SDMS Document ID
2009278

CDM Fax

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To:	Floyd Nichols	**From:**	Frank Morris
Organization:	EPA	**Date:**	10/20/03
Fax No.:	(313) 312-6071	**Time:**	1600
Re:	SL12 - Microvac Results	**Job #:**	
# of Pages: (including cover sheet)	10		

● **Message:**

Floyd,

Please call with any questions.

Thanks,
Frank

Blank

LIBBY Version 26

TEM Asbestos Structure Count -- ISO 10312

SAMPLE ID		PARAMETERS	
Status	Analyzed	Effective filter area	201.0 mm2
EPA Sample Number	SLC2-1008	Indirect factor	2.00E-01
QA Type	Not QA	Number of Grid Openings (amphibole)	10
Lab Sample Number	818034	Number of Grid Openings (chrysotile)	10
Sample Type	Dust	Grid opening area	0.0110 mm2
Category	Blank	Volume (L) or Area (cm2)	0 cm2
Prep	Indirect	Sensitivity (amphibole)	Blank s/cm2
Counting Rule	10312	Sensitivity (chrysotile)	Blank s/cm2

COUNTS (based on countable structures only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	0	0	0		
b	0	0	0		
c	0	0	0		
d	0	0	0		
e	0	0	0		
f	0	0	0		
Total	0	0	0	0	0
Check	OK	OK	OK		
Grand total	0	OK			

LOADING (s/cm2)

Class	LA	OA	C	PCME(all)	PCME(asb)
a					
b					
c					
d					
e					
f					
Total					<DL

RISK (air only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a					
b					
c					
d					
e					
f					
Total					

Toxicity factors

Berman and Crump Feb 15, 1999

Type	Amphiboles		Chrysotile	
length (um)	5-10	>10	5-10	>10
Unit Risk (f/cc)-1	5.74E-02	1.89E+01	2.20E-03	6.86E-01

IRIS (PCME)

Unit Risk (f/cc)-1	0.23

Type	Class	Length	Width	Aspect ratio
LA = Libby-type amphibole	a			<5
OA = Other amphibole	b	<.5		>= 5
C = Chrysotile	c		>.5	>= 5
	d	>=.5 to < 5	<=.5	>= 5
	e	5 to 10	<=.5	>= 5
	f	>10	<=.5	>= 5

① basement

LIBBY

Version 26

TEM Asbestos Structure Count -- ISO 10312

SAMPLE ID		PARAMETERS	
Status	Analyzed	Effective filter area	201.0 mm2
EPA Sample N mber	SLC2-1009	Indirect factor	5.00E-03
QA Type	Not QA	Number of Grid Openings (amphibole)	4
Lab Sample Nu nber	818035	Number of Grid Openings (chrysotile)	4
Sample Type	Dust	Grid opening area	0.0110 mm2
Category	Field	Volume (L) or Area (cm2)	300 cm2
Prep	Indirect	Sensitivity (amphibole)	3.05E+03 s/cm2
Counting Rules	10312	Sensitivity (chrysotile)	3.05E+03 s/cm2

COUNTS (bas d on countable structures only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	1	0	0		
b	0	0	0		
c	1	0	0		
d	5	0	7		
e	2	0	1		
f	0	0	0		
Total	9	0	8	0	0
Check	OK	OK	OK		
Grand total	17	OK			

fibers men.

LOADING (s/c n2)

PCME threshold length ≥ 5m width ≥ .25m

Class	LA	OA	C	PCME(all)	PCME(asb)
a	3.05E+03	<DL	<DL		
b	<DL	<DL	<DL		
c	3.05E+03	<DL	<DL		
d	1.52E+04	<DL	2.13E+04		
e	6.09E+03	<DL	3.05E+03		
f	<DL	<DL	<DL		
Total	2.74E+04	<DL	2.44E+04	<DL	<DL

larger

RISK (air only

Class	LA	OA	C	PCME(all)	PCME(asb)
a					
b					
c					
d					
e					
f					
Total					

Wendy chip X6603

Toxicity factors

Berman and Cru mp Feb 15, 1999

Type	Amphiboles		Chrysotile	
length (um)	5-10	>10	5-10	>10
Unit Risk (f/cc)-	5.74E-02	1.89E+01	2.20E-03	6.86E-01

IRIS (PCME)

Unit Risk (f/cc)-	0.23

Type	Class	Length	Width	Aspect ratio
LA = Libby-type mphibole	a			<5
OA = Other amp ibole	b	<.5		>= 5
C = Chrysotile	c		>.5	>= 5
	d	>=.5 to < 5	<=.5	>= 5
	e	5 to 10	<=.5	>= 5
	f	>10	<=.5	>= 5

ITI LISTIC TRAINING (SE LORNAT)

(1) Electrical Conduit box

(2) Top of switch box

LIBBY Version 26

TEM Asbestos Structure Count – ISO 10312

SAMPLE ID		**PARAMETERS**	
Status	Analyzed	Effective filter area	201.0 mm2
EPA Sample Number	SLC2-1003	Indirect factor	5.00E-03
QA Type	Not QA	Number of Grid Openings (amphibole)	10
Lab Sample Number	818029	Number of Grid Openings (chrysotile)	10
Sample Type	Dust	Grid opening area	0.0110 mm2
Category	Field	Volume (L) or Area (cm2)	200 cm2
Prep	Indirect	Sensitivity (amphibole)	1.83E+03 s/cm2
Counting Rule:	10312	Sensitivity (chrysotile)	1.83E+03 s/cm2

COUNTS (based on countable structures only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	1	0	0		
b	0	0	0		
c	2	0	1		
d	3	0	8		
e	1	0	4		
f	1	0	3		
Total	8	0	16	3	3
Check	OK	OK	OK		
Grand total	24	OK			

LOADING (s/cm2)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	1.83E+03	<DL	<DL		
b	<DL	<DL	<DL		
c	3.65E+03	<DL	1.83E+03		
d	5.48E+03	<DL	1.46E+04		
e	1.83E+03	<DL	7.31E+03		
f	1.83E+03	<DL	5.48E+03		
Total	1.46E+04	<DL	2.92E+04	5.48E+03	5.48E+03

14,600

RISK (air only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a					
b					
c					
d					
e					
f					
Total					

Toxicity factor

Berman and Crump Feb 16, 1999

Type	Amphiboles		Chrysotile	
length (um)	5-10	>10	5-10	>10
Unit Risk (f/cc)-	5.74E-02	1.89E+01	2.20E-03	6.86E-01

IRIS (PCME)

Unit Risk (f/cc)-	0.23

Type	Class	Length	Width	Aspect ratio
LA = Libby-type amphibole	a			<5
OA = Other amphibole	b	<.5		>= 5
C = Chrysotile	c		>.5	>= 5
	d	>=.5 to < 5	<=.5	>= 5
	e	5 to 10	<=.5	>= 5
	f	>10	<=.5	>= 5

(1.) floor_corner (SW)
(2) floor - center of South Wall
(3.) floor — corner (SE)

LIBBY

Version 26

TEM Asbestos Structure Count -- ISO 10312

SAMPLE ID		PARAMETERS	
Status	Analyzed	Effective filter area	201.0 mm2
EPA Sample Number	SLC2-1004	Indirect factor	5.00E-02
QA Type	Not QA	Number of Grid Openings (amphibole)	10
Lab Sample Number	818030	Number of Grid Openings (chrysotile)	10
Sample Type	Dust	Grid opening area	0.0110 mm2
Category	Field	Volume (L) or Area (cm2)	300 cm2
Prep	Indirect	Sensitivity (amphibole)	1.22E+02 s/cm2
Counting Rules	10312	Sensitivity (chrysotile)	1.22E+02 s/cm2

COUNTS (based on countable structures only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	0	0	0		
b	0	0	0		
c	0	0	0		
d	1	0	4		
e	0	0	1		
f	0	0	0		
Total	1	0	5	0	0
Check	OK	OK	OK		
Grand total	6	OK			

LOADING (s/cm2)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	<DL	<DL	<DL		
b	<DL	<DL	<DL		
c	<DL	<DL	<DL		
d	1.22E+02	<DL	4.87E+02		
e	<DL	<DL	1.22E+02		
f	<DL	<DL	<DL		
Total	1.22E+02	<DL	6.09E+02	<DL	<DL

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RISK (air only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a					
b					
c					
d					
e					
f					
Total					

Toxicity factors

Berman and Crump Feb 15, 1999

Type	Amphiboles		Chrysotile	
length (um)	5-10	>10	5-10	>10
Unit Risk (f/cc)-1	5.74E-02	1.89E+01	2.20E-03	6.86E-01

IRIS (PCME)

Unit Risk (f/cc)-1	0.23

Type	Class	Length	Width	Aspect ratio
LA = Libby-type amphibole	a			<5
OA = Other amphibole	b	<.5		>= 5
C = Chrysotile	c		>.5	>= 5
	d	>=.5 to < 5	<=.5	>= 5
	e	5 to 10	<=.5	>= 5
	f	>10	<=.5	>= 5

Artistic Printing - (INK storage Room)
(1) Top of canisters on shelf.
(2) Workbench in corner
(3) Overhead doorway

LIBBY Version 26

TEM Asbestos Structure Count -- ISO 10312

SAMPLE ID		PARAMETERS	
Status	Analyzed	Effective filter area	201.0 mm2
EPA Sample Number	SLC2-1007	Indirect factor	5.00E-02
QA Type	Not QA	Number of Grid Openings (amphibole)	10
Lab Sample Number	818033	Number of Grid Openings (chrysotile)	10
Sample Type	Dust	Grid opening area	0.0110 mm2
Category	Field	Volume (L) or Area (cm2)	300 cm2
Prep	Indirect	Sensitivity (amphibole)	1.22E+02 s/cm2
Counting Rules	10312	Sensitivity (chrysotile)	1.22E+02 s/cm2

COUNTS (based on countable structures only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	0	0	0		
b	0	0	0		
c	0	0	0		
d	2	0	0		
e	0	0	0		
f	0	0	0		
Total	2	0	0	0	0
Check	OK	OK	OK		
Grand total	2	OK			

LOADING (s/cm2)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	<DL	<DL	<DL		
b	<DL	<DL	<DL		
c	<DL	<DL	<DL		
d	2.44E+02	<DL	<DL		
e	<DL	<DL	<DL		
f	<DL	<DL	<DL		
Total	2.44E+02	<DL	<DL	<DL	<DL

244

RISK (air only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a					
b					
c					
d					
e					
f					
Total					

Toxicity factor:
Berman and Crump Feb 15, 1999

Type	Amphiboles		Chrysotile	
length (um)	5-10	>10	5-10	>10
Unit Risk (f/cc)-	5.74E-02	1.89E+01	2.20E-03	6.86E-01

IRIS (PCME)

Unit Risk (f/cc)-	0.23

Type	Class	Length	Width	Aspect ratio
LA = Libby-type amphibole	a			<5
OA = Other amphibole	b	<.5		>= 5
C = Chrysotile	c		>.5	>= 5
	d	>=.5 to < 5	<=.5	>= 5
	e	5 to 10	<=.5	>= 5
	f	>10	<=.5	>= 5

Artistic rinsing - Center storage Area

① Top of locker #5

② Center of east side

LIBBY

Version 26

TEM Asbestos Structure Count – ISO 10312

SAMPLE ID		PARAMETERS	
Status	Analyzed	Effective filter area	201.0 mm2
EPA Sample Number	SLC2-1006	Indirect factor	5.00E-03
QA Type	Not QA	Number of Grid Openings (amphibole)	10
Lab Sample Number	818032	Number of Grid Openings (chrysotile)	10
Sample Type	Dust	Grid opening area	0.0110 mm2
Category	Field	Volume (L) or Area (cm2)	200 cm2
Prep	Indirect	Sensitivity (amphibole)	1.83E+03 s/cm2
Counting Rules	10312	Sensitivity (chrysotile)	1.83E+03 s/cm2

COUNTS (based on countable structures only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	0	0	0		
b	0	0	0		
c	1	0	0		
d	3	0	3		
e	0	0	0		
f	0	0	0		
Total	4	0	3	1	1
Check	OK	OK	OK		
Grand total	7	OK			

LOADING (s/cm2)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	<DL	<DL	<DL		
b	<DL	<DL	<DL		
c	1.83E+03	<DL	<DL		
d	5.48E+03	<DL	5.48E+03		
e	<DL	<DL	<DL		
f	<DL	<DL	<DL		
Total	7.31E+03	<DL	5.48E+03	1.83E+03	1.83E+03

7310

RISK (air only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a					
b					
c					
d					
e					
f					
Total					

Toxicity factor

Berman and Crump Feb 15, 1999

Type	Amphiboles		Chrysotile	
length (um)	5-10	>10	5-10	>10
Unit Risk (f/cc)-	5.74E-02	1.89E+01	2.20E-03	6.86E-01

IRIS (PCME)

Unit Risk (f/cc)-	0.23

Type	Class	Length	Width	Aspect ratio
LA = Libby-type amphibole	a			<5
OA = Other amphibole	b	<.5		>= 5
C = Chrysotile	c		>.5	>= 5
	d	>=.5 to < 5	<=.5	>= 5
	e	5 to 10	<=.5	>= 5
	f	>10	<=.5	>= 5

