

file 5FQ

C. M. Pierce, J. F. Queeny Plant

February 12, 1973

Carl Bohl, Medical Dept.

Asbestos Samples

Mr. John D. Fairing

~~Corp. Research - S3B~~

Asbestos samples for 7 separate Queeny Plant operations (jobs) are submitted together with data sheets for each sample. These are for your analysis and fiber count.

Expenses or costs involved in the analysis may be charged to Account 2-01-908.10.

Your prompt attention to this request is appreciated.

C. M. Pierce
Safety Department

CMP:cs

Encl. 7 samples and data sheets

MON 27394

TS:

INSECT: Asbestos Sampling -- Quarry Plant

ASB #1 -- Mixing Mud by Insulators (2/7/73)

Material: John Manville No 352, Asbestos shorts, 50# bag

Container: 18" X 36" X 12" unventilated box.

Procedure: water charged
8:21 -- empty bag carefully into water.
8:22½ -- bag empty, leave powder soak in water.
8:24½ -- start mixing with hoe.
8:25½ -- add more water.
8:26½ -- job complete

Duration of Test = 5½ minutes

Setting on Pump = 1.6 L/min.

Personal observation = Operator wore dust cloth

Difficult to visualize problem here.
Respiratory Equip. Worn: 3M Nonbreathable mask #8500 No B1 Approval
Same used for ASB #2 & #3

ASB #2 -- Wrapping steam lines with Asbestos Tape (2/7/73)

Material: John Manville No 122, woven Asbestos, 2" rolls.

Prop: 5' section of 1" pipe mounted in Bench vice.

Procedure:
8:32½ -- roll off a strip of tape and cut
8:33 -- start applying to pipe.
8:36½ -- tape on and wired at each end.

Duration of Test = 4 minutes

MON 27399

Setting on Pump = 1.6 L/min

Personal Observation = Absolutely no problem here.

ASB #3 -- Wrapping steam lines with Asbestos Tape (2/17/73)

Met. + Prop: same as ASB #2.

Procedure:

8:40 $\frac{1}{2}$ --- begin removing wrapped section of line

8:41 $\frac{1}{2}$ --- tape off, cut first third and
rewrap pipe in 3 sections

8:45 --- second cut with scissor.

8:47 $\frac{1}{2}$ --- " wrap complete

8:48 $\frac{1}{2}$ --- third cut

8:49 $\frac{1}{2}$ --- job is completed.

Duration of Test = 9 $\frac{1}{2}$ minutes

Setting on Pump = 1.6 L/min

Personal Observation = Absolutely no problem.

St. J. M.

file JFO

M O N S A N T O C O M P A N Y
C O R P O R A T E R E S E A R C H D E P A R T M E N T
P H Y S I C A L S C I E N C E S C E N T E R
M I C R O S C O P Y G R O U P
S T. L O U I S

A S B E S T O S F I B E R C O U N T

F O R

C. M. PIERCE

L O C A T I O N

J. F. QUEENY PLANT

S A M P L E I D E N T I F I C A T I O N

A S B 1

TOTAL NUMBER OF FIELDS COUNTED =	40.	
FIELD SIZE =	0.003842	SQUARE MILLIMETERS
TOTAL NUMBER OF FIBERS COUNTED =	3.	
AVERAGE NUMBER OF FIBERS PER FIELD =	0.075	
AREA OF FILTER =	855.	SQUARE MILLIMETERS
TOTAL NUMBER OF FIBERS ON FILTER =	16691.	
AIR FLOW =	1.60	LITERS PER MINUTE
SAMPLING TIME =	5.5	MINUTES
TOTAL VOLUME OF AIR SAMPLED =	8.80	LITERS
FIBERS PER CUBIC CENTIMETER OF AIR =	1.897	

DATE: FEBRUARY 16, 1973
COUNTED BY: J. D. FAIRING
REQUEST NO: 270121

MON 27401

M O N S A N T O C O M P A N Y
C O R P O R A T E R E S E A R C H D E P A R T M E N T
P H Y S I C A L S C I E N C E S C E N T E R
M I C R O S C O P Y G R O U P
S T. L O U I S

A S B E S T O S F I B E R C O U N T

F O R

C. M. PIERCE

L O C A T I O N

J. F. QUEENY PLANT

S A M P L E I D E N T I F I C A T I O N

A S B 2

TOTAL NUMBER OF FIELDS COUNTED =	40.	
FIELD SIZE =	0.003842	SQUARE MILLIMETERS
TOTAL NUMBER OF FIBERS COUNTED =	3.	
AVERAGE NUMBER OF FIBERS PER FIELD =	0.075	
AREA OF FILTER =	855.	SQUARE MILLIMETERS
TOTAL NUMBER OF FIBERS ON FILTER =	16691.	
AIR FLOW =	1.60	LITERS PER MINUTE
SAMPLING TIME =	4.	MINUTES
TOTAL VOLUME OF AIR SAMPLED =	6.40	LITERS
FIBERS PER CUBIC CENTIMETER OF AIR =	2.608	

