# J.C. Broderick & Associates, Inc.

Environmental/Construction Consulting & Testing

February 24, 2023

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

> Re: Indoor Radon Sampling South Grove Elementary School 60 Colony Lane Syosset, New York 11791 Sampling Dates: February 13 - 15, 2023

JCB#: 22-52916

#### Dear Mr. Fasulo:

J.C. Broderick and Associates, Inc. (JCB) was retained to perform indoor radon sampling within the above referenced school building. This duplicate short-term sampling event was targeted to four (4) locations within the gym addition as a result of the most recent January 2023 sampling results. To perform the sampling under normal building conditions, the existing active sub-slab depressurization system (SSDS) for radon mitigation was operational throughout the duration of the sampling.

The radon sampling was performed by experienced JCB representatives following the AARST Consortium on National Radon Standards - *Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings*, dated 2015 guidance document. Sampling was performed utilizing Short-Term test devices which were placed in frequently occupied rooms in contact with the ground.

#### **Radon Laboratory Analytical Summary**

The short-term Radon in Air sampling was performed utilizing laboratory supplied test kits, assigned individual identification numbers, and were secured. Chain of Custody documents were prepared, and the samples were then delivered to an independent New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory for analysis of Radon in Air.

EMSL Analytical Inc. (EMSL) of Cinnaminson, New Jersey provided laboratory analytical services. Copies of EMSL's NYSDOH certifications are available upon request.

The laboratory analytical results for the Radon in Air samples were reviewed and compared to the United States Environmental Protection Agency (EPA) recommended action level of 4.0 pCi/L as reported in the AARST guidance document.

The table on the following page summarizes the Radon Analytical Results for the last several sampling events:



February 24, 2023 Mr. Severino Fasulo of Syosset CSD Indoor Radon Sampling South Grove Elementary School 60 Colony Ln., Syosset, NY 11791 JCB#: 22-52916

Table No. 1: Summary of Radon Samples Analysis Results							
AHERA Room Identification	Radon Activity pCi/L – 2/15/23	Radon Activity pCi/L – 2/8/23	Radon Activity pCi/L – 1/12/23	Radon Activity pCi/L – 4/25/22	Radon Activity pCi/L – 2/25/22		
Gym Vestibule	0.6	0.8					
Gym Vestibule - Duplicate	0.5	0.9					
Gym (stage)	1.3	1.7					
Gym (stage) - Duplicate	1.3	1.4					
Room 123	2.1	2.6	4.0	0.8	2.3		
Room 123 - Duplicate	0.6	2.6					
Room 124	1.8	1.6	3.8	0.9	2.0		
Room 124 - Duplicate	1.5	1.2					

