### AHERA ASBESTOS MANAGEMENT PLAN AMENDMENT

Kim School District R-88

scope of the original inspection.

LEA:

SCHOOL: Kim School K-12

Spence-Geiger Associates, Inc. (SGA) recently performed a supplemental quality control re-inspection of the above school campus. The inspection date, name and accreditation of the SGA inspector performing this service is given below. The purpose of the re-inspection (which does not substitute for the statutory triennial re-inspection) was to

review the original SGA-developed AHERA management plan with respect to conditions as they existed at the time of the original inspection. In particular, certain previously non-suspect materials, such as drywall and hard cementitious plasters, were added to the

After review of the re-inspection data, this Management Plan Amendment has been prepared. The amendment date, name and accreditation of the SGA management planner are given below. The amendment consists of this document plus the following attached materials:

	CDH "School Buildings at Each Location" list - Changes as a result of this re-inspection are circled.
X	<u>Asbestos Sample Log Sheet</u> - Indicates sample number, date, location (sample area), material (homogeneous area), and result for each sample collected during the re-inspection. All sampling was performed per original management plan protocols in a random manner.
X	<u>Building Diagram</u> - If available, original diagram updated to further illustrate new sample locations.
X	Bulk Sample Reports - Per EPA and CDH, refer to "Total Asbestos" column for sample result; sample is Non-ACBM if < 1% asbestos.
X	<u>Assessment Sheet</u> - A separate sheet is attached for each newly identified homogeneous area of suspect material, along with mark-ups of any changes to previously identified areas.
	Other

All Amendment documents should be reviewed and then inserted into all copies of the AHERA Management Plan for this school campus. It is important to note that these documents will **not** reflect changes in building status, such as abatement, remodel and/or construction since the creation of the original Plan. The LEA must continually update the Plan to reflect any such changes. The LEA must also comply with other AHERA recordkeeping, statutory surveillance and re-inspection requirements, etc. as set forth in 40 CFR 763.

In the original Plan, the SGA "Inventory of ACM by Building" was provided as a convenient summary of asbestos materials. In order to update this inventory, the following listing of changes to the summary as a result of this re-inspection is provided. Note that this does not replace the original summary, rather it serves to supplement it:

BUILDING:

High School

FRIABLE ACBM:

NON-FRIABLE ACBM:

NON-SUSPECT MATERIAL:

Two (2) types of pressed wood ceiling tile - 1 x 1 & 4 x 8. Per

EPA, these now are non-suspect.

NOTES:

Post-plan abatement has occurred.

BUILDING:

Elementary School

FRIABLE ACBM:

NON-FRIABLE ACBM:

Flooring includes mastic.

NON-SUSPECT MATERIAL:

Pressed wood 1 x 1 ceiling tile. Per EPA, this is now non-

suspect.

NOTES:

Post-plan abatement has occurred.

BUILDING:

Gym/Cafeteria

FRIABLE ACBM:

NON-FRIABLE ACBM:

Add cement asbestos board (CAB); Flooring ir cludes mastic.

NON-SUSPECT MATERIAL:

NOTES:

Post-plan abatement has occurred.

BUILDING:

Activity Center

FRIABLE ACBM:

NON-FRIABLE ACBM:

Floor tile includes mastic.

NON-SUSPECT MATERIAL:

Pressed wood 4 x 8 ceiling tile. Per EPA, this is now non-

suspect.

NOTES:

Post-plan abatement has occurred.

BUILDING:

Vocational Shop/Agricultural Building

FRIABLE ACBM:

NON-FRIABLE ACBM:

Floor tile includes mastic.

NON-SUSPECT MATERIAL:

NOTES:

INSPECTION, SAMPLING ASSESSMENT BY:

Type Name:

Signature:

Date:

Jeffrey R. Geiger

Accreditation Number:

12-19-91

State of Accreditation:

Course Provider:

Colorado

387-48-0681

PSI

MANAGEMENT PLANNING BY:

Type Name:

Signature:

Date:

Jeffrey R. Geiger

01-20-92

State of Accreditation:

Accreditation Number:

Course Provider:

Colorado

387-48-0681

PSI

CLIENT : Kim School District R-88

BUILDING(S) : Kim School K-12

SAMPLE	DATE	FLR	LOCATION	MATERIAL	ACI
			GYM/CAFTERIA (continued)		
IA0129	07-22-88	1st	Gym - Center	Spray Insulation	-
LA0130	07-22-88	1st	Gym - Northwest Corner	Spray Insulation	-
LA0131	07-22-88	1st	Gym - South	Spray Insulation	-
LA0132	07-22-88	1st	Gym - North	Spray Insulation	-
LA0133	07-22-88	1st	Gym - Northeast Corner	Spray Insulation	-
LA0134	07-22-88	1st	Gym - East	Spray Insulation	-
			ACTIVITY CENTER		
LA0135	07-22-88	1st	Hall - Northeast Corner	lx1 Ceiling Tile	-
LA0136	07-22-88	1st	Hall - Southwest Corner	lx1 Ceiling Tile	-
LA0137	07-22-88	lst	Hall - Center	1x1 Ceiling Tile	-
IA0138	07-22-88	1st	Kitchen - West	Sheet Vinyl Flooring	-
LA0139	07-22-88	1st	Dining Room - East	Sheet Vinly Flooring	-
LA0140	07-22-88	1st	Kitchen Closet	Stored Sheet Vinyl	-
LA0141	07-22-88	1st	Dining Room - Southwest	2x4 Ceiling Tile	-
LA0142	07-22-88	1st	Dining Room - Center	2x4 Ceiling Tile	-
LA0143	07-22-88	lst	Dining Room - Northeast	2x4 Ceiling Tile	-
			HEGH SCHOOL		
LA0144	12-19-91	1	LEGRALY STORAGE	STUCCO	_   -
LAOIS	12-19-91	1	AUDITORIUM - FRONT	STUCCO	-
LA0146	12-19-91	1	AJOITORIUM - REAR	STUCLO	-
LA0147	12-19-91	В	Boscer Room	DRYVALL	-
LA0148	12-19-91	1	COMPUTER ROOM	DRIVALL	TR

ASBESTOS CONTENT: (+) = POSITIVE, (-) = NONE DETECTED, (TR) = TRACE



# ASBESTOS SAMPLE LOG

CLIENT_	KIM	50	Ro	88	
BUILDING	;				

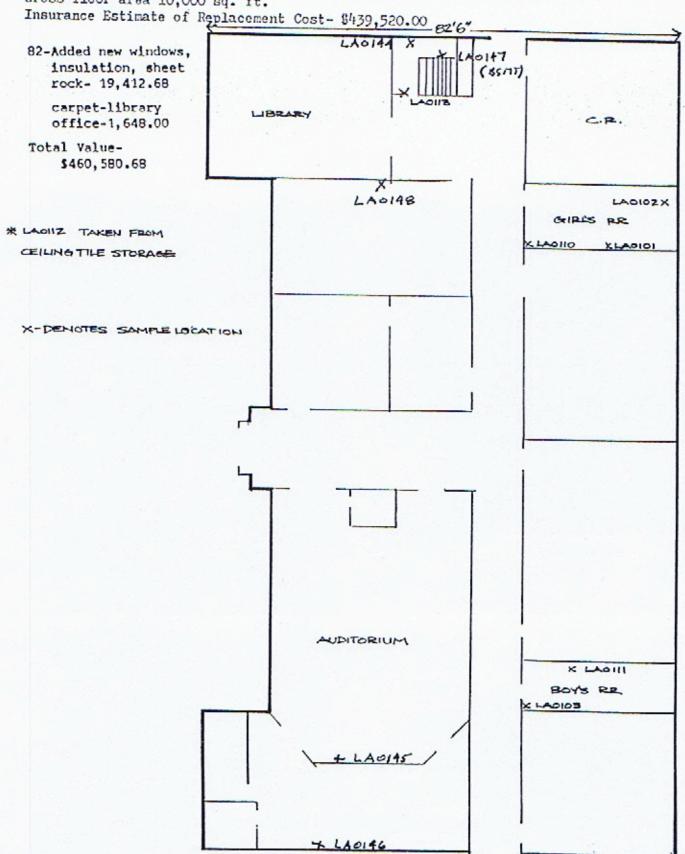
COLLECTED BY:	
	OF

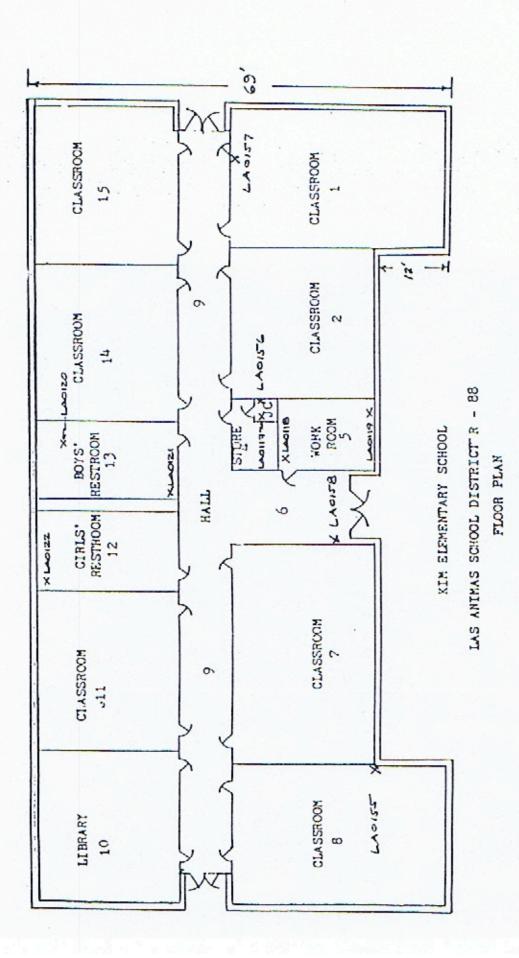
OLLECTE	Б1			- <u> </u>	OF
SAMPLE	DATE	FLR		MATERIAL	REMARKS
LA0149	12-19-91	1	VO AG OFFICE	DATWALL-W. Will	_
			ACTIVETY CUITER		
LA0150	12-19-91	B	S. W. STORAGE	ONTWALL	-
LAOITI	12-19-91	1	Den's R.R.	ONYWALL	_
LA0152	12-19-91	1	D.E. HALL	DATUME	-
LAOID	12-19-91	1	ENTHANCE STORAGE	STUCEO	-
LA0154	12-17-91	B	S.E. STATE	STUCCO	_
			ELEMENTARY		
LAOIS	12-19-91	1	5.E. CR. 8	ONYWALL	_
LA0156	12-19-91	1	JANITOR CLOSIST	DRYWALL	_
LA0157	12-19-91	1	N.E. CRI	STUCCO	TR
LADITB	12-19-91	1	MAEN ENTRANCE	STUCED	TR
			STO CAFETORIA		
LA0159	12-19-91	1	CAFETERTA JAUTTOR	DRYWALL	_
LAOICO	12-11-91	1	GYIT JANETOR	DRYJALL	_
			GMAGE		
LA0161	12-14-91	1	N.E. CONVER	DRYWALL	_

SGA-IH-006-588

Kim High School Building #1

Completed in 1940- Native Stone outside walls, wood floors and roof. Electricity, water sewage, central heating, telephone, and carpet added. Gross floor area 10,000 sq. ft.





X-DENGIES SAMPLE LOCATION

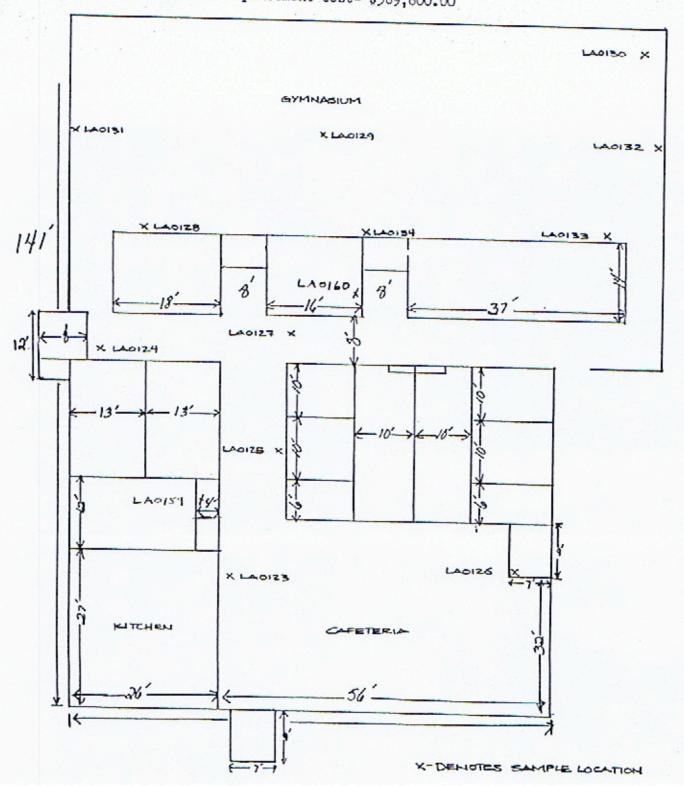


Building Record

Gym and Cafeteria Building #4

Cinderblock construction, brick veneer, constructed in 1972

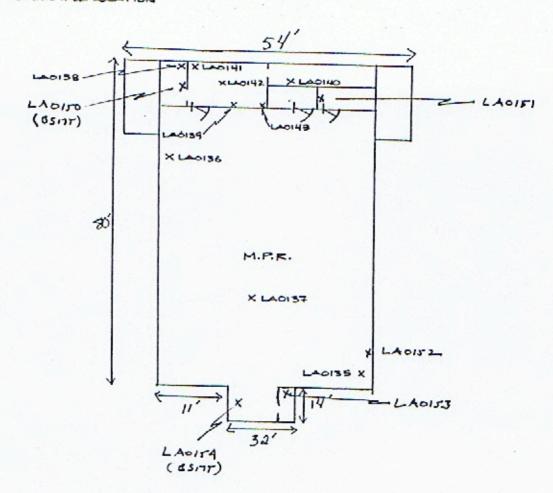
Insurance estimate of replacement cost- \$569,600.00



