

J.C. Broderick & Associates, Inc.

Environmental/Construction Consulting & Testing



May 16, 2022

Mr. Severino Fasulo
Syosset Central School District
99 Pell Lane
Syosset, New York 11791

**Re: Indoor Radon Sampling and Methane Monitoring
South Grove Elementary School
60 Colony Lane
Syosset, New York 11791
Sampling Dates: April 21 - 25, 2022**

JCB#: 22-51127

Dear Mr. Fasulo:

J.C. Broderick and Associates, Inc. (JCB) was retained to perform indoor radon sampling and methane monitoring within the above referenced school building. The existing active sub-slab depressurization system (SSDS) for radon mitigation was turned off 48-hours prior to the start and throughout the duration of the sampling. The purpose of the SSDS shut down was to provide two sampling events to represent site conditions without an active mitigation system. This second sampling event completes the testing and will be used to make a determination on the continued testing and use of the SSDS.

The radon sampling was performed by experienced JCB representatives following the EPA Radon Measurement in Schools (EPA 402-R-92-014) guidance document. Sampling was performed utilizing Short-Term test devices which were placed in frequently occupied rooms in contact with the ground after the building was closed for a minimum of 12 hours.

The samples were assigned unique identification numbers, logged into a chain of custody document, and delivered to an accredited laboratory for the analysis of Radon. The results were compared with the decision-making flowchart found in the EPA Radon Measurement in Schools (EPA 402-R-92-014) guidance document which establishes an action level of 4 pCi/L.

The monitoring for methane gas was also performed during this period utilizing a Landtec GEM 5000 methane detecting real-time monitor. The monitor recorded the percentage of methane along with carbon dioxide and oxygen every 15-minutes.

The results of the sampling performed revealed the following:

- All radon results were reported below the EPA action level.
- No methane was recorded by the data-logging detector.

May 16, 2022

Mr. Severino Fasulo of Syosset CSD

Indoor Radon Sampling and Methane Monitoring

South Grove Elementary School

60 Colony Ln., Syosset, NY 11791

JCB#: 22-51127

Please see the attached laboratory reports to be included in the District's Radon Measurement Plan. If there are any questions or if more information is needed, please feel free to contact our office.

Sincerely,

J. C. Broderick & Associates, Inc.

A handwritten signature in black ink, appearing to read "Steven Muller", with a long horizontal flourish extending to the right.

Steven Muller, P.G.

Director, Subsurface Division

TRANSFER Lab # 06

2 Day



**CHAIN OF CUSTODY
RADON LABORATORY SERVICES**
(COMMERCIAL USE)

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: 800-220-3675
www.emsl.com

EMSL Job #: 382203365 2022 APR 27 A 9:09

Company Information: EMSL Acct #: JCBR50

Company Name: JCBRODOLICK & ASSOC

Contact: STEVEN MULLER

Address: 1775 EXPRESSWAY DR. N

City: HAUPPAUGE

State: NY Zip: 11788

Phone: 631-584-5496 Fax: _____

Email: SMULLER@JCBRODOLICK.COM

Technician Certification #: _____

Tech Name: STEVEN MULLER

Tech Signature: [Signature]

Project/Site Information: *Required

Project Name: SOUTH GROVE ES

Project # / PO: 22-51127

*Address: 60 COLONY LANE

*City: SYOSSET *State: NY *Zip: 11791

*Building type? Residential, Non-Residential
 School Other: _____

*Building foundation type? Basement Crawlspace
 Slab on Grade Other: _____

Special Notes / Instructions: _____

***Turnaround Time (TAT) Options**

1 Day 2 Day 3 Day 4 Day

Disclaimer: In no event shall EMSL be liable for indirect, special, consequential, or incidental damages for loss of profit or goodwill regardless of the negligence (either sole or concurrent) of EMSL and whether EMSL has been informed of the possibility of such damages arising out of or in connection with EMSL's services there under or the delivery, use, reliance upon or interpretation of test results by client or third party. We accept no legal responsibility for the purposes for which the client uses the test results. In no event shall EMSL be liable to a client or any third party, whether based upon theories of tort, contract or any other legal or equitable theory, in excess of the amount paid to EMSL by client thereafter.