Artistic Printing - (Window sill @ east wall)

LIBBY Version 26

TEM Asbestos Structure Count -- ISO 10312

SAMPLE ID

Status	Analyzed
EPA Sample Number	SLC2-1005
QA Type	Not QA
Lab Sample Number	818031
Sample Type	Dust
Category	Field
Prep	Indirect
Counting Rule	10312

PARAMETERS

Effective filter area	201.0 mm2
Indirect factor	5.00E-03
Number of Grid Openings (amphibole)	10
Number of Grid Openings (chrysotile)	10
Grid opening area	0.0110 mm2
Volume (L) or Area (cm2)	300 cm2
Sensitivity (amphibole)	1.22E+03 s/cm2
Sensitivity (chrysotile)	1.22E+03 s/cm2

COUNTS (based on countable structures only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	0	0	0		
b	0	0	0		
c	0	0	0		
d	6	0	23		
e	1	0	6		
f	0	0	1		
Total	7	0	30	1	1
Check	OK	OK	OK		
Grand total	37	OK			

LOADING (s/cm2)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	<DL	<DL	<DL		
b	<DL	<DL	<DL		
c	<DL	<DL	<DL		
d	7.31E+03	<DL	2.80E+04		
e	1.22E+03	<DL	7.31E+03		
f	<DL	<DL	1.22E+03		
Total	8.53E+03	<DL	3.65E+04	1.22E+03	1.22E+03

8,530

RISK (air only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a					
b					
c					
d					
e					
f					
Total					

Toxicity factor

Berman and Crump Feb 15, 1999

Type	Amphiboles		Chrysotile	
length (um)	5-10	>10	5-10	>10
Unit Risk (f/cc)-	5.74E-02	1.89E+01	2.20E-03	6.86E-01

IRIS (PCME)

Unit Risk (f/cc)-	0.23

Type	Class	Length	Width	Aspect ratio
LA = Libby-type amphibole	a			<5
OA = Other amphibole	b	<.5		>= 5
C = Chrysotile	c		>.5	>= 5
	d	>=.5 to < 5	<=.5	>= 5
	e	5 to 10	<=.5	>= 5
	f	>10	<=.5	>= 5

① basement

LIBBY

Version 26

TEM Asbestos Structure Count -- ISO 10312

SAMPLE ID		**PARAMETERS**	
Status	Analyzed	Effective filter area	201.0 mm2
EPA Sample N mber	SLC2-1009	Indirect factor	5.00E-03
QA Type	Not QA	Number of Grid Openings (amphibole)	4
Lab Sample Nu nber	818035	Number of Grid Openings (chrysotile)	4
Sample Type	Dust	Grid opening area	0.0110 mm2
Category	Field	Volume (L) or Area (cm2)	300 cm2
Prep	Indirect	Sensitivity (amphibole)	3.05E+03 s/cm2
Counting Rules	10312	Sensitivity (chrysotile)	3.05E+03 s/cm2

COUNTS (bas d on countable structures only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	1	0	0		
b	0	0	0		
c	1	0	0		
d	5	0	7		
e	2	0	1		
f	0	0	0		
Total	9	0	8	0	0
Check	OK	OK	OK		
Grand total	17	OK			

LOADING (s/c n2)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	3.05E+03	<DL	<DL		
b	<DL	<DL	<DL		
c	3.05E+03	<DL	<DL		
d	1.52E+04	<DL	2.13E+04		
e	6.09E+03	<DL	3.05E+03		
f	<DL	<DL	<DL		
Total	2.74E+04	<DL	2.44E+04	<DL	<DL

27400

RISK (air only

Class	LA	OA	C	PCME(all)	PCME(asb)
a					
b					
c					
d					
e					
f					
Total					

Toxicity factors

Berman and Cru np Feb 15, 1999

Type	Amphiboles		Chrysotile	
length (um)	5-10	>10	5-10	>10
Unit Risk (f/cc)-1	5.74E-02	1.89E+01	2.20E-03	6.86E-01

IRIS (PCME)

Unit Risk (f/cc)-1	0.23

Type	Class	Length	Width	Aspect ratio
LA = Libby-type amphibole	a			<5
OA = Other amphibole	b	<.5		>= 5
C = Chrysotile	c		>.5	>= 5
	d	>=.5 to < 5	<=.5	>= 5
	e	5 to 10	<=.5	>= 5
	f	>10	<=.5	>= 5