# Building Record 1-1-81

Kim Gymnasium- Activity Building
Building #5
Completed in the 1930's- Native stone outside walls, full basement (closed off now), wood floor, wood roof- chuted with corrigated metal.
Gross floor area 12,800 sq. ft.
Insurance estimate of replacement value \$92,500.00

# X- DENOTES SAMPLE LOCATION



	LED RE 88
	BUILDING: HEGH SCHOOL
	FUNCTIONAL SPACE(S): ENTINE DUDGE
ı.	MATERIAL DESCRIPTION (LIST):
	A. Material location: WALLS  B. Material amount: 2 4 4 4 5.7.  C. Material type: 570400  D. Thermal: [ ] Surfacing: [ X ] Miscellaneous: [ ]  E. Friable: [ ] Nonfriable: [ X ]  F. Sample Codes: #1 LAO144 #2 LAO145 #3 LAO146
	G. Assumed: [ ] Positive: [ ] Trace: [ ] Negative: [ X ]
II.	ASSESSMENT FACTORS FOR ALL FRIABLE AND THEPMAL ACM (CHOOSE ONE OR MORE)
	A. Existing significant damage or damage
	SD D ND  [ ] [ ] [ ] 1. Flaking [ ] [ ] 2. Blistering [ ] [ ] [ ] 3. Water damage [ ] [ ] [ ] 4. Impact damage [ ] [ ] [ ] 5. Air erosion [ ] [ ] [ ] 6. Torn jacket [ ] [ ] [ ] 7. Other (list)
	B. Potential for significant damage or damage
	SD D ND  [ ] [ ] 1. Accessibility - general public [ ] [ ] 2. Accessibility - employees and contractors [ ] [ ] [ ] 3. Air movement and plenums [ ] [ ] 4. Vibration [ ] [ ] 5. Other (list)
III.	AHERA CATEGORY FOR ALL FRIABLE AND THERMAL ACM (CHOOSE ONE)
	A. Damaged or significantly damaged thermal system insulation ACM B. Damaged friable surfacing ACM C. Significantly damaged friable surfacing ACM D. Damaged or significantly damaged friable misc. ACM E. ACEM with potential for damage F. ACEM with potential for significant damage G. Any remaining friable ACEM or friable suspected ACEM

	KEM SD RE 88
	BUILDING: HIELH SCHOOL
	FUNCTIONAL SPACE(S): BOTCEN ROOM, HALLS, COMPUTE LM, OFFICE, LIBRARY
	De Desert, MALLS, Confund
I.	MATERIAL DESCRIPTION (LIST):
	A. Material location: LJALLS + CELLIUCS  B. Material amount: 6656 S.F.  C. Material type: MAYUALL  D. Thermal: [ ] Surfacing: [ ] Miscellaneous: [X]  E. Priable: [ ] Nonfriable: [X]  F. Sample Codes: #1LAoIA7 #2 LAOI48 #3
	#4 #5 #6 #7  G. Assumed: [ ] Positive: [ ] Trace: [ X ] Negative: [ ]  Prior Positive: [ ]
II.	ASSESSMENT FACTORS FOR ALL FRIABLE AND THERMAL ACM (CHOOSE ONE OR MORE)
	A. Existing significant damage or damage
	SD
	B. Potential for significant damage or damage
	SD D ND  [ ] [ ] [ ] 1. Accessibility - general public [ ] [ ] [ ] 2. Accessibility - employees and contractors [ ] [ ] [ ] 3. Air movement and plenums [ ] [ ] [ ] 4. Vibration [ ] [ ] [ ] 5. Other (list)
III	. AHERA CATEGORY FOR ALL FRIABLE AND THERMAL ACM (CHOOSE ONE)
]	] A. Damaged or significantly damaged thermal system insulation ACM

C. Significantly damaged friable surfacing ACM

D. Damaged or significantly damaged friable misc. ACM

E. ACBM with potential for damage

F. ACHM with potential for significant damage

G. Any remaining friable ACEM or friable suspected ACEM

	CLIENT: KIM SO RE88
	BUILDING: ACTIVITY CHUTER
	FUNCTIONAL SPACE(S): ENTINE BLAG
	ENTINE BLAG
I.	MATERIAL DESCRIPTION (LIST):
	A. Material location: Walls + Certifics  B. Material amount: 8600 SF  C. Material type: Daywall  D. Thermal: [ ] Surfacing: [ ] Miscellaneous: [X]  E. Friable: [ ] Nonfriable: [X ]  F. Sample Codes: #1 LAGISO #2 LAGISI #3 LAGIS
	G. Assumed: [ ] Positive: [ ] Trace: [ ] Negative: [ X ]
II.	ASSESSMENT FACTORS FOR ALL FRIABLE AND THERMAL ACM (CHOOSE ONE OR MORE)
	A. Existing significant damage or damage
	SD D ND  [ ] [ ] [ ] 1. Flaking [ ] [ ] 2. Blistering [ ] [ ] 3. Water damage [ ] [ ] [ ] 4. Impact damage [ ] [ ] [ ] 5. Air erosion [ ] [ ] [ ] 6. Torn jacket [ ] [ ] [ ] 7. Other (list)
	B. Potential for significant damage or damage
	SD D ND  [ ] [ ] [ ] 1. Accessibility - general public [ ] [ ] [ ] 2. Accessibility - employees and contractors [ ] [ ] [ ] 3. Air movement and plenums [ ] [ ] [ ] 4. Vibration [ ] [ ] [ ] 5. Other (list)
III.	AHERA CATEGORY FOR ALL FRIABLE AND THERMAL ACM (CHOOSE CHE)
	A. Damaged or significantly damaged thermal system insulation ACM B. Damaged friable surfacing ACM C. Significantly damaged friable surfacing ACM D. Damaged or significantly damaged friable misc. ACM E. ACBM with potential for damage F. ACBM with potential for significant damage G. Any remaining friable ACBM or friable suspected ACBM

C. Significantly damaged friable surfacing ACM

D. Damaged or significantly damaged friable misc. ACM

] E. ACEM with potential for damage

F. ACBM with potential for significant damage

] G. Any remaining friable ACBM or friable suspected ACBM

[

	CLIENT: KIN SO RE 98
	BUILDING: ELETENTARY
	FUNCTIONAL SPACE(S): EDTERIS BLOG
I.	MATERIAL DESCRIPTION (LIST):
	A. Material location: UALLS + CEFLENCE  B. Material amount: /5550 SF  C. Material type: OnyUALL  D. Thermal: [ ] Surfacing: [ ] Miscellaneous: [X]  E. Friable: [ ] Nonfriable: [ X]  F. Sample Codes: #1 LAOIST #2 LAOISC #3
	G. Assumed: [ ] Positive: [ ] Trace: [ ] Negative: [ X ]
II.	ASSESSMENT FACTORS FOR ALL FRIABLE AND THERMAL ACM (CHOOSE ONE OR MORE)
	λ. Existing significant damage or damage
	SD
	B. Potential for significant damage or damage
	SD D ND  [ ] [ ] [ ] 1. Accessibility - general public [ ] [ ] [ ] 2. Accessibility - employees and contractors [ ] [ ] [ ] 3. Air movement and plenums [ ] [ ] [ ] 4. Vibration [ ] [ ] [ ] 5. Other (list)
III.	AHERA CATEGORY FOR ALL FRIABLE AND THEFMAL ACM (CHOOSE ONE)
	A. Damaged or significantly damaged thermal system insulation ACM B. Damaged friable surfacing ACM C. Significantly damaged friable surfacing ACM D. Damaged or significantly damaged friable misc. ACM E. ACHM with potential for damage F. ACHM with potential for significant damage G. Any remaining friable ACHM or friable suspected ACHM

