethylbenzene	Lab Fort Blk. % Rec.	105.40	%	70-130
		Lab Fort Blank Amt.	24.58	ug/m3	
		Lab Fort Blk. Found	26.59	ug/m3	
	cis-1,2-Dichloroethylene	Lab Fort Blk. % Rec.	108.20	%	70-130
		Lab Fort Blank Amt.	19.82	ug/m3	
		Lab Fort Blk. Found	19.62	ug/m3	
	1,2-Dichloropropane	Lab Fort Blk. % Rec.	99.00	%	70-130
		Lab Fort Blank Amt.	23.10	ug/m3	
		Lab Fort Blk. Found	22.64	ug/m3	
	Dichlorodifluoromethane	Lab Fort Blk. % Rec.	97.99	%	70-130
		Lab Fort Blank Amt.	24.72	ug/m3	
		Lab Fort Blk. Found	25.41	ug/m3	
	1,2-Dibromoethane	Lab Fort Blk. % Rec.	102.80	%	70-130
		Lab Fort Blank Amt.	38.42	ug/m3	
		Lab Fort Blk. Found	39.57	ug/m3	
	1,2-Dichlorotetrafluoroethane (114)	Lab Fort Blk. % Rec.	103.00	%	70-130
		Lab Fort Blank Amt.	34.95	ug/m3	
		Lab Fort Blk. Found	34.25	ug/m3	
		Lab Fort Blk. % Rec.	97.99	%	70-130



QC SUMMARY REPORT

SAMPLE QC: Sample Results with Duplicates
Sample Matrix Spikes and Matrix Spike Duplicates

BATCH QC: Lab fortified Blanks and Duplicates
Standard Reference Materials and Duplicates
Method Blanks

Report Date: 2/27/2007

Lims Bat #: LIMT-04042

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QUALITY CONTROL DEFINITIONS AND ABBREVIATIONS

QC BATCH NUMBER	This is the number assigned to all samples analyzed together that would be subject to comparison with a particular set of Quality Control Data.
LIMITS	Upper and Lower Control Limits for the QC ANALYSIS Reported. All values normally would fall within these statistically determined limits, unless there is an unusual circumstance that would be documented in a NOTE appearing on the last page of the QC SUMMARY REPORT. Not all QC results will have Limits defined.
Sample Amount	Amount of analyte found in a sample.
Blank	Method Blank that has been taken through all the steps of the analysis.
LFBLANK	Laboratory Fortified Blank (a control sample)
STDADD	Standard Added (a laboratory control sample)
Matrix Spk Amt Added	Amount of analyte spiked into a sample
MS Amt Measured	Amount of analyte found including amount that was spiked
Matrix Spike % Rec.	% Recovery of spiked amount in sample.
Duplicate Value	The result from the Duplicate analysis of the sample.
Duplicate RPD	The Relative Percent Difference between two Duplicate Analyses.
Surrogate Recovery	The % Recovery for non-environmental compounds (surrogates) spiked into samples to determine the performance of the analytical methods.
Sur. Recovery (ELCD)	Surrogate Recovery on the Electrolytic Conductivity Detector.
Sur. Recovery (PID)	Surrogate Recovery on the Photoionization Detector.
Standard Measured	Amount measured for a laboratory control sample
Standard Amt Added	Known value for a laboratory control sample
Standard % Recovery	% recovered for a laboratory control sample with a known value.
Lab Fort Blank Amt	Laboratory Fortified Blank Amount Added
Lab Fort Blk. Found	Laboratory Fortified Blank Amount Found
Lab Fort Blk % Rec	Laboratory Fortified Blank % Recovered
Dup Lab Fort Bl Amt	Duplicate Laboratory Fortified Blank Amount Added
Dup Lab Fort Bl Fnd	Duplicate Laboratory Fortified Blank Amount Found
Dup Lab Fort Bl % Rec	Duplicate Laboratory Fortified Blank % Recovery
Lab Fort Blank Range	Laboratory Fortified Blank Range (Absolute value of difference between recoveries for Lab Fortified Blank and Lab Fortified Blank Duplicate).
Lab Fort Bl. Av. Rec.	Laboratory Fortified Blank Average Recovery
Duplicate Sample Amt	Sample Value for Duplicate used with Matrix Spike Duplicate
MSD Amount Added	Matrix Spike Duplicate Amount Added (Spiked)
MSD Amt Measured	Matrix Spike Duplicate Amount Measured
MSD % Recovery	Matrix Spike Duplicate % Recovery
MSD Range	Absolute difference between Matrix Spike and Matrix Spike Duplicate Recoveries



www.contestlabs.com

39 Spruce Street
East Longmeadow, MA
Phone: 1-413-525-2332
Fax: 1-413-525-6405

SAMPLE RECEIPT CHECKLIST

CLIENT NAME: LFR

RECEIVED BY: TPH DATE: 2-21-07

1. Was chain of custody relinquished and signed? YES NO

2. Does Chain agree with samples? YES NO

If not, explain:

3. All Samples in good condition? YES NO

If not, explain:

4. Were samples received in compliance with Temperature 0-6 degrees C? YES NO

Degrees: N/A

5. Are all soil vph & voc samples covered with preservation? YES NO

6. Are there any on hold samples? YES NO

7. Laboratory analysts notified? YES NO
Who _____ Time _____ Date _____

8. Location where samples are stored: Air Lock

CONTAINERS SENT IN TO CON-TEST	# of containers	CONTAINERS SENT TO CON-TEST	# of containers
1 liter amber		Air Cassettes	
500 ml amber		8 oz clear jar	
250 ml amber (8oz. Amber)		4 oz clear jar	
1 liter plastic		2 oz clear jar	
500 ml plastic		Plastic bag	
250 ml plastic		Encore	
40 ml vial		Brass Sleeves	
Colisure bottle		Tubes	
Dissolved oxygen bottle		Summa cans	
Flashpoint bottle		Other	<u>Tedlar Bag 2</u>

Laboratory comments:

Do all the samples have the correct pH levels? YES NO If no, please explain below: