

CAMBRIDGE

03633872

TO: M.M. McDaniel - Santa Ana DATE: October 13, 1976
FROM: T.E. Hamilton SUBJECT: Air Sampling Results
CC: J.W. Wolter
W.R. Wright
R.E. Schneider
R.H. Locke
~~L.W. Farmer~~ - South Gate

The results of the air sampling for tremolite fibers that I did in your plant on 9-30-76 are enclosed. They are very good and show that you have been able to maintain the low fiber levels for several months.

I calculated Time Weighted Averages for the two employees and they show that you are well below the OSHA limit of 2.0 fibers/cc TWA.

<u>Employee</u>	<u>TWA</u>
1. B. Grant, Bagger D-18 #2, Libby #4	1.08 fibers/cc
2. A. Mejia, Bagger MK, Libby #3	0.09 fibers/cc

If you have any questions, please call.

Thomas E. Hamilton

Thomas E. Hamilton

TEH:bp
Enclosure

CONFIDENTIAL
AIR SAMPLING RECORD SHEET

PLANT LOCATION Santa Ana, Calif.

CONTAMINANT	Tremolite
Asbestos	Yes
Lead	No
Mercury	No
Pesticides	No
Radon	No
Volatile Organic Compounds (VOCs)	No
Heavy Metals	No
Mold	No
Flammable Liquids/Gases	No
Other Contaminants	No

SAMPLING BY TEL

DATE: 9-30-76

SAMPLING CONDITIONS:

OUTSIDE
clean.

INSIDE DRAFT *slight*

VISIBLE DUST slight

HOUSEKEEPING:

Excellent

[illegible]

Additional Comments:

Laboratory Evaluation By:

1000

Date:

1979

15161284

* SA-5 taken in closed room, crushing cores from roof deck samples, local exhaust ventilation ON. Sample taken near tester machine.

PERSONNEL SAMPLE

03633874

Plant Loca¹:

117A 1220

Date of Sale: _____

amirenc Samoled F1B18/5

SAMPLING CONTINUED

OUTSIDE

GUIDE DRAFT

51

Clear

ione

Cloudy

Slings:

Rain

derate

judicial

Snow

Excessive

Heavy

Results

SAMPLES DATA & EVALUATION

Pump Type No.	Block No.	Sample No.	Employee	Operation/Area	Pump In	Sampling Time	Operating Volume	Remarks	Lab Evaluation
07	1.6	5	PRIMROSE	BRIDGE H. Full	2 12	30		L1B34 #4 Core ASD.	< 0.07
	1.6	6	MIRANDA	CHURCH M. Full	2 53	30			< 0.07
	1.6	7	AGUIRRE	M. Full	2 55	30			0.28

Sampling by J. D. Schaefer

—

15161285

03633875

Type Contaminant Sampled FIBERS

HOUSKEEPING

500b

Heavy

SAMPLING DATA & EVALUATION

TEST SAMUEL

3

03633876

SAMPLING CONDITIONS:	OUTSIDE	INSIDE DRAFT	VISIBLE DUST	HOUSEKEEPING
	Clear	None	None	Good
	Cloudy	Slight	Slight	
	Rain	Moderate	Moderate	
	Snow	Excessive	Heavy	

SAMPLING DATA & EVALUATION

[illegible]

Sampling By Matt McDermott Laboratory Evaluation By _____
Date _____ 15161287

036333877

Plant Location SAWTA AWA, Calif Date of Sampling 12-11-75 Type Contaminant Sampled Asbestos

SAMPLING CONDITIONS: OUTSIDE Clear Cloudy Rain Snow INSIDE DRAFT None Slight Moderate Excessive VISIBLE DUST None Slight Moderate Heavy HOUSEKEEPING Very Good

REMARKS #3 Libby ore #1 D-18 - Bulk#4 Libby ore #2 D-18 - Concrete agg.

SAMPLING DATA & EVALUATION

 $K = 3.42 \times 10^5$
 $N = \frac{P \cdot T \cdot B \cdot S}{A \cdot F}$
 $T = \text{Total Time}$
 $P = \text{Pump Rate}$
 $B = \text{Baghouse Efficiency}$
 $S = \text{Sample Size}$
 $A = \text{Area}$
 $F = \text{Flow Rate}$