	FED SO RE88
	BUILDING: 12 LIETTENTANT
	FUNCTIONAL SPACE(S): EUTENE BLDG-
	EDILINE ISLOC
Ι.	MATERIAL DESCRIPTION (LIST):
	A. Material location: UALLS B. Material amount: 6550 C. Material type: 570600 D. Thermal: [ ] Surfacing: [X] Miscellaneous: [ ] E. Friable: [ ] Nonfriable: [X] F. Sample Codes: #1 LAOI57 #2 LAOIS #3
	#4 #5 #6 #7  G. Assumed: [ ] Positive: [ ] Trace: [ X ] Negative: [ ]  Prior Positive: [ ]
II.	ASSESSMENT FACTORS FOR ALL FRIABLE AND THERMAL ACM (CHOOSE ONE OR MORE)
	A. Existing significant damage or damage
	SD   D   ND
	B. Potential for significant damage or damage
	SD D ND  [ ] [ ] [ ] 1. Accessibility - general public [ ] [ ] [ ] 2. Accessibility - employees and contractors [ ] [ ] [ ] 3. Air movement and plenums [ ] [ ] [ ] 4. Vibration [ ] [ ] [ ] 5. Other (list)
III.	. AHERA CATEGORY FOR ALL FRIABLE AND THERMAL ACM (CHOOSE ONE)
	A. Damaged or significantly damaged thermal system insulation ACM B. Damaged friable surfacing ACM C. Significantly damaged friable surfacing ACM D. Damaged or significantly damaged friable misc. ACM E. ACHM with potential for damage F. ACHM with potential for significant damage G. Any remaining friable ACHM or friable suspected ACHM

	CLIENT: KEN SD REBB
	EUTIDING: GYM CAFETERIA
	FUNCTIONAL SPACE(S):
	FUNCTIONAL SPACE(S): EDTERE BLOG
I.	MATERIAL DESCRIPTION (LIST):
	A. Material location: WALLS + CEELENC  B. Material amount: 5930 SF  C. Material type: DAYWALL  D. Thermal: [ ] Surfacing: [ ] Miscellaneous: [K]  E. Friable: [ ] Nonfriable: [ X ]  F. Sample Codes: #1 LAOIS9 #2 LAOICE #3
	#4 #5 #6 #7  G. Assumed: [ ] Positive: [ ] Trace: [ ] Negative: [ X ]  Prior Positive: [ ]
II.	ASSESSMENT FACTORS FOR ALL FRIABLE AND THERMAL ACM (CHOOSE ONE OR MORE)
	A. Existing significant damage or damage
	SD D ND [ ] 1. Flaking
	[ ] [ ] 2. Blistering
	[ ] [ ] 3. Water damage
	[ ] [ ] 4. Impact damage [ ] [ ] 5. Air erosion [ ] [ ] 6. Torn jacket
	[ ] [ ] 6. Torn jacket [ ] [ ] 7. Other (list)
	t , t , t , t , t data (115c)
	B. Potential for significant damage or damage
	SD D ND
	[ ] [ ] 1. Accessibility - general public [ ] [ ] 2. Accessibility - employees and contractors [ ] [ ] [ ] 3. Air movement and plenums [ ] [ ] 4. Vibration
	[ ] [ ] 2. Accessibility - employees and contractors [ ] [ ] 3. Air movement and plenums [ ] [ ] 4. Vibration
	[ ] [ ] 4. Vibration
	[ ] [ ] 5. Other (list)
III.	AHERA CATEGORY FOR ALL FRIABLE AND THERMAL ACM (CHOOSE ONE)
1	A. Damaged or significantly damaged thermal system insulation ACM
į	J B. Damaged friable surfacing ACM
[	] C. Significantly damaged friable surfacing ACM ] D. Damaged or significantly damaged friable misc. ACM
	E. ACEM with potential for damage
1	<ul> <li>F. ACEM with potential for significant damage</li> <li>G. Any remaining friable ACEM or friable suspected ACEM</li> </ul>
	, The remaining filterie ment of filterie suspected activ

	CLIENT: KIN SO RE88
	ELIENT: KIN SO RE88  BUILDING: GARAGE
	FUNCTIONAL SPACE(S): (ENTING KLOG-
1.	MATERIAL DESCRIPTION (LIST):
	A. Material location: Walls + Curcus  B. Material amount: /375  C. Material type: Orywall  D. Thermal: [ ] Surfacing: [ ] Miscellaneous: [K]  E. Friable: [ ] Nonfriable: [ X ]  F. Sample Codes: #1 LAO [6] #2 #3
	#4 #5 #6 #7  G. Assumed: [ ] Positive: [ ] Trace: [ ] Negative: [ X ]  Prior Positive: [ ]
II.	ASSESSMENT FACTORS FOR ALL FRIABLE AND THERMAL ACM (CHOOSE ONE OR MORE)
	A. Existing significant damage or damage
	SD D ND  [ ] [ ] [ ] 1. Flaking [ ] [ ] 2. Blistering [ ] [ ] 3. Water damage [ ] [ ] [ ] 4. Impact damage [ ] [ ] [ ] 5. Air erosion [ ] [ ] [ ] 6. Torn jacket [ ] [ ] [ ] 7. Other (list)
	B. Potential for significant damage or damage
	SD D ND  [ ] [ ] [ ] 1. Accessibility - general public [ ] [ ] 2. Accessibility - employees and contractors [ ] [ ] [ ] 3. Air movement and plenums [ ] [ ] [ ] 4. Vibration [ ] [ ] 5. Other (list)
II.	AHERA CATEGORY FOR ALL FRIABLE AND THEFMAL ACM (CHOOSE ONE)
	A. Damaged or significantly damaged thermal system insulation ACM B. Damaged friable surfacing ACM C. Significantly damaged friable surfacing ACM D. Damaged or significantly damaged friable misc. ACM E. ACHM with potential for damage F. ACHM with potential for significant damage G. Any remaining friable ACHM or friable suspected ACHM