DATE: FEBRUARY 16, 1973
COUNTED BY: J. D. FAIRING
REQUEST NO: 270121

MON 27402

M O N S A N T O C O M P A N Y
C O R P O R A T E R E S E A R C H D E P A R T M E N T
P H Y S I C A L S C I E N C E S C E N T E R
M I C R O S C O P Y G R O U P
S T. L O U I S

A S B E S T O S F I B E R C O U N T

F O R

C. M. PIERCE

L O C A T I O N

J. F. QUEENY PLANT

S A M P L E I D E N T I F I C A T I O N

ASB 3

TOTAL NUMBER OF FIELDS COUNTED =	40.	
FIELD SIZE =	0.003842	SQUARE MILLIMETERS
TOTAL NUMBER OF FIBERS COUNTED =	9.	
AVERAGE NUMBER OF FIBERS PER FIELD =	0.225	
AREA OF FILTER =	855.	SQUARE MILLIMETERS
TOTAL NUMBER OF FIBERS ON FILTER =	50072.	
AIR FLOW =	1.60	LITERS PER MINUTE
SAMPLING TIME =	9.5	MINUTES
TOTAL VOLUME OF AIR SAMPLED =	15.20	LITERS
FIBERS PER CUBIC CENTIMETER OF AIR =	3.294	

DATE: FEBRUARY 16, 1973
COUNTED BY: J. D. FAIRING
REQUEST NO: 270121

MON 27403

ASBESTOS SAMPLING LOG

LOCATION: *Store room DDD Bldg. JFQ.*

SAMPLE NO.: *ASB-7*

MATERIAL SAMPLED (Mfgr. Identification) *Accumulations of various Asbestos Dusts on table top, on floor and on equipment*

DATE SAMPLED: *2/9/73*

DESCRIPTION OF JOB OR OPERATION:

Hose Cleaning - Cleaning table top & floor after gasket cutting operations

SAMPLING DEVICE: *MSA Dust Sampling Pump*

FILTER: *Hillipore filter*

AIR FLOW RATE: *1.6 Liter/min.*

TIME START: *10:10 AM*

TIME STOP: *10:20 AM*

WORKER'S NAME: *HARTZ*

RESPIRATORY PROTECTION USED: *BH Appnt. Respirator*

ANALYSIS:

M O N S A N T O C O M P A N Y
C O R P O R A T E R E S E A R C H D E P A R T M E N T
P H Y S I C A L S C I E N C E S C E N T E R
M I C R O S C O P Y G R O U P
S T. L O U I S

A S B E S T O S F I B E R C O U N T

F O R

C. M. PIERCE

L O C A T I O N

J. F. QUEENY PLANT

S A M P L E I D E N T I F I C A T I O N

A S B 7

TOTAL NUMBER OF FIELDS COUNTED =	40.	
FIELD SIZE =	0.003842	SQUARE MILLIMETERS
TOTAL NUMBER OF FIBERS COUNTED =	0.	
AVERAGE NUMBER OF FIBERS PER FIELD =	0.000	
AREA OF FILTER =	855.	SQUARE MILLIMETERS
TOTAL NUMBER OF FIBERS ON FILTER =	0.	
AIR FLOW =	1.60	LITERS PER MINUTE
SAMPLING TIME =	10.	MINUTES
TOTAL VOLUME OF AIR SAMPLED =	16.00	LITERS
FIBERS PER CUBIC CENTIMETER OF AIR =	0.000	

DATE: FEBRUARY 16, 1973
COUNTED BY: J. D. FAIRING
REQUEST NO: 270121

MON 27407

ASBESTOS SAMPLING LOG

LOCATION: Store room DDD Bldg. JFQ

SAMPLE NO.: ASB-6

MATERIAL SAMPLED (Mfgr. Identification)

Jones-Menville ^{#106} Asbestos Millboard 1/2"

DATE SAMPLED: 2/9/73

DESCRIPTION OF JOB OR OPERATION: using Band saw. Cut 14 pieces
20" long.

SAMPLING DEVICE: MSA Dust Sampling Pump
FILTER: Millipore pore size .8

AIR FLOW RATE: 1.6 Liter/min
(Spot Ventilation system in operation)

TIME START: 10:00 AM
TIME STOP: 10:05 AM

WORKER'S NAME: HARTZ

RESPIRATORY PROTECTION USED: OH approved Respirator

ANALYSIS:

1

M O N S A N T O C O M P A N Y
C O R P O R A T E R E S E A R C H D E P A R T M E N T
P H Y S I C A L S C I E N C E S C E N T E R
M I C R O S C O P Y G R O U P
S T. L O U I S

A S B E S T O S F I B E R C O U N T

F O R

C. M. PIERCE

L O C A T I O N

J. F. QUEENY PLANT

S A M P L E I D E N T I F I C A T I O N

A S B 6

TOTAL NUMBER OF FIELDS COUNTED =	40.	
FIELD SIZE =	0.003842	SQUARE MILLIMETERS
TOTAL NUMBER OF FIBERS COUNTED =	6.	
AVERAGE NUMBER OF FIBERS PER FIELD =	0.150	
AREA OF FILTER =	855.	SQUARE MILLIMETERS
TOTAL NUMBER OF FIBERS ON FILTER =	33381.	
AIR FLOW =	1.60	LITERS PER MINUTE
SAMPLING TIME =	5.	MINUTES
TOTAL VOLUME OF AIR SAMPLED =	8.00	LITERS
FIBERS PER CUBIC CENTIMETER OF AIR =	4.173	