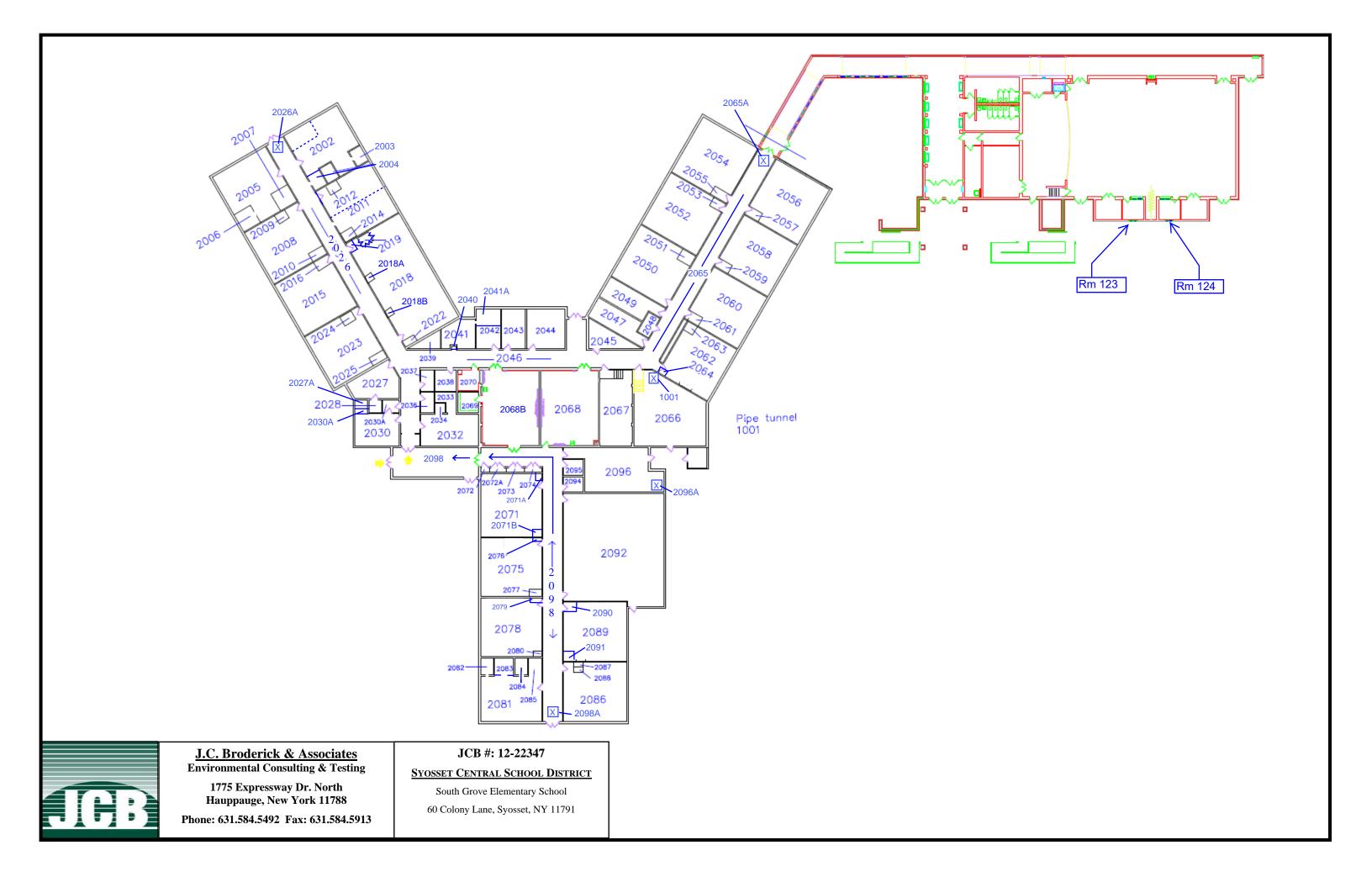
The laboratory analytical results from the Radon in Air samples collected on February 15, 2023, indicated a concentration of Radon below the guidance value established by the EPA of equal to or greater than 4.0 pCi/L in all samples tested.

Please see the attached laboratory reports and to include 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.

Steven Muller, P.G. Director, Subsurface Division

Appendix A Figures



## **Appendix B** Laboratory Analysis Reports



## Attn: Steven Muller J.C. Broderick &

J.C. Broderick & Associates 1775 Expressway Drive North, Suite 1 Hauppauge, NY 11788

Phone:	(631) 584-5492
Fax:	
Received:	2/20/2023 03:36 PM
Analysis Date:	2/21/2023
Collected:	2/13/2023