	CLIENT : KIN SO REBB
	BUILDING: GYM / CAPETERTA
	FUNCTIONAL SPACE(S): SW GYN ENTRAUCE
I.	MATERIAL DESCRIPTION (LIST):
	A. Material location: CELLIJG- B. Material amount: /C 5/= C. Material type: CAB D. Thermal: [ ] Surfacing: [ ] Miscellaneous: [ X ] E. Friable: [ ] Nonfriable: [ Y ] F. Sample Codes: #1 #2 #3
	#4 #5 #6 #7  G. Assumed: [ X ] Positive: [ ] Trace: [ ] Negative: [ ]  Prior Positive: [ ]
II.	ASSESSMENT FACTORS FOR ALL FRIABLE AND THERMAL ACM (CHOOSE ONE OR MORE)
	A. Existing significant damage or damage
	SD D ND  [ ] [ ] [ ] 1. Flaking [ ] [ ] 2. Blistering [ ] [ ] [ ] 3. Water damage [ ] [ ] [ ] 4. Impact damage [ ] [ ] [ ] 5. Air erosion [ ] [ ] [ ] 6. Torn jacket [ ] [ ] [ ] 7. Other (list)
	B. Potential for significant damage or damage
	SD D ND  [ ] [ ] [ ] 1. Accessibility - general public [ ] [ ] [ ] 2. Accessibility - employees and contractors [ ] [ ] [ ] 3. Air movement and plenums [ ] [ ] [ ] 4. Vibration [ ] [ ] [ ] 5. Other (list)
111.	AHERA CATEGORY FOR ALL FRIABLE AND THERMAL ACM (CHOOSE ONE)
	A. Damaged or significantly damaged thermal system insulation ACM B. Damaged friable surfacing ACM C. Significantly damaged friable surfacing ACM D. Damaged or significantly damaged friable misc. ACM E. ACEM with potential for damage F. ACEM with potential for significant damage G. Any remaining friable ACEM or friable suspected ACEM

REPORTING DATE:

JANUARY 3, 1992

CLIENT:

SPENCE - GEIGER ASSOC., INC.

CLIENT JOB NO.: PROJECT TITLE: PROJECT NUMBER:

KIM SGA5919

#### PERCENTAGE COMPOSITION BY AREA/VOLUME

	DCM LAB NO.: SAMPLE DATE:	A-19	-1-B	-1-C	-1-D	-1-E
	% OF SAMPLE:	0.5%			10.0%	
	CLIENT NO .:	LA0144	LA0144	LA0144	LA0144	LA0144
ASBESTIFORM MINERAL FIBERS	:					
CHRYSOTILE		0.0	0.0	0.0	0.0	0.0
AMOSITE		0.0	0.0	0.0	0.0	0.0
CROCIDOLITE		0.0	0.0	0.0	0.0	0.0
TREMOLITE-ACTINOLITE		0.0	0.0	0.0	0.0	0.0
ANTHOPHYLLITE		0.0	0.0	0.0	0.0	0.0
TOTAL ASBESTOS:		0.0	0.0	0.0	0.0	0.0
TOTAL ASBESTOS CONTENT OF	SAMPLE	0.0%				
OTHER FIBROUS CONSTITUENTS		3.0	1.0	2.0	TR	TR
NON-FIBROUS CONSTITUENTS		97.0	99.0	98.0	100.0	100.0
TOTAL PERCENTAGE IDENTIFIE	D MATERIALS	100.0	100.0	100.0	100.0	100.0

NOTES: SAMPLE NO. 1 CONSISTS OF 5 PARTS. PART A IS A BROWN RESINOUS MATERIAL, PART B IS A MULTI-COLORED RESINOUS PAINT, PART C IS A WHITE PLASTER, PART D IS A WHITE PERLITIC PLASTER AND PART E IS A TAN CONCRETE PLASTER. FOR CALCULATION OF TOTAL ASBESTOS CONTENT OF SAMPLE, TRACE (TR) IS ASSUMED TO BE 0.5%.

REPORTING DATE:

CLIENT:

CLIENT JOB NO.: PROJECT TITLE:

PROJECT NUMBER:

JANUARY 3, 1992

SPENCE - GEIGER ASSOC., INC.

BOC99 KIM SGA5919

# PERCENTAGE COMPOSITION BY AREA/VOLUME

	DCM LAB NO.: SAMPLE DATE:		-2-B 12-19-91	-3 12-19-91	-4-A 12-19-91	-4-B 12-19-91
	% OF SAMPLE:	5.0%				
	CLIENT NO.:	LA0145	LA0145	LA0146	LA0147	LA0147
ASBESTIFORM MINERAL FIBERS						
CHRYSOTILE		0.0	0.0	0.0	0.0	0.0
AMOSITE		0.0	0.0	0.0	0.0	0.0
CROCIDOLITE		0.0	0.0	0.0	0.0	0.0
TREMOLITE-ACTINOLITE		0.0	0.0	0.0	0.0	0.0
ANTHOPHYLLITE		0.0	0.0	0.0	0.0	0.0
TOTAL ASBESTOS:		0.0	0.0	0.0	0.0	0.0
TOTAL ASBESTOS CONTENT OF S	SAMPLE	0.0%		0.0%	0.0%	
OTHER FIBROUS CONSTITUENTS		2.0	TR	TR	98.0	10.0
NON-FIBROUS CONSTITUENTS		98.0	100.0	100.0	2.0	90.0
TOTAL PERCENTAGE IDENTIFIED	MATERIALS	100.0	100.0	100.0	100.0	100.0

NOTES: SAMPLE NO. 2 CONSISTS OF 2 PARTS. PART A IS A MULTI-COLORED RESINOUS PAINT AND PART B IS A TAN CONCRETE PLASTER. SAMPLE NO. 3 IS A WHITE PERLITIC PLASTER. SAMPLE NO. 4 CONSISTS OF 2 PARTS. PART A IS A TAN AND BROWN FIBROUS MATERIAL AND PART B IS A PINK PLASTER.

REPORTING DATE:

JANUARY 3, 1992

CLIENT:

SPENCE - GEIGER ASSOC., INC.

CLIENT JOB NO.: PROJECT TITLE: PROJECT NUMBER: BOC99 KIM SGA5919

# PERCENTAGE COMPOSITION BY AREA/VOLUME

	DCM LAB NO.: SAMPLE DATE:	-5-A 12-19-91	-5-B 12-19-91	-5-C 12-19-91	-5-D 12-19-91
	% OF SAMPLE:	2.0%	4.0%	7.08	87.0%
ASBESTIFORM MINERAL FIBERS:	CLIENT NO.:	LA0148	LA0148	LA0148	LA0148
CHRYSOTILE		0.0	[1-5]	0.0	0.0
AMOSITE		0.0	0.0	0.0	0.0
CROCIDOLITE		0.0	0.0	0.0	0.0
TREMOLITE-ACTINOLITE		0.0	0.0	0.0	0.0
ANTHOPHYLLITE		0.0	0.0	0.0	0.0
TOTAL ASBESTOS:		0.0	1.0	0.0	0.0
TOTAL ASBESTOS CONTENT OF S	SAMPLE	<0.1%			
OTHER FIBROUS CONSTITUENTS		1.0	1.0	98.0	12.0
NON-FIBROUS CONSTITUENTS		99.0	98.0	2.0	88.0
TOTAL PERCENTAGE IDENTIFIED	MATERIALS	100.0	100.0	100.0	100.0

NOTES: SAMPLE NO. 5 CONSISTS OF 4 PARTS. PART A IS A MULTI-COLORED RESINOUS PAINT, PART B IS A TAN PLASTER, PART C IS A BROWN FIBROUS MATERIAL AND PART D IS A WHITE PLASTER.

