



**Dow U.S.A.**

The Dow Chemical Company  
P.O. Box 150  
Plaquemine, Louisiana 70765-0150

July 29, 1992

Daniel Cortez      Petrin      Building 4106  
Eddie Guillory      Petrin

cc:    Rock Gustin      LHC II      Building 4801

Asbestos Monitoring

Enclosed are sample results for potential exposure to asbestos.

The OSHA 8-hour permissible exposure limit for asbestos is 0.2 f/cc >5 microns and the 30-minute short term exposure limit is 1 f/cc >5 microns.

The results displayed are based on sampling duration.

The data sheet shows the results of exposure using two methods, the Limit of Detection (LOD) and the Limit of Quantitation (LOQ). Included on the data sheet is an explanation of the method Limit of Quantitation.

Thank you,

**Darlene S. Creel**  
Industrial Hygiene  
Ext. 6181  
Building 3502-E

Attachment

dsc

PRODUCED FOR THE ASBESTOS DATABASE  
DATE: 7-29-92  
MASTER No. 453871 QSC

DO A 114839  
CONFIDENTIAL

**DOW** LOUISIANA DIVISION INDUSTRIAL HYGIENE SAMPLE RECORD

SAMPLE N° 14071

PLANT/DEPT. LHC II  
MONITORING FOR: Asbestos

DATE 6-15-92  
OTHER CHEMICALS PRESENT: \_\_\_\_\_

SAMPLE COLLECTION MEDIA:  
☒ BADGE NO. \_\_\_\_\_ TYPE \_\_\_\_\_  
TEMP/HUMIDITY: (REQUIRED FOR BADGES) \_\_\_\_\_  
☐ CHARCOAL TUBE SIZE \_\_\_\_\_  
☒ FILTER CASSETTE SIZE 25 mm  
☐ SILICA TUBE SIZE \_\_\_\_\_  
☐ DRAGER TUBE TYPE \_\_\_\_\_  
☐ OTHER \_\_\_\_\_

PUMP SERIAL NO. 073191  
CALIBRATION DEVICE: ☒ BUBBLEMETER ☐ ROTAMETER  
☐ OTHER \_\_\_\_\_

PUMP FLOW RATE CALIBRATION:  
BEGIN: 1. 2498 2502  
2. 2498  
3. 2500

BEGINNING FLOW RATE AVG. 2500 ☒ CC/MIN ☐ L/MIN  
ENDING: 1. 1349 1354  
2. 1349  
3. 1350

ENDING FLOW RATE AVG. 1351 ☐ CC/MIN ☐ L/MIN

SAMPLE AVERAGE FLOW RATE 1925.2

TIME STARTED 8:00 AM  
TIME STOPPED 8:30 AM  
TOT. RUNNING TIME(MIN) 30 min 51.75

SAMPLE VOLUME (AVG FLOW X RUN TIME) 577.6

SHIFT: ☒ 8 HR. ☐ 12 HR. ☐ PERSONNEL SAMPLE ☐ AREA SAMPLE  
☒ FULL SHIFT TWA  
☐ STEL/TASK

EMPLOYEE NAME James Sparks  
EMPLOYEE I.D.# 436-74-13508  
JOB CLASSIFICATION Inspector  
IH JOB CODE # \_\_\_\_\_  
CONTRACTOR COMPANY Petrol Corp.

RESPIRATOR USED? ☒ YES ☐ NO  
RESPIRATOR MODEL / CANISTER TYPE North 7700 w/Hypr  
☐ MOUTH-BIT ☐ DUST ☒ HALF-FACE  
☐ FULL-FACE ☐ AIR-LINE ☐ SCBA

DESCRIPTION OF AREA SAMPLED/JOB PERFORMED DURING MONITORING Wet method used while removing Asbestos from 1" pipe.

ANALYTICAL REPORT REFERENCE # 20-4570  
ANALYTICAL RESULTS: 1.962 0.03 LOD

\* RESTRICTED FOR USE WITHIN DOW ONLY \*

VP-124

FORM FILLED IN BY: Daniel R. Kelly

**DOW** LOUISIANA DIVISION INDUSTRIAL HYGIENE SAMPLE RECORD

SAMPLE N° 14094

PLANT/DEPT. LHC II  
MONITORING FOR: Asbestos E. beris

DATE 7-17-92  
OTHER CHEMICALS PRESENT: \_\_\_\_\_

SAMPLE COLLECTION MEDIA:  
☐ BADGE NO. \_\_\_\_\_ TYPE \_\_\_\_\_  
TEMP/HUMIDITY: (REQUIRED FOR BADGES) \_\_\_\_\_  
☐ CHARCOAL TUBE SIZE \_\_\_\_\_  
☒ FILTER CASSETTE SIZE 25 mm  
☐ SILICA TUBE SIZE \_\_\_\_\_  
☐ DRAGER TUBE TYPE \_\_\_\_\_  
☐ OTHER \_\_\_\_\_