(S) Sample (B) Blank (D) Duplicate	Device Number	Location	Room #	Exposure Period Beginning Date		Exposure Period Ending Date		Temp. °F	Humidity, %
				Date	Time	Date	Time		
S	496161	DESK	2002	4/21/22	4:08	4/25/22	5:57	71.2	27.6
B	498478								
S	496221	DESK	2005	4/21/22	4:08	4/25/22	5:58	70.3	28.5
S	498160	DESK	2008	4/21/22	4:10	4/25/22	5:59	74.5	25.8
D	498493								
S	495579	DESK	2011 2011	4/21/22	4:11	4/25/22	6:01	76.2	23.9
S	498022	DESK	2015 2015	4/21/22	4:12	4/25/22	6:02	74.6	24.8
S	49550	DESK	2018 2018	4/21/22	4:13	4/25/22	6:03	73.7	24.7
S	495640	DESK	2023	4/21/22	4:14	4/25/22	6:04	73.9	25.7

Relinquished by (Sign): [Signature] Date: 4/25/22 Time: _____

Received by EMSL (Sign): _____ Date: _____ Time: _____



**CHAIN OF CUSTODY
RADON LABORATORY SERVICES
(COMMERCIAL USE)**

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: 800-220-3675
www.emsl.com

EMSL Job #: 382203365

EMSL ANALYTICAL, INC.

(S) Sample (B) Blank (D) Duplicate	Device Number	Location	Room #	Exposure Period Beginning Date		Exposure Period Ending Date		Temp, °F	Humidity, %
				Date	Time	Date	Time		
S	496199	TABLE	2027	4/21/22	4:15	4/25/22	6:06	73.2	25.7
S	498065	DESK	2030	4/21/22	4:19	4/25/22	6:06	72.3	25.6
S	498045 498043	CHAIR	2032	4/21/22	4:19	4/25/22	6:07	72.3	25.8
S	498049	TABLE	2041	4/21/22	4:22	4/25/22	6:12	75.5	23.9
S	496302	DESK	2043	4/21/22	4:24	4/25/22	6:10	73.9	24.8
S	498161	TABLE	2044	4/21/22	4:24	4/25/22	6:11	75.5	24.8
S	498121	CHAIR	2045	4/21/22	4:26	4/25/22	6:14	75.2	24.8
S	498064	DESK	2050	4/21/22	4:27	4/25/22	6:15	74.3	24.8
S	496171	DESK	2052	4/21/22	4:28	4/25/22	6:16	73.9	24.7
D	498679								
S	498082	DESK	2054	4/21/22	4:29	4/25/22	6:17	74.1	24.8
S	496174	DESK	2056	4/21/22	4:30	4/25/22	6:18	74.1	24.8
S	495568	DESK	2058	4/21/22	4:31	4/25/22	6:19	74.1	24.8
S	497996	DESK	2060	4/21/22	4:32	4/25/22	6:21	74.8	24.8
S	497993	DESK	2062	4/21/22	4:33	4/25/22	6:21	75.0	24.8
B	498094								
S	498181	CHAIR	2068	4/21/22	4:34	4/25/22	6:23	75.2	23.8
S	496177	CHAIR	2068B	4/21/22	4:35	4/25/22	6:24	75.2	23.8
D	498125								

Relinquished by (Sign):

Date: 4/25/22 Time: _____

2 Page of 3

Received by EMSL (Sign): _____

Date: _____ Time: _____



CHAIN OF CUSTODY
RADON LABORATORY SERVICES
 (COMMERCIAL USE)

EMSL ANALYTICAL, INC.
 200 ROUTE 130 NORTH
 CINNAMINSON, NJ 08077
 PHONE: 800-220-3675
 www.emsl.com

EMSL Job #: 382203365

EMSL ANALYTICAL, INC.

(S) Sample (B) Blank (D) Duplicate	Device Number	Location	Room #	Exposure Period Beginning Date		Exposure Period Ending Date		Temp, °F	Humidity, %
				Date	Time	Date	Time		
S	496200	DESK	2070	4/21/22	4:36	4/25/22	6:09	73.4	24.7
S B	496229 498185	DESK	2071	4/21/22	4:39	4/25/22	6:27	73.7	28.0
S	495873	DESK	2075	4/21/22	4:40	4/25/22	6:28	69.0	31.3
S	495578	DESK	2078	4/21/22	4:40	4/25/22	6:29	67.8	30.3
S	498062	DESK	2081	4/21/22	4:41	4/25/22	6:30	68.7	29.4
S D	495609 498325	DESK	2086	4/21/22	4:42	4/25/22	6:31	68.3	30.3
S	498000	DESK	2089	4/21/22	4:43	4/25/22	6:32	70.5	29.5
S	496176	SHELF	2096	4/21/22	4:45	4/25/22	6:33	73.0	26.7
S	498006	DESK	123	4/21/22	4:47	4/25/22	6:41	70.5	28.5
S	498207	DESK	124	4/21/22	4:47	4/25/22	6:41	70.3	28.5