## DCM SCIENCE LABORATORY, INC. 12477 W. CEDAR DRIVE LAKEWOOD, CO 80228

DCM PROJECT NO .:

SGA5919

CLIENT JOB NO .:

BOC99

#### BULK SAMPLE ANALYSIS

#### ACCREDITATION:

DCMSL is accredited by the AIHA (since 1986). Our accreditation number is 305. DCMSL was accredited by NVLAP on April 1, 1989. Our NVLAP Lab Code is 1258.

#### ENDORSEMENT:

The results of this analysis must not be used by the client to claim product endorsement by NVIAP or any agency of the U.S. Government.

This test report relates only to the items tested.

CHARLIE NASONGKLA

ANALYST

JOHN SILVERMAN

ANALYSIS DATE

LABORATORY DIRECTOR

REPORTING DATE:

JANUARY 6, 1992 CLIENT: SPENCE - GEIGER ASSOC., INC.

CLIENT JOB NO .: BOC99 PROJECT TITLE: KIM SGA5920

PROJECT NUMBER:

## PERCENTAGE COMPOSITION BY AREA/VOLUME

	DCM LAB NO.:	-1-A	-1-B	-2-A	-2-B	-2-C
	SAMPLE DATE:	12-19-91	12-19-91	12-19-91	12-19-91	12-19-91
	% OF SAMPLE:	12.0%	88.0%	3.0%	7.0%	90.0%
	CLIENT NO .:	LA0149	LA0149	LA0150	LA0150	LA0150
ASBESTIFORM MINERAL FIBERS	:					
CHRYSOTILE		0.0	0.0	0.0	0.0	0.0
AMOSITE		0.0	0.0	0.0	0.0	0.0
CROCIDOLITE		0.0	0.0	0.0	0.0	0.0
TREMOLITE-ACTINOLITE		0.0	0.0	0.0	0.0	0.0
ANTHOPHYLLITE		0.0	0.0	0.0	0.0	0.0
TOTAL ASBESTOS:		0.0	0.0	0.0	0.0	0.0
TOTAL ASBESTOS CONTENT OF	SAMPLE	0.0%		0.0€		
ATURE PERSONS CONCERNMENT						
OTHER FIBROUS CONSTITUENTS		97.0	6.0	TR	96.0	4.0
NOW PURPOSE CONCENTIONED						
NON-FIBROUS CONSTITUENTS		3.0	94.0	100.0	4.0	96.0
TOTAL PERCENTAGE IDENTIFIE	D MATERIALS	100.0	100.0	100.0	100.0	100.0

NOTES: SAMPLE NO. 1 CONSISTS OF 2 PARTS. PART A IS A TAN FIBROUS MATERIAL AND PART B IS A WHITE PLASTER. SAMPLE NO. 2 CONSISTS OF 3 PARTS. PART A IS A YELLOW AND GREEN RESINOUS PAINT, PART B IS A BROWN FIBROUS MATERIAL AND PART C IS A WHITE PERLITIC PLASTER.

REPORTING DATE:

JANUARY 6, 1992

CLIENT:

SPENCE - GEIGER ASSOC., INC.

CLIENT JOB NO.: PROJECT TITLE: PROJECT NUMBER:

BOC99 KIM SGA5920

# PERCENTAGE COMPOSITION BY AREA/VOLUME

SA	M LAB NO.: MPLE DATE:	-3-A 12-19-91	-3-B 12-19-91		-3-D 12-19-91
	OF SAMPLE:	1.0%	4.0%	7.0%	88.0%
	LIENT NO.:	LA0151	LA0151	LA0151	LA0151
ASBESTIFORM MINERAL FIBERS:					
CHRYSOTILE		0.0	0.0	0.0	0.0
AMOSITE		0.0	0.0	0.0	0.0
CROCIDOLITE		0.0	0.0	0.0	0.0
TREMOLITE-ACTINOLITE		0.0	0.0	0.0	0.0
ANTHOPHYLLITE		0.0	0.0	0.0	0.0
TOTAL ASBESTOS:		0.0	0.0	0.0	0.0
TOTAL ASBESTOS CONTENT OF SAME	PLE	80.0			
OTHER FIBROUS CONSTITUENTS		TR	TR	98.0	7.0
NON-FIBROUS CONSTITUENTS		100.0	100.0	2.0	93.0
TOTAL PERCENTAGE IDENTIFIED MA	ATERIALS	100.0	100.0	100.0	100.0

NOTES: SAMPLE NO. 3 CONSISTS OF 4 PARTS. PART A IS A WHITE RESINOUS PAINT, PART B IS A WHITE PLASTER, PART C IS A BROWN FIBROUS MATERIAL AND PART D IS A WHITE FIBROUS PLASTER.

REPORTING DATE:

JANUARY 6, 1992

CLIENT:

SPENCE - GEIGER ASSOC., INC.

CLIENT JOB NO.: PROJECT TITLE: PROJECT NUMBER: BOC99 KIM SGA5920

## PERCENTAGE COMPOSITION BY AREA/VOLUME

	DCM LAB NO.:	-4-A	-4-B	-4-C	-4-D	-5
	SAMPLE DATE:	12-19-91	12-19-91	12-19-91	12-19-91	12-19-91
	₹ OF SAMPLE:	1.0%	2.0%	5.0%	92.0%	100.0%
	CLIENT NO.:	IA0152	LA0152	LA0152	LA0152	LA0153
ASBESTIFORM MINERAL F	IBERS:					
CHRYSOTILE		0.0	0.0	0.0	0.0	0.0
AMOSITE		0.0	0.0	0.0	0.0	0.0
CROCIDOLITE		0.0	0.0	0.0	0.0	0.0
TREMOLITE-ACTIN	OLITE	0.0	0.0	0.0	0.0	0.0
ANTHOPHYLLITE		0.0	0.0	0.0	0.0	0.0
TOTAL ASBESTOS:		0.0	0.0	0.0	0.0	0.0
TOTAL ASBESTOS CONTEN	T OF SAMPLE	0.0%				0.0%
OTHER FIBROUS CONSTIT	UENTS	TR	TR	98.0	6.0	TR
NON-FIBROUS CONSTITUE	ENTS	100.0	100.0	2.0	94.0	100.0
TOTAL PERCENTAGE IDEN	TIFIED MATERIALS	100.0	100.0	100.0	100.0	100.0

NOTES: SAMPLE NO. 4 CONSISTS OF 4 PARTS. PART A IS A WHITE PLASTER, PART B IS A WHITE RESINOUS PAINT, PART C IS A BROWN FIBROUS MATERIAL AND PART D IS A WHITE FIBROUS PLASTER. SAMPLE NO. 5 IS A WHITE CONCRETE PLASTER.

REPORTING DATE:

CLIENT:

CLIENT JOB NO.: PROJECT TITLE: PROJECT NUMBER: JANUARY 6, 1992

SPENCE - GEIGER ASSOC., INC.

