BIOSPHERICS® INCORPORATED

June 30, 1989

GSA-PBS
Safety and Environmental
Management Division
7th and D Streets, S.W.
Room 2036
Washington, D.C. 20407

Attn: Ms. Normajean P. Eleazer

RE: GSA Contract No. GS-11 P87MJD0094
GSA Order No.: P1189DC5669
GSA Account No.: P61340495
GSA Building No.: VA0085ZZ
GSA Building Name: Hybla Valley

Dear Ms. Eleazer:

Enclosed please find the results of Biospherics' Radon In Air Monitoring survey of Hybla Valley Building, located at 6801 Telegraph Road, Alexandria, Virginia. Work was performed on March 10, 1989, in accordance with your order. Our survey showed that 0 of 35 samples had radon values at or above the 4 picocuries per liter (pCi/l) of air, the EPA Radon Standard. Please see attached data tables for details of this testing and other pertinent information.

If there are any questions, please call us at any time.

Sincerely,

Willie Y. Chase

Willie Y. Chase
Project Manager, Field Operations
Environmental Services Division

Enclosure
WYC:lml
872FIELD

36 Units Placed (Blanks and Duplicates Included)
35 Units Retrieved

☐ **Corporate Headquarters**
12051 Indian Creek Court
Beltsville, Maryland 20705
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☐ **New Jersey Regional Office**
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8241B Sandy Court
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BARRINGER LABORATORIES INC.

15000 W. 6TH AVE., SUITE 300
GOLDEN, COLORADO 80401
PHONE: (303) 277-1687

1455 DEMING WAY, SUITE 15
SPARKS, NEVADA 89431
PHONE: (702) 358-1158

Biospherics
12051 Indian Creek Court
Beltsville, MD 20705

ATTN: Willie Chase

Date: June 2, 1989

Summary
Results of Analysis
Radon in Air - ATD Method

Date group of detectors received: 3/27/89
Number of detectors received with this group: 120
Date of processing: 4/6/89 to 6/2/89
Number of detectors processed for this group: 120

Client ID's	Pages	Number of Detectors	Sheet Batch #	Etch Bath #
BIO - VA0085ZZ	5	35	88-B09/TP02	89-051
BIO - [illegible]0029ZZ	3	16	88-TP02	89-051
BIO - DC0116ZZ	9	6[illegible]	88-TP02/B09	89-051
	TOTAL	1[illegible]7		

Calibration Factor: 99 pCi/liter-day per track/sq mm
Background: 0.2 pCi/liter-year per sq mm.
Area counted manually: 28 sq mm.

Results for Radon in pCi/liter of air for the respective detectors are reported on the following forms.

BIOSPHERICS, INC.
INDUSTRIAL HYGIENE DIVISION

RADON DETECTOR SAMPLING FORM

FACILITY NAME Hybla Valley

FACILITY LOCATION 6801 Telegraph Rd

CONTACT PERSON Jesse Walters
TELEPHONE 453-5236

BUILDING NUMBER VA0085ZZ

CONTACT NAME Marybeth Stewart
CLIENT GSA - PBS
ADDRESS 7th & D Sts., Room 2036
Washington, D.C. 20407
TELEPHONE 453-5236

ID NUMBER	SERIAL NUMBER	LOCATION	START DATE	STOP DATE	RESULTS pCI/l
VA0085ZZ01	12020	Basement Stairwell Ewing Basement	12/8	3/10/89	0.7 ±0.5(19)
VA0085ZZ02	12029	Basement B-56 Ewing didn't arrive	12/8	3/10/89	Not Received
VA0085ZZ03	~~12002~~ 12024	Basement B-52 Ewing	12/8	3/10/89	0.6 ±0.5(15)
VA0085ZZ04	12011	Basement B-51	12/8	3/10/89	0.5 ±0.5(13)
VA0085ZZ05	12017	B-50	12/8	3/10/89	0.7 ±0.5(19)
VA0085ZZ06	12005	Stairwell 7	12/8	3/10/89	2.2 ±0.5(58)
VA0085ZZ07	12008	B-11 B wing	12/8	3/10/89	1.6 ±0.7(40)
VA0085ZZ08	12018	womens B-Room B-wing	12/8	3/10/89	1.0 ±0.5(27)