Pump Type & No.	Flow Rate	Sample No.	Employee	Operation/Area	Pump Off	Pump On	Sampling Time	Operating Volume	Remarks	Lab Evaluation
Microport 2331	1.5	SA 1	—	#1 Fur. Stoner Waste Hopper	11:49	11:33	15 min	22.5L	Exhaust Air Off	13.30
5547	1.5	SA 2	—	#1 Fur. discharge Bulk conveyor #1 sclo	11:55	11:40	"	"		3.25
2331	"	SA 3	—	Vibrator ore feed #1	1:17	1:02	"	"		6.08
5547	"	SA 4	—	Baghouse #1 Fur.	1:18	1:03	"	"		8.36
2331	"	SA 5	—	#1 Stoner - rock end	2:23	2:05	18 min	27L		1.58
5547	"	SA 6	—	#1 Stoner - vrm end	2:23	2:05	"	"		0.95
10842	"	SA 7	—	#1 Furnace feed pipe	2:22	2:10	12 min	18.0L		63.18
5694	"	SA 8	J. Gonzalez	Monoxide bagger	2:57	2:42	15 min	22.5L		2.28
2343	"	SA 9	A. Miranda	monoxide	2:57	2:42	"	"		0.76
2343	"	SA 10	—	Stoner #2 - vrm end	3:22	3:07	"	"		1.14
5694	"	SA 11	—	Stoner #2 - rock end	3:21	3:06	"	"		1.92
10842	"	SA 12	—	#1 Furnace stoner waste feed	3:20	3:05	"	"	Air Exhaust Off	58.5

Sampling By J. P. Hamilton

Laboratory Evaluation By

J. P. Hamilton

Date

12/14/75

15161288

036333878

Plant Location Santa Ana Date of Sampling 12-12-75 Type Contaminant Sampled Asb

SAMPLING CONDITIONS: OUTSIDE INSIDE DRAFT VISIBLE DUST HOUSEKEEPING

Clear None None

Cloudy Slight Slight

Rain Moderate Moderate

Snow Excessive Heavy

Very goodREMARKS #4 Libby - Concrete Agg D-18 #2
#3 .. - Bull D-18 #1

SAMPLING DATA & EVALUATION

Pump Type & No.	Flow Rate	Sample No.	Employee	Operation/Area	Pump Off	Pump On	Sampling Time	Operating Volume	Remarks	Lab Evaluation
micromit 5694	2/14 1.5	SA 13	B. Grant	Bagger #2 D-18	8:30	8:15	15 min	22.5L		1.14
10842	1.5	SA 14	J. Gmies	Bagger #1 D-18	8:35	8:20	"	"		1.14
5694	"	SA 15	Grant	" #2 D-18	8:45	8:30	"	"		3.04
10842	"	SA 16	Gmies	" #1 D-18	9:15	9:00	"	"		1.14
"	"	SA 17	Grant	" #2 D-18	10:15	10:00	"	"		6.76
5547	"	SA 18	Gmies	" #1 D-18	10:30	10:15	"	"		2.66
"	"	SA 19	"	" #1 D-18	11:00	10:45	"	"		2.66
"	"	SA 20	Grant	" #2 D-18	11:45	11:30	"	"		2.28
10842	"	SA 21	Gmies	" #1 D-18	12:00	11:45	"	"		2.66
5694	"	SA 22	Grant	" #2 D-18	1:20	1:00	20 min	30L		0.57
10842	"	SA 23	"	" #2 D-18	1:35	1:20	15 min	22.5L		1.52
5694	"	SA 24	Gmies	" #1 D-18	2:00	1:45	"	"		2.66

Sampling By T. H. H. H.

Laboratory Evaluation By

P. P. Wallace

Date

12/24/75

15161289

Plant Location	Santa Ana	Date of Sampling	12-12-75	Type	Contaminant Sampled
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HOUSEKEEPING

VISIBLE DUST

INSIDE DRAFT

OUTSIDE

over

None

Slight

Moderate

Heavy

REMARKS		
#4	Libby ore - Concrete Agg	D-18 #2
#3	" " - Bull	D-18 #1

SAMPLING DATA & EVALUATION

[illegible]

Sampling By TF Laminator

Laboratory Evaluation By

9713 Wallace / Steg
12/24/75

Date _____

15161290

Best Average Concentration calculated by NIOSH app.
statistical method is:

Grant D-18 # 2

TWA 1.36 fibers/cc

Gonzales D-18 # 1

TWA 2.0 fibers/cc

Plant Location	Santa Ana, Cal.	Date of Sampling	6-10-74	Type Contaminant Sampled	First

INSIDE DRAFT

VISIBLE DUST

HOUSEKEEPING

Clear

None

None

VERY GOOD

Cloudy

Slight

Slight

Rain

Moderate

Moderate

Snow

Excessive

Heavy

REMARKS

SAMPLING DATA & EVALUATION

[illegible]

Sampling By Peter Kotze

Laboratory Evaluation By

Date _____

7/8/74

15161293

03633882

Plant Location SANTA ANA CAL. Date of Sampling 6-11-74 Type Contaminant Sampled FIBERS

TESTING CONDITIONS: OUTSIDE INSIDE DRAFT VISIBLE DUST HOUSEKEEPING

VERY GOOD

None

Slight

Moderate

Heavy.

ING DATA & EVALUATION

[illegible]

Peter Kostic

Laboratory Evaluation By *J. Wallace*

Date 7/6/74

15161294