BOC99 KIM SGA5920

### PERCENTAGE COMPOSITION BY AREA/VOLUME

D	CM LAB NO.:	-6-A	-6-B	
S.	AMPLE DATE:	12-19-91	12-19-91	
8	OF SAMPLE:	0.5%	99.5%	
	CLIENT NO.:	LA0154	LA0154	
ASBESTIFORM MINERAL FIBERS:				
CHRYSOTILE		0.0	0.0	
AMOSITE		0.0	0.0	
CROCIDOLITE		0.0	0.0	
TREMOLITE-ACTINOLITE		0.0	0.0	
ANTHOPHYLLITE		0.0	0.0	
TOTAL ASBESTOS:		0.0	0.0	
TOTAL ASBESTOS CONTENT OF SAM	MPLE	0.0%		
OTHER FIBROUS CONSTITUENTS		97.0	TR	
NON-FIBROUS CONSTITUENTS		3.0	100.0	
TOTAL PERCENTAGE IDENTIFIED N	MATERIALS	100.0	100.0	

NOTES: SAMPLE NO. 6 CONSISTS OF 2 PARTS. PART A IS A TAN FIBROUS MATERIAL AND PART B IS A PINK PERLITIC PLASTER. FOR CALCULATION OF TOTAL ASBESTOS CONTENT OF SAMPLE, TRACE (TR) IS ASSUMED TO BE 0.5%.

## DCM SCIENCE LABORATORY, INC. 12477 W. CEDAR DRIVE LAKEWOOD, CO 80228

DCM PROJECT NO.:

SGA5920

CLIENT JOB NO .:

BOC99

### BULK SAMPLE ANALYSIS

#### ACCREDITATION:

DCMSL is accredited by the AIHA (since 1986). Our accreditation number is 305. DCMSL was accredited by NVLAP on April 1, 1989. Our NVLAP Lab Code is 1258.

#### ENDORSEMENT:

The results of this analysis must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government.

This test report relates only to the items tested.

MICHAEL J. MARTIN

m.g. merts

RON L. SCHOTT

Kon Z. Achott

ANALYST

1-6-92 ANALYSIS DATE

LABORATORY DIRECTOR

REPORTING DATE:

CLIENT:

JANUARY 3, 1992

SPENCE - GEIGER ASSOC., INC.

CLIENT JOB NO.: PROJECT TITLE: PROJECT NUMBER: BOC99 KIM SGA5921

# PERCENTAGE COMPOSITION BY AREA/VOLUME

	DCM LAB NO .:	-1-A	-1-B	-1-C	-1-D	-1-E
	SAMPLE DATE:	12-19-91	12-19-91	12-19-91	12-19-91	12-19-91
	% OF SAMPLE:	3.09	5.08	8.0	14.09	₹ 70.0%
	CLIENT NO .:	LA0155	LA0155	LA0155	LA0155	LA0155
ASBESTIFORM MINERAL FIBERS	5:					
CHRYSOTILE		0.0	0.0	0.0	0.0	0.0
AMOSITE		0.0	0.0	0.0	0.0	0.0
CROCIDOLITE		0.0	0.0	0.0	0.0	0.0
TREMOLITE-ACTINOLIT	3	0.0	0.0	0.0	0.0	0.0
ANTHOPHYLLITE		0.0	0.0	0.0	0.0	0.0
TOTAL ASBESTOS:		0.0	0.0	0.0	0.0	0.0
TOTAL ASBESTOS CONTENT OF	SAMPLE	0.08				
OTHER FIBROUS CONSTITUENTS	3	0.0	4.0	TR	98.0	5.0
NON-FIBROUS CONSTITUENTS		100.0	96.0	100.0	2.0	95.0
TOTAL PERCENTAGE IDENTIFIE	ED MATERIALS	100.0	100.0	100.0	100.0	100.0

NOTES: SAMPLE NO. 1 CONSISTS OF 5 PARTS. PART A IS A WHITE RESINOUS PAINT, PART B IS A WHITE PLASTER, PART C IS A WHITE FOAMY, RESINOUS MATERIAL, PART D IS A TAN FIBROUS MATERIAL AND PART E IS A WHITE FIBROUS PLASTER.

REPORTING DATE:

CLIENT:

CLIENT JOB NO.: PROJECT TITLE: PROJECT NUMBER: JANUARY 3, 1992

SPENCE - GEIGER ASSOC., INC.

BOC99 KIM SGA5921

# PERCENTAGE COMPOSITION BY AREA/VOLUME

DCM LAB NO.:	-2-A		-2-C	-2-D
SAMPLE DATE:	12-19-91	12-19-91	12-19-91	12-19-91
% OF SAMPLE:	3.08	15.09	15.09	67.0%
CLIENT NO.:	LA0156	LA0156	LA0156	LA0156
ASBESTIFORM MINERAL FIBERS:				
CHRYSOTILE	0.0	0.0	0.0	0.0
AMOSITE	0.0	0.0	0.0	0.0
CROCIDOLITE	0.0	0.0	0.0	0.0
TREMOLITE-ACTINOLITE	0.0	0.0	0.0	0.0
ANTHOPHYLLITE	0.0	0.0	0.0	0.0
TOTAL ASBESTOS:	0.0	0.0	0.0	0.0
TOTAL ASBESTOS CONTENT OF SAMPLE	0.0%			
OTHER FIBROUS CONSTITUENTS	TR	1.0	98.0	5.0
NON-FIBROUS CONSTITUENTS	100.0	99.0	2.0	95.0
TOTAL PERCENTAGE IDENTIFIED MATERIALS	100.0	100.0	100.0	100.0

NOTES: SAMPLE NO. 2 CONSISTS OF 4 PARTS. PART A IS A BLUE RESINOUS PAINT, PART B IS A TAN CONCRETE PLASTER/GREEN PAINT (INSEPARABLE), PART C IS A TAN FIBROUS MATERIAL AND PART D IS A WHITE PLASTER.

REPORTING DATE:

CLIENT:

JANUARY 3, 1992 CLIENT JOB NO .: BOC99

PROJECT TITLE: PROJECT NUMBER: SPENCE - GEIGER ASSOC., INC.

KIM SGA5921

## PERCENTAGE COMPOSITION BY AREA/VOLUME

	NO.: -3-A		-4-A	-4-B
SAMPLE	DATE: 12-19-91	12-19-91	12-19-91	12-19-91
€ OF SA	MPLE: 15.0			
CLIENT	NO.: LA0157	LA0157	LA0158	LA0158
ASBESTIFORM MINERAL FIBERS:				
CHRYSOTILE	0.0	[TR-1]	0.0	[TR-1]
AMOSITE	0.0	0.0	0.0	0.0
CROCIDOLITE	0.0	0.0	0.0	0.0
TREMOLITE-ACTINOLITE	0.0	0.0	0.0	0.0
ANTHOPHYLLITE	0.0	0.0	0.0	0.0
TOTAL ASBESTOS:	0.0	0.5	0.0	0.5
TOTAL ASBESTOS CONTENT OF SAMPLE	0.49	8	0.5%	
OTHER FIBROUS CONSTITUENTS	TR	1.0	TR	1.0
NON-FIBROUS CONSTITUENTS	100.0	98.5	100.0	98.5
TOTAL PERCENTAGE IDENTIFIED MATERIA	100.0	100.0	100.0	100.0

NOTES: SAMPLE NO. 3 CONSISTS OF 2 PARTS. PART A IS A MULTI-COLORED RESINOUS PAINT AND PART B IS A TAN CONCRETE PLASTER. SAMPLE NO. 4 CONSISTS OF 2 PARTS. PART A IS A BLUE AND TAN RESINOUS PAINT AND PART B IS A TAN CONCRETE PLASTER. FOR CALCULATION OF TOTAL ASBESTOS CONTENT OF SAMPLE, TRACE (TR) IS ASSUMED TO BE 0.5%.