TECHNICIAN PLACING DETECTORS Hayes/Scott DATE 12/8/88

TECHNICIAN RECOVERING DETECTORS Steven McCullain DATE 3/10/89

FOOTNOTES:
VOID: LOST/DAMAGED

BIOSPHERICS, INC.
INDUSTRIAL HYGIENE DIVISION

RADON DETECTOR SAMPLING FORM

FACILITY NAME HyBla Building
FACILITY LOCATION Telegraph Rd

CONTACT PERSON
TELEPHONE

BUILDING NUMBER

CONTACT NAME Marybeth Stewart
CLIENT GSA - PBS
ADDRESS 7th & D Sts., Room 2036
Washington, D.C. 20407
TELEPHONE 453-5236

ID NUMBER	SERIAL NUMBER	LOCATION	START DATE	STOP DATE	RESULTS pCI/l
VA 008522 09	12009	Womens Bathroom	12/8	3/10/89	0.8 ± 0.5 (21)
VA 008522 10	12016	B-2	12/8	3/10/89	1.3 ± 0.5 (35)
VA 008522 11	12010	maintenance Boiler Room Back Wall C-Wing	12/8	3/10/89	0.6 ± 0.5 (15)
VA 008522 12	12012	Computer Room B22	12/8	3/10/89	1.9 ± 0.5 (48)
VA 008522 13	12021	B-34 Communication Center lock Door	12/8	3/10/89	0.6 ± 0.5 (7)
VA 008522 14	12025	B-26	12/8	3/10/89	1.9 ± 0.5 (48)
VA 008522 15 (20 of 28)	12002	B-25	12/8	3/10/89	1.7 ± 0.5 (44)
VA 008522 16	12013	Mechanical Room	12/8	3/10/89	0.3 ± 0.5 (7)

TECHNICIAN PLACING DETECTORS Haye / Scott DATE 12/8/88
TECHNICIAN RECOVERING DETECTORS Steven McElwain DATE 3/10/89

FOOTNOTES:
VOID: LOST/DAMAGED

BIOSPHERICS, INC.
INDUSTRIAL HYGIENE DIVISION

RADON DETECTOR SAMPLING FORM

FACILITY NAME Hybla Valley

FACILITY LOCATION Telegraph Rd.

CONTACT PERSON

TELEPHONE

BUILDING NUMBER VA 0085 ZZ

CONTACT NAME Marybeth Stewart
CLIENT GSA - PBS
ADDRESS 7th & D Sts., Room 2036
Washington, D.C. 20407
TELEPHONE 453-5236

ID NUMBER	SERIAL NUMBER	LOCATION	START DATE	STOP DATE	RESULTS pCI/1
VA0085ZZ 17	12004	mechanical Room	12/8	3/10/89	1.3 ± 0.6 (35)
VA0085ZZ 18	12006	Confer Room Back of sliding Door	12/8	3/10/89	0.8 ± 0.5 (21)
VA0085ZZ 19	Ex 12015	end of corridor conference H3	12/8	3/10/89	0.3 ± 0.5 (9)
VA 0085ZZ 20 (21 8128)	12003	Rm 125	12/8	3/10/89	1.8 ± 0.6 (46)
VA 0085ZZ 21	12023	Rm 125	12/8	3/10/89	1.6 ± 0.5 (42)
VA 0085ZZ 22	12022	mens Bathroom	12/8	3/10/89	1.5 ± 0.5 (38)
VA 0085ZZ 23	12007	Snack Bar	12/8	3/10/89	1.3 ± 0.5 (33)
VA 0085ZZ 24	12014	mens Rm Adjacent 144	12/8	3/10/89	0.6 ± 0.5 (15)