DATE: FEBRUARY 16, 1973
COUNTED BY: J. D. FAIRING
REQUEST NO: 270121

MON 27406

ASBESTOS SAMPLING LOG

LOCATION: *STOREROOM 000 Bldg (JFD)*

SAMPLE NO.: *ASB-4*

MATERIAL SAMPLED (Mfr. Identification) *CAREY'S ASBESTOS Millboard 1/4"*
Spec. Johns Mansville style 106 42"X48" Asbestos Millboard

DATE SAMPLED: *2/9/73*

DESCRIPTION OF JOB OR OPERATION: *1/4" thick*
Cutting Circular gaskets from Millboard
use of Portable "Cut-a-Wal" Vibrator Saw on Work Table. Cutting Done
On top of 5 layers of Asbestos Millboard

SAMPLING DEVICE: *MSA Sampling pump*

FILTER: *Millipore Field Monitor Pore Size .8*

AIR FLOW RATE: *1.6 liters/min*

TIME START: *8:40 AM*

TIME STOP: *9:00 AM*

WORKER'S NAME: *HARTZ*

RESPIRATORY PROTECTION USED: *BH approved Dustloc*

ANALYSIS:

M O N S A N T O C O M P A N Y
C O R P O R A T E R E S E A R C H D E P A R T M E N T
P H Y S I C A L S C I E N C E S C E N T E R
M I C R O S C O P Y G R O U P
S T. L O U I S

A S B E S T O S F I B E R C O U N T

F O R

C. M. PIERCE

L O C A T I O N

J. F. QUEENY PLANT

SAMPLE IDENTIFICATION

ASB 4

TOTAL NUMBER OF FIELDS COUNTED =	40.	
FIELD SIZE =	0.003842	SQUARE MILLIMETERS
TOTAL NUMBER OF FIBERS COUNTED =	6.	
AVERAGE NUMBER OF FIBERS PER FIELD =	0.150	
AREA OF FILTER =	855.	SQUARE MILLIMETERS
TOTAL NUMBER OF FIBERS ON FILTER =	33381.	
AIR FLOW =	1.60	LITERS PER MINUTE
SAMPLING TIME =	20.	MINUTES
TOTAL VOLUME OF AIR SAMPLED =	32.00	LITERS
FIBERS PER CUBIC CENTIMETER OF AIR =	1.043	

DATE: FEBRUARY 16, 1973
COUNTED BY: J. D. FAIRING
REQUEST NO: 270121

MON 27404

ASBESTOS SAMPLING LOG

LOCATION: STOREROOM DDD Bldg. JFQ

SAMPLE NO.: ASB-5

MATERIAL SAMPLED (Mfr. Identification)

Compressed CHRYSOTILE ASBESTOS SRB Binder Style GARLOCK #7021

DATE SAMPLED: 2/9/73

DESCRIPTION OF JOB OR OPERATION: Cutting circular gaskets $\frac{1}{8}$ " thick
using Portable Vibrator Saw. Gaskets $6\frac{5}{8}$ " I.D.
Work performed on work table w/ 5 layers $\frac{1}{4}$ " Material 106 beneath
SAMPLING DEVICE: MSA GRAVIMETRIC Dust Sampling Pump
FILTER: Millipore pore size .8

AIR FLOW RATE: 1.6 liters/min.

TIME START: 9:36 AM
TIME STOP: 9:56 AM

WORKER'S NAME: HARTZ

RESPIRATORY PROTECTION USED: Dust fac BM 4M.

ANALYSIS:

M O N S A N T O C O M P A N Y
C O R P O R A T E R E S E A R C H D E P A R T M E N T
P H Y S I C A L S C I E N C E S C E N T E R
M I C R O S C O P Y G R O U P
S T. L O U I S

A S B E S T O S F I B E R C O U N T

F O R

C. M. PIERCE

L O C A T I O N

J. F. QUEENY PLANT

SAMPLE IDENTIFICATION

ASB 5

TOTAL NUMBER OF FIELDS COUNTED =	40.	
FIELD SIZE =	0.003842	SQUARE MILLIMETERS
TOTAL NUMBER OF FIBERS COUNTED =	4.	
AVERAGE NUMBER OF FIBERS PER FIELD =	0.100	
AREA OF FILTER =	855.	SQUARE MILLIMETERS
TOTAL NUMBER OF FIBERS ON FILTER =	22254.	
AIR FLOW =	1.60	LITERS PER MINUTE
SAMPLING TIME =	20.	MINUTES
TOTAL VOLUME OF AIR SAMPLED =	32.00	LITERS
 FIBERS PER CUBIC CENTIMETER OF AIR =	 0.695	

DATE: FEBRUARY 16, 1973
COUNTED BY: J. D. FAIRING
REQUEST NO: 270121

MON 27405