Project: South Grove ES / 22-52916 / 60 Colony Ln

Test South Grove ES Site: 60 Colony Ln

## Syosset, NY 11791

### Test Report: Radon in Air Test Results

Liquid Scintillation	n ID Location	Radon Activity (pCi/L)	Start	Stop	Temperature F	Humidity %	Sample Type
524347	Vestibule	0.6	2/13/2023	2/15/2023	64	34	Customer
382301097-0001			7:17:00 AM	4:11:00 PM			
Sample Notes:							
524368	Vestibule	0.5	2/13/2023	2/15/2023	64	34	Duplicate
382301097-0002			7:17:00 AM	4:11:00 PM	Dupli	Duplicate RPD = 18.2%	
Sample Notes:	Duplicate's Customer Sample:382301097-0001				Dapi		
521719	Gym	1.3	2/13/2023	2/15/2023	64	35	Customer
382301097-0003			7:18:00 AM	4:12:00 PM			
Sample Notes:							
524321	Gym	1.3	2/13/2023	2/15/2023	64	35	Duplicate
382301097-0004			7:18:00 AM	4:12:00 PM	Duplicate RPD = 0.0%		
Sample Notes:	Duplicate's Customer Sample:382301097-0003				Bupi		
524337	File Cabinet 123	2.1	2/13/2023	2/15/2023	63	36	Customer
382301097-0005			7:20:00 AM	4:14:00 PM			
Sample Notes:							
524313	File Cabinet 123	0.6	2/13/2023	2/15/2023	63	36	Duplicate
382301097-0006			7:20:00 AM	4:14:00 PM	Dunli	cate RPD -	111 1%
Sample Notes:	Duplicate's Customer Sample:382301097-0005 Duplicate RPD >67%				Dupi	Duplicate RPD = 111.1%	
524461	File Cabinet 124	1.8	2/13/2023	2/15/2023	65	36	Customer
382301097-0007			7:21:00 AM	4:15:00 PM			
Sample Notes:							
524351	File Cabinet 124	1.5	2/13/2023	2/15/2023	65	36	Duplicate
382301097-0008			7:21:00 AM	4:15:00 PM	Dunli	cate RPD =	18.2%
Sample Notes:	Duplicate's Customer Sample:382301097-0007				Bupi		10.2 /0

**Report Notes** 



#### Test Report: Radon in Air Test Results

		Radon					
		Activity			Temperature	Humidity	
Liquid Scintillation ID	Location	(pCi/L)	Start	Stop	F	%	Sample Type

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)

Jeanel Zoll (8)

- falat

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 02/24/2023 09:36:43

RADON LABO	OF CUSTODY       EMSL ANALYTICAL, INC.         PRATORY SERVICES       200 ROUTE 130 NORTH         MERCIAL USE)       CINNAMINSON, NJ 08077         CINNAMINSON, NJ 08077       PHONE: 800-220-3675         WWW.emsl.com       WWW.emsl.com						
Company Information: EMSL Acct #: JCBR 50	Project/Site Information: *Required						
Company Name: JUBRODELICIE & ASSOCIATE	Project Name: South GROVE ES						
Contact: STEUERS Mullon	Project #/ PO: 22-52916						
Address: 1775 EXPRESSLEDY DK. N	*Address: GO COLONY LANG						
City: HAUPPAUGE, NY	*City: Syosset *State: Ny *Zip: 11791						
State: NEW YORK Zip: 11788 Phone: 631-584-5492 Fax:	*Building type?						
Email: Smulteresconduc.com Technician Certification #:	*Building foundation type?  Basement  Crawlspace						
Tech Name: STEVEN Mullen Tech Signature: Mull	Special Notes / Instructions:						
	d Time (TAT) Options						
1 Day 2 Day	3 Day 4 Day						

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(S)Sample (B)Blank		Device Number	Location	Room #	Exposure Period Beginning Date		Exposure Period Ending Date		Temp,	Humidity,
	(D) Duplicate				Date	Time	Date	Time	°F	%
•	(S) Sample	524347	VESTIBULE	CASE	2/13/23	717	2/15/23	1611	63.8	34.1
8	\$	521719	Sym	STAGE	2/13/23	718	2/15/23	1612	63.8	35.0
0	S	524337 524313	FILE CADINET	123	2/13/23	720	2/15/23	1614	62.9	36.1
•	5	524461 524351	FILE CABINET	121	2/13/23	721	2/15/23	1615	64.9	35.9
				2					. 16	
			6. X							
Relinquished by (Sign): Abmult Date: Z/16/2:3 Time: 12:00 pm Page of Received by EMSL (Sign): Jeanel Z 301 Date: 2/17/23Time: 15:36 PM										
			Jeanel	 Page 1 0			mE	3	-	