(1) Shelf in small room

LIBBY

Version 26

TEM Asbestos Structure Count – ISO 10312

SAMPLE ID

Status	Analyzed
EPA Sample Number	SLC2-1010
QA Type	Not QA
Lab Sample Number	818036
Sample Type	Dust
Category	Field
Prep	Indirect
Counting Rules	10312

PARAMETERS

Effective filter area	201.0 mm2
Indirect factor	2.50E-04
Number of Grid Openings (amphibole)	10
Number of Grid Openings (chrysotile)	10
Grid opening area	0.0110 mm2
Volume (L) or Area (cm2)	100 cm2
Sensitivity (amphibole)	7.31E+04 s/cm2
Sensitivity (chrysotile)	7.31E+04 s/cm2

COUNTS (based on countable structures only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	1	0	0		
b	0	0	0		
c	0	0	0		
d	1	0	8		
e	2	0	1		
f	0	0	1		
Total	4	0	10	0	0
Check	OK	OK	OK		
Grand total	14	OK			

LOADING (s/cm2)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	7.31E+04	<DL	<DL		
b	<DL	<DL	<DL		
c	<DL	<DL	<DL		
d	7.31E+04	<DL	5.85E+05		
e	1.46E+05	<DL	7.31E+04		
f	<DL	<DL	7.31E+04		
Total	2.92E+05	<DL	7.31E+05	<DL	<DL

292,000

RISK (air only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a					
b					
c					
d					
e					
f					
Total					

Toxicity factors

Berman and Crump Feb 15, 1999

Type	Amphiboles		Chrysotile	
length (um)	5-10	>10	5-10	>10
Unit Risk (f/cc)-	5.74E-02	1.89E+01	2.20E-03	6.86E-01

IRIS (PCME)

Unit Risk (f/cc)-	0.23

Type	Class	Length	Width	Aspect ratio
LA = Libby-type amphibole	a			<5
OA = Other amphibole	b	<.5		>= 5
C = Chrysotile	c		>.5	>= 5
	d	>=.5 to < 5	<=.5	>= 5
	e	5 to 10	<=.5	>= 5
	f	>10	<=.5	>= 5

Nacificorp - UP&L Blockhouse

1. floor near back door
2. window sill
3. top of switch boxes

LIBBY

Version 26

TEM Asbestos Structure Count -- ISO 10312

SAMPLE ID		PARAMETERS	
Status	Analyzed	Effective filter area	201.0 mm2
EPA Sample Number	SLC2-1011	Indirect factor	5.00E-03
QA Type	Not QA	Number of Grid Openings (amphibole)	5
Lab Sample Number	818037	Number of Grid Openings (chrysotile)	5
Sample Type	Dust	Grid opening area	0.0110 mm2
Category	Field	Volume (L) or Area (cm2)	300 cm2
Prep	Indirect	Sensitivity (amphibole)	2.44E+03 s/cm2
Counting Rule	10312	Sensitivity (chrysotile)	2.44E+03 s/cm2

COUNTS (based on countable structures only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	0	0	0		
b	0	0	0		
c	1	0	1		
d	0	0	16		
e	0	0	5		
f	0	0	6		
Total	1	0	28	1	1
Check	OK	OK	OK		
Grand total	29	OK			

LOADING (s/cm2)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	<DL	<DL	<DL		
b	<DL	<DL	<DL		
c	2.44E+03	<DL	2.44E+03		
d	<DL	<DL	3.90E+04		
e	<DL	<DL	1.22E+04		
f	<DL	<DL	1.46E+04		
Total	2.44E+03	<DL	6.82E+04	2.44E+03	2.44E+03

RISK (air only 2,440

Class	LA	OA	C	PCME(all)	PCME(asb)
a					
b					
c					
d					
e					
f					
Total					

Toxicity factors

Berman and Crump Feb 15, 1999

Type	Amphiboles		Chrysotile	
length (um)	5-10	>10	5-10	>10
Unit Risk (f/cc)-1	5.74E-02	1.89E+01	2.20E-03	6.86E-01

IRIS (PCME)

Unit Risk (f/cc)-1	0.23

Type	Class	Length	Width	Aspect ratio
LA = Libby-type amphibole	a			<5
OA = Other amphibole	b	<.5		>=5
C = Chrysotile	c		>.5	>=5
	d	>=.5 to <5	<=.5	>=5
	e	5 to 10	<=.5	>=5
	f	>10	<=.5	>=5