PUMP SERIAL NO. 5122  
CALIBRATION DEVICE: ☒ BUBBLEMETER ☐ ROTAMETER  
☐ OTHER \_\_\_\_\_

PUMP FLOW RATE CALIBRATION:  
BEGIN: 1. 2516 2514  
2. 2524  
3. 2518

BEGINNING FLOW RATE AVG. 2518 ☒ CC/MIN ☐ L/MIN  
ENDING: 1. 2464 2448  
2. 2452  
3. 2448

ENDING FLOW RATE AVG. 2432 ☐ CC/MIN ☐ L/MIN

SAMPLE AVERAGE FLOW RATE 2525

TIME STARTED 10:00 AM  
TIME STOPPED 10:30 AM  
TOT. RUNNING TIME(MIN) 30 min.

SAMPLE VOLUME (AVG FLOW X RUN TIME) 7.6

SHIFT: ☒ 8 HR. ☐ 12 HR. ☐ PERSONNEL SAMPLE ☐ AREA SAMPLE  
☐ FULL SHIFT TWA  
☐ STEL/TASK

EMPLOYEE NAME Trevor Simon  
EMPLOYEE I.D.# 435-19-6527  
JOB CLASSIFICATION Inspector  
IH JOB CODE # \_\_\_\_\_  
CONTRACTOR COMPANY Petrol Corp.

RESPIRATOR USED? ☒ YES ☐ NO  
RESPIRATOR MODEL / CANISTER TYPE North 7700 w/Hypr  
☐ MOUTH-BIT ☐ DUST ☒ HALF-FACE  
☐ FULL-FACE ☐ AIR-LINE ☐ SCBA

DESCRIPTION OF AREA SAMPLED/JOB PERFORMED DURING MONITORING Removing insulation from 3" steam line - wet method

ANALYTICAL REPORT REFERENCE # 20-5402  
ANALYTICAL RESULTS: 4990 LOD LO.01

\* RESTRICTED FOR USE WITHIN DOW ONLY \*

VP-124

FORM FILLED IN BY: Gilbert Brulley

DO A 114840  
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**EXPOSURE GUIDELINES**

8-HR. TWA LIMIT - 0.20 FIB/CC

30-MINUTE LIMIT = 1.0 FIB/CC

LIMIT OF DETECTION = 7 FIB/MM2

LIMIT OF QUANTITATION = 100 FIB/MM2

\*\*LOD

\*\*\*LOQ

**ASBESTOS MONITORING DATA RESULTS: LHC II 1992**

| DATE    | SAMPLE # | PERSONNEL    | DESCRIPTION                                                             | DUR(MIN) | VOL(L) | ** LOD<br>FIB/CC | ***LOQ<br>FIB/CC |
|---------|----------|--------------|-------------------------------------------------------------------------|----------|--------|------------------|------------------|
| 6/15/92 | 14071    | *436-74-3503 | Insulator: WET METHOD used while removing Asbestos from 1" pipe         | 30       | 58     | 0.03             | <0.68            |
| 7/17/92 | 14094    | *433-19-6528 | Insulator: WET METHOD used while removing insulation from 3" steam line | 30       | 76     | <0.01            | <0.51            |

\* The proper protective clothing was worn during the job. North 7700 Respirator with HEPA filters were worn during the job.

Note: The Limit of Quantitation has been defined as 100 Fibers/MM2 using the minimum fiber loading criteria specified. In the NIOSH analytical method 7400, the stated range of the method is 100 to 1300 Fibers/MM2 filter area. Although samples below this range can be analyzed, the method has not been validated below 100 Fibers/MM2. However, the NIOSH method 7400 also establishes the estimated Limit of Detection as 7 Fibers/MM2 (Reference OSHA Std. 1910.1001, Appendix B). Based on this information, we will establish 100 Fibers/MM2 filter area as our Limit of Quantitation and 7 Fibers/MM2 filter area as our Limit of Detection (which is more representative of the actual fibers present ) for asbestos monitoring. We will report both Limit of Quantitation and Limit of Detection.

If only Limit of Quantitation were expressed, the minimum reportable result would calculate to be 0.04 Fibers per cc for an 8-hr. Time weighted average sample at a flow rate of 2 liters per minute and 0.6 fibers per cc for a 30 minute time weighted average short term sample at a flow rate of 2 liters per minute.

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