RECEIVED
 EMSL ANALYTICAL, INC.
 CINCINNATI, OH
 APR 25 10:51 AM

Relinquished by (Sign):

Date: 4/25/22 Time: _____

Received by EMSL (Sign): _____

Date: _____ Time: _____



EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax: (800) 220-3675 / (856) 786-0327
<http://www.EMSL.com> cinnaminsonradonlab@emsl.com

EMSL Order: 382203365
 CustomerID: JCBR50
 CustomerPO:
 ProjectID:

Attn: **Steven Muller**
J.C. Broderick & Associates
1775 Expressway Drive North, Suite 1
Hauppauge, NY 11788

Phone: (631) 584-5492
 Fax:
 Received: 4/27/2022 09:09 AM
 Analysis Date: 4/28/2022
 Collected: 4/21/2022

Project: **Southgrove ES/#22-51127**

Test **Southgrove ES/#22-51127**
 Site: **60 Colony Lane**
Syosset, NY 11791

Test Report: Radon in Air Test Results

Liquid Scintillation ID	Location	Radon Activity (pCi/L)	Start	Stop	Temperature F	Humidity %	Sample Type
496161 382203365-0001	Room #2002-Desk	0.3	4/21/2022 4:08:00 PM	4/25/2022 5:57:00 PM	71.2	27.6	Customer
Sample Notes: Radon device exposed >96 hours							
498478 382203365-0002	Room #2002-Desk	-0.1	4/21/2022 4:08:00 PM	4/25/2022 5:57:00 PM	71.2	27.6	Blank
Sample Notes: Radon device exposed >96 hours							
496221 382203365-0003	Room #2005-Desk	0.4	4/21/2022 4:08:00 PM	4/25/2022 5:58:00 PM	70.3	28.5	Customer
Sample Notes: Radon device exposed >96 hours							
498160 382203365-0004	Room #2008-Desk	0.3	4/21/2022 4:10:00 PM	4/25/2022 5:59:00 PM	74.5	25.8	Customer
Sample Notes: Radon device exposed >96 hours							
498493 382203365-0005	Room #2008-Desk	0.1	4/21/2022 4:10:00 PM	4/25/2022 5:59:00 PM	74.5	25.8	Duplicate
Sample Notes: Duplicate's Customer Sample:382203365-0004 Duplicate RPD >67% Radon device exposed >96 hours							
Duplicate RPD = 100.0%							
495579 382203365-0006	Room #2011-Desk	0.3	4/21/2022 4:11:00 PM	4/25/2022 6:01:00 PM	76.2	23.9	Customer
Sample Notes: Radon device exposed >96 hours							
498022 382203365-0007	Room #2015-Desk	0.4	4/21/2022 4:12:00 PM	4/25/2022 6:02:00 PM	74.6	24.8	Customer
Sample Notes: Radon device exposed >96 hours							
495550 382203365-0008	Room #2018-Desk	0.3	4/21/2022 4:13:00 PM	4/25/2022 6:03:00 PM	73.7	24.7	Customer
Sample Notes: Radon device exposed >96 hours							
495640 382203365-0009	Room #2023-Desk	0.4	4/21/2022 4:14:00 PM	4/25/2022 6:04:00 PM	73.9	25.7	Customer
Sample Notes: Radon device exposed >96 hours							
496199 382203365-0010	Room #2027-Table	0.3	4/21/2022 4:15:00 PM	4/25/2022 6:06:00 PM	73.2	25.7	Customer
Sample Notes: Radon device exposed >96 hours							

Please visit www.radontestinglab.com



EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (800) 220-3675 / (856) 786-0327

<http://www.EMSL.com>

cinnaminsonradonlab@emsl.com

EMSL Order: 382203365

CustomerID: JCBR50

CustomerPO:

ProjectID:

Test Report: Radon in Air Test Results

Liquid Scintillation ID	Location	Radon Activity (pCi/L)	Start	Stop	Temperature F	Humidity %	Sample Type
498065 382203365-0011	Room #2030-Desk	0.6	4/21/2022 4:18:00 PM	4/25/2022 6:06:00 PM	72.3	25.6	Customer
Sample Notes: Radon device exposed >96 hours							
498043 382203365-0012	Room #2032-Chair	0.2	4/21/2022 4:19:00 PM	4/25/2022 6:07:00 PM	72.3	25.8	Customer
Sample Notes: Radon device exposed >96 hours							
498049 382203365-0013	Room #2041-Table	0.3	4/21/2022 4:22:00 PM	4/25/2022 6:12:00 PM	75.5	23.9	Customer
Sample Notes: Radon device exposed >96 hours							
496302 382203365-0014	Room #2043-Desk	0.1	4/21/2022 4:24:00 PM	4/25/2022 6:10:00 PM	73.9	24.8	Customer
Sample Notes: Radon device exposed >96 hours							
498161 382203365-0015	Room #2044-Table	0.3	4/21/2022 4:24:00 PM	4/25/2022 6:11:00 PM	75.5	24.8	Customer
Sample Notes: Radon device exposed >96 hours							
498121 382203365-0016	Room #2045-Chair	0.4	4/21/2022 4:26:00 PM	4/25/2022 6:14:00 PM	75.2	24.8	Customer
Sample Notes: Radon device exposed >96 hours							
498064 382203365-0017	Room #2050-Desk	0.3	4/21/2022 4:27:00 PM	4/25/2022 6:15:00 PM	74.3	24.8	Customer
Sample Notes: Radon device exposed >96 hours							
496171 382203365-0018	Room #2052-Desk	0.1	4/21/2022 4:28:00 PM	4/25/2022 6:16:00 PM	73.9	24.7	Customer
Sample Notes: Radon device exposed >96 hours							
498679 382203365-0019	Room #2052-Desk	0.5	4/21/2022 4:28:00 PM	4/25/2022 6:16:00 PM	73.9	24.7	Duplicate
Sample Notes: Duplicate's Customer Sample:382203365-0018 Duplicate RPD >67% Radon device exposed >96 hours						Duplicate RPD = 133.3%	
498082 382203365-0020	Room #2054-Desk	0.3	4/21/2022 4:29:00 PM	4/25/2022 6:17:00 PM	74.1	24.8	Customer
Sample Notes: Radon device exposed >96 hours							
496174 382203365-0021	Room #2056-Desk	0.3	4/21/2022 4:30:00 PM	4/25/2022 6:18:00 PM	74.1	24.8	Customer
Sample Notes: Radon device exposed >96 hours							
495568 382203365-0022	Room #2058-Desk	0.5	4/21/2022 4:31:00 PM	4/25/2022 6:19:00 PM	74.1	24.8	Customer
Sample Notes: Radon device exposed >96 hours							
497996 382203365-0023	Room #2060-Desk	0.3	4/21/2022 4:32:00 PM	4/25/2022 6:21:00 PM	74.8	24.8	Customer
Sample Notes: Radon device exposed >96 hours							

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<http://www.EMSL.com>

cinnaminsonradonlab@emsl.com

EMSL Order: 382203365

CustomerID: JCBR50

CustomerPO:

ProjectID:

Test Report: Radon in Air Test Results

Liquid Scintillation ID	Location	Radon Activity (pCi/L)	Start	Stop	Temperature F	Humidity %	Sample Type
497993 382203365-0024	Room #2062-Desk	0.2	4/21/2022 4:33:00 PM	4/25/2022 6:21:00 PM	75	24.8	Customer
Sample Notes: Radon device exposed >96 hours							
498094 382203365-0025	Room #2062-Desk	-0.1	4/21/2022 4:33:00 PM	4/25/2022 6:21:00 PM	75	24.8	Blank
Sample Notes: Radon device exposed >96 hours							
498181 382203365-0026	Room #2068-Chair	0.3	4/21/2022 4:34:00 PM	4/25/2022 6:23:00 PM	75.2	23.8	Customer
Sample Notes: Radon device exposed >96 hours							
496177 382203365-0027	Room #2068B-Chair	0.6	4/21/2022 4:35:00 PM	4/25/2022 6:24:00 PM	75.2	23.8	Customer
Sample Notes: Radon device exposed >96 hours							
498125 382203365-0028	Room #2068B-Chair	0.2	4/21/2022 4:35:00 PM	4/25/2022 6:24:00 PM	75.2	23.8	Duplicate
Sample Notes: Duplicate's Customer Sample:382203365-0027 Duplicate RPD >67% Radon device exposed >96 hours						Duplicate RPD = 100.0%	
496200 382203365-0029	Room #2070-Desk	0.4	4/21/2022 4:36:00 PM	4/25/2022 6:09:00 PM	73.4	24.7	Customer
Sample Notes: Radon device exposed >96 hours							
496229 382203365-0030	Room #2071-Desk	0.3	4/21/2022 4:39:00 PM	4/25/2022 6:27:00 PM	73.7	28	Customer
Sample Notes: Radon device exposed >96 hours							
498185 382203365-0031	Room #2071-Desk	0	4/21/2022 4:39:00 PM	4/25/2022 6:27:00 PM	73.7	28	Blank
Sample Notes: Radon device exposed >96 hours							
495873 382203365-0032	Room #2075-Desk	0.4	4/21/2022 4:40:00 PM	4/25/2022 6:28:00 PM	69	31.3	Customer
Sample Notes: Radon device exposed >96 hours							
495578 382203365-0033	Room #2078-Desk	0.6	4/21/2022 4:40:00 PM	4/25/2022 6:29:00 PM	67.8	30.3	Customer
Sample Notes: Radon device exposed >96 hours							
498062 382203365-0034	Room #2081-Desk	0.4	4/21/2022 4:41:00 PM	4/25/2022 6:30:00 PM	68.7	29.4	Customer
Sample Notes: Radon device exposed >96 hours							
495609 382203365-0035	Room #2086-Desk	0.5	4/21/2022 4:42:00 PM	4/25/2022 6:31:00 PM	68.3	30.3	Customer
Sample Notes: Radon device exposed >96 hours							