REPORTING DATE: JANUARY 3, 1992

CLIENT: SPENCE - GEIGER ASSOC., INC.

CLIENT JOB NO.: BOC99
PROJECT TITLE: KIM
PROJECT NUMBER: SGA5921

## PERCENTAGE COMPOSITION BY AREA/VOLUME

DCM LAB NO.:	-5-A	-5-B	-6-A	-6-B	-6-C
SAMPLE DATE:	12-19-91	12-19-91	12-19-91	12-19-91	12-19-91
% OF SAMPLE:	20.0%	80.08	2.09	8.0	90.0%
CLIENT NO.:	LA0159	LA0159	IA0160	LA0160	LA0160
ASBESTIFORM MINERAL FIBERS:					
CHRYSOTILE	0.0	0.0	0.0	0.0	0.0
AMOSITE	0.0	0.0	0.0	0.0	0.0
CROCIDOLITE	0.0	0.0	0.0	0.0	0.0
TREMOLITE-ACTINOLITE	0.0	0.0	0.0	0.0	0.0
ANTHOPHYLLITE	0.0	0.0	0.0	0.0	0.0
TOTAL ASBESTOS:	0.0	0.0	0.0	0.0	0.0
TOTAL ASBESTOS CONTENT OF SAMPLE	0.09		0.09	6	
OTHER FIBROUS CONSTITUENTS	98.0	12.0	TR	98.0	8.0
NON-FIBROUS CONSTITUENTS	2.0	88.0	100.0	2.0	92.0
TOTAL PERCENTAGE IDENTIFIED MATERIALS	100.0	100.0	100.0	100.0	100.0

NOTES: SAMPLE NO. 5 CONSISTS OF 2 PARTS. PART A IS A TAN FIBROUS MATERIAL AND PART B IS A WHITE AND TAN PLASTER. SAMPLE NO. 6 CONSISTS OF 3 PARTS. PART A IS A WHITE PLASTER, PART B IS A TAN FIBROUS MATERIAL AND PART C IS A WHITE FIBROUS PLASTER.

REPORTING DATE:

CLIENT: CLIENT JOB NO .: PROJECT TITLE: PROJECT NUMBER:

JANUARY 3, 1992

SPENCE - GEIGER ASSOC., INC.

BOC99 KIM SGA5921

# PERCENTAGE COMPOSITION BY AREA/VOLUME

DCM LAB NO.:			-7-C
SAMPLE DATE: % OF SAMPLE:			85.0%
CLIENT NO.:	LA0161	LA0161	LA0161
ASBESTIFORM MINERAL FIBERS:			
CHRYSOTILE	0.0	0.0	0.0
AMOSITE	0.0	0.0	0.0
CROCIDOLITE	0.0	0.0	0.0
TREMOLITE-ACTINOLITE	0.0	0.0	
ANTHOPHYLLITE	0.0	0.0	0.0
TOTAL ASBESTOS:	0.0	0.0	0.0
TOTAL ASBESTOS CONTENT OF SAMPLE	0.0%		
OTHER FIBROUS CONSTITUENTS	5.0	98.0	9.0
NON-FIBROUS CONSTITUENTS	95.0	2.0	91.0
TOTAL PERCENTAGE IDENTIFIED MATERIALS	100.0	100.0	100.0

NOTES: SAMPLE NO. 7 CONSISTS OF 3 PARTS. PART A IS A GREEN AND TAN RESINOUS PAINT, PART B IS A TAN FIBROUS MATERIAL AND PART C IS A WHITE PLASTER.

## DCM SCIENCE LABORATORY, INC. 12477 W. CEDAR DRIVE LAKEWOOD, CO 80228

DCM PROJECT NO. :

SGA5921

CLIENT JOB NO .:

BOC99

#### BULK SAMPLE ANALYSIS

#### ACCREDITATION:

DCMSL is accredited by the AIHA (since 1986). Our accreditation number is 305. DCMSL was accredited by NVLAP on April 1, 1989. Our NVLAP Lab Code is 1258.

#### ENDORSEMENT:

The results of this analysis must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government.

This test report relates only to the items tested.

CHARLIE NASONGKLA

Charle Magnetta

MICHAEL J. MARTIN

M.g. Marto

ANALYST

Rev. 7/91

#### DCM SCIENCE LABORATORY, INC.

#### BULK IDENTIFICATION PROCEDURES

DCM Science Laboratory bulk asbestos analyses are conducted utilizing procedures developed by the McCrone Research Institute and in compliance with guidelines established by the Environmental Protection Agency. (EPA-600/M4-82-020Dec. 1982).

One half of each sample is used for analysis, with careful attention given to layering, if present. The remaining half of the sample is retained for reference. A microscopic sample is taken with fine forceps from many areas over the entire macro sample. A 10x to 80x stereo microscope is used to obtain a representative 0.5 - 1.0 mg sample, to make preliminary fiber identification, and to examine the homogeneity of the sample. The principal fibrous components: chrysotile, amosite, crocidolite, mineral wool and cellulose can normally be identified at this time. The stereo microscope is also used to determine the components of the sample by volume percent.

The representative sample is then split and mounted in two refractive index liquids, 1.550 HD and 1.680 ND, for analysis under a compound binocular polarizing light microscope (PLM). In addition, all fibrous materials are mounted separately in the two liquids to closely examine the fiber types present under polarized light and dispersion staining. When the macro sample consists of two or more layers, each layer is analyzed separately as described above. All samples are examined for the presence of carbonate with dilute N.F. 10% hydrochloric acid. The above procedures are carried out under a specially constructed hood providing a contamination-free environment.

The samples are then viewed using the PLM at 100x. Fiber and matrix identifications are based on normal optical mineralogic techniques including color and pleochroism, form, cleavage, relief, birefringence, extinction, orientation, twinning, interference figure and other distinguishing features. Dispersion staining is also used as a further aid in mineral identification. The percentage composition by volume is then determined in each liquid. If fibrous material is present which does not match either the 1.550 HD or the 1.680 ND liquid, the sample is then mounted in 1.605 HD and 1.620 HD liquids for further examination. Magnifications ranging from 25x to 630x may be used on samples requiring a more detailed analysis. The asbestos content in each type of liquid is analyzed. The results are averaged to determine total content and percentage range for each type of asbestos. All percentages of asbestos, other fibers, and non-fibrous constituents are calculated by averaging the values obtained from the stereo and PLM microscopes. A chart prepared by R.D. Terry and G.V. Chilinger for The Journal of Sedimentary Petrology, (Volume 25, pp. 229 - 234, 1955) provides a guide for estimating percentages. The values are then normalized to 100%.

All samples are archived for six months unless other arrangements are made by the client.