TECHNICIAN PLACING DETECTORS Scott / HAYES DATE 12/8

TECHNICIAN RECOVERING DETECTORS Steven McClaren DATE 3/10/89

FOOTNOTES:
VOID: LOST/DAMAGED

BIOSPHERICS, INC.
INDUSTRIAL HYGIENE DIVISION

RADON DETECTOR SAMPLING FORM

FACILITY NAME Hybla Valley
FACILITY LOCATION Telegraph Rd

CONTACT PERSON
TELEPHONE

BUILDING NUMBER VA0085ZZ

CONTACT NAME Marybeth Stewart
CLIENT GSA - PBS
ADDRESS 7th & D Sts., Room 2036
Washington, D.C. 20407
TELEPHONE 453-5236

ID NUMBER	SERIAL NUMBER	LOCATION	START DATE	STOP DATE	RESULTS pCI/l
VA0085ZZ 25	9547	east side Dr. Carrus Office Fire Exit	12/8	3/10/89	2.1 ± 0.8 (54)
VA0085ZZ 26	9530	west side –	12/8	3/10/89	1.6 ± 0.5 (40)
VA0085ZZ 27	9532	Rm 103	12/8	3/10/89	0.6 ± 0.5 (15)
VA0085ZZ 28	9539	Rm 117	12/8	3/10/89	1.5 ± 0.5 (38)
VA0085ZZ 29	9549	Rm 117	12/8	3/10/89	1.3 ± 0.5 (35)
VA0085ZZ 30	9546	Rm 116	12/8	3/10/89	0.9 ± 0.5 (25)
VA0085ZZ 31	9536	Conference rm	12/8	3/10/89	0.4 ± 0.5 (11)
VA0085ZZ 32	9544	164	12/8	3/10/89	0.8 ± 0.5 (21)

TECHNICIAN PLACING DETECTORS Hayes / Scott DATE 12/8/88
TECHNICIAN RECOVERING DETECTORS Steven McIlwain DATE 3/10/89

FOOTNOTES:
VOID: LOST/DAMAGED

BIOSPHERICS, INC.
INDUSTRIAL HYGIENE DIVISION

RADON DETECTOR SAMPLING FORM

FACILITY NAME Hybla Valley

FACILITY LOCATION 6801 Telegraph Rd

CONTACT PERSON

TELEPHONE

BUILDING NUMBER VA008522

CONTACT NAME Marybeth Stewart
CLIENT GSA - PBS
ADDRESS 7th & D Sts., Room 2036
Washington, D.C. 20407
TELEPHONE 453-5236

ID NUMBER	SERIAL NUMBER	LOCATION	START DATE	STOP DATE	RESULTS pCI/l
VA 008522 33	9538	164	12/8	3/10/89	1.8 ± 0.5 (46)
VA 008522 34	9543	Stairwell across Rm 164	12/8	3/10/89	1.6 ± 0.5 (40)
VA 008522 35	9496	Missing BLANK	12/8	3/10/89	1.2 ± 0.6 (31)
VA 008522 36	9477	Missing BLANK	12/8	3/10/89	0.6 ± 0.5 (15)
VA 008522 37			12/8		
VA 008522 38			12/8		
VA 008522 39			12/8		
VA 008522 40			12/8		

TECHNICIAN PLACING DETECTORS Hayes/Scott DATE 12/8/88

TECHNICIAN RECOVERING DETECTORS Eileen McIlwain DATE 3/10/89

FOOTNOTES:
VOID: LOST/DAMAGED

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R- 4

SUMMARY OF RADON RESULTS

Building Name: HYBLA VALLEY
Building Number: VA 0085 ZZ

Placement Date(s): 12/8/88
Retrieval Date(s): 3/10/89

Shortest Retrieval time: 92
Longest Retrieval time: 92

Results:

Range:	0.3 - 2.2
# of detectors retrieved:	35
# of detectors lost:	1
# of blanks:	2
# of duplicates:	0
# greater than 4 pCi/l:	0
# greater than 200 pCi/l:	0

Statistical Information:

mean ($\bar{x}$):	1.143
standard deviation (σ):	0.549
sum of x:	40.0
sum of x^2:	56.24

Duplicates:

Blanks:

9496	1.2 ± 0.6
9477	0.6 ± 0.5