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Phone/Fax: (800) 220-3675 / (856) 786-0327

<http://www.EMSL.com>

cinnaminsonradonlab@emsl.com

EMSL Order: 382203365

CustomerID: JCBR50

CustomerPO:

ProjectID:

Test Report: Radon in Air Test Results

Liquid Scintillation ID	Location	Radon Activity (pCi/L)	Start	Stop	Temperature F	Humidity %	Sample Type
498327 382203365-0036	Room #2086-Desk	0.6	4/21/2022 4:42:00 PM	4/25/2022 6:31:00 PM	68.3	30.3	Duplicate
Sample Notes: Duplicate's Customer Sample:382203365-0035 Radon device exposed >96 hours							Duplicate RPD = 18.2%
498000 382203365-0037	Room #2089-Desk	0.5	4/21/2022 4:43:00 PM	4/25/2022 6:32:00 PM	70.5	29.5	Customer
Sample Notes: Radon device exposed >96 hours							
496176 382203365-0038	Room #2096-Shelf	0.4	4/21/2022 4:45:00 PM	4/25/2022 6:33:00 PM	73	26.7	Customer
Sample Notes: Radon device exposed >96 hours							
498006 382203365-0039	Room #123-Desk	0.8	4/21/2022 4:47:00 PM	4/25/2022 6:41:00 PM	70.5	28.5	Customer
Sample Notes: Radon device exposed >96 hours							
498207 382203365-0040	Room #124-Desk	0.9	4/21/2022 4:47:00 PM	4/25/2022 6:41:00 PM	70.3	28.5	Customer
Sample Notes: Radon device exposed >96 hours							

Report Notes

The United States Environmental Protection Agency (EPA) has established a radon action level of 4.0pCi/L. EPA recommends mitigation of a structure if the confirmed radon level is equal to or greater than 4.0pCi/L. The radon tests were performed using liquid scintillation radon detectors and counted on a liquid scintillation counter following EPA Method # 402-R-92-004 testing protocol for Radon in Air testing. EPA recommends retesting every two years. Please contact EMSL Analytical, Inc. or your State Health Department for further information. All procedures used for generating this report are in complete accordance with the current EPA protocols for the analysis of Radon in Air.

Analyst(s)

Dominic Gehret (40)

Dominic Gehret, Radiochemistry Laboratory Manager, 10872

In no event shall EMSL be liable for indirect, special, consequential, or incidental damages, including, but not limited to, damages for loss of profit or goodwill regardless of the negligence (either sole or concurrent) of EMSL and whether EMSL has been informed of the possibility of such damages, arising out of or in connection with EMSL's services thereunder or the delivery, use, reliance upon or interpretation of test results by client or any third party. We accept no legal responsibility for the purposes for which the client uses the test results. In no event shall EMSL be liable to a client or any third party, whether based upon theories of tort, contract or any other legal or equitable theory, in excess of the amount paid to EMSL by client thereunder. The test results meets all NELAC requirements unless otherwise specified.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ FL RB2034/R2687,IL RNL2008202,IN RTL00935,IA RNLAB10005,KS KS-LB-0005/KS-MS-0482,ME SPC202,MN RL-0005,NE 474/RMB-1083,NJ 03036/MEB92525/MES13910,NY 10872,OH RL39,OK D9952,PA 2573/3393/68-00367,RI RMB-108/RI00179,WV RL000220,NRSB-ARL6006,NRPP

Initial report from 04/29/2022 14:52:00