D. ALLEN
CORRIE

2348 ✓

WV-0195 # 177

WORKPLACE ENVIRONMENT MONITORING - FIELD DATA SHEET

Page ___ of ___

Date 1-21-87 Project ASBESTOS Department 169100/327000-B36

General Operating Conditions: REMOVING INSULATION FROM PIPES IN DUMPSTER RESPIRATOR, GLOVES, GOGGLES, ROPED OFF.

Sampling Method and Equipment: Personal ✓ : Area ___ : Portable Sampler Pump ✓ Charcoal Tube ___ : Bag ___ : Other FILTER CASSETTE .25mm

Remarks:

Shift: Day ___ Eve. ___ Mid. ___ No. Employees ___ Sampled by LENS III

Employee Name, Job Title, Payroll No., Soc. Sec. No., Bldg. No. - Monitoring Loc. Smoke - Chew?	Sample No.	Pump Ser. Number	Pump KV	Pump Flow Control Set	Initial Pump Reading	Final Pump Reading	Net Pump Reading	Start (Time)	Stop (Time)	Net Sample Time, Min.	Volume, Liters.	F/cc
J. A. HUDSON 235-82-8290 F S	1	6307	—	—	2LPM		→	1253	1415	82	164	.003

12 - 1 = 11 F/100 FIELDS

11 ÷ 100 X 385 = .003 F/cc

7.54 X 82

Remarks: (See Reverse Side)

UCC 0012541

PLAINTIFF'S EXHIBIT
UC-3814

INDUSTRIAL HYGIENE SURVEY REPORT

SOUTH CHARLESTON PLANT

To: J.K. CORRIE

Date: 1-21-87

cc: J.R. DEMENT
D.F. TETER, M.D
M.J. SHOGER
B.N. GHATTA

From: W.J. VINCENT
L.E. MILLER III

BLDG 36

Survey Date 1-21-87 Department/Location 169100/321000

Contaminants ASBESTOS File No. OH

Area/Source (7.3)(1), ✓ Occupational Exposure (7.4),

Sample Location, Employee Monitored	JOB TITLE	Sample Duration, Minutes	Exposure Concentration, PPMV, mg/m3 (TWA/8 Hrs.)	Status
J.A. HUDSON	INSULATOR	82	.003F/cc	IST

Comments:

WORE SURVIVAIR 1090 CARTRIDGE RESPIRATOR
INSUFFICIENT SAMPLE TIME FOR TWA8

(1) (n.n) = Plant 514 Safety File Reference

(2) IC = In Compliance; NC = Non-Compliance; NEEL = No Established Exposure Limit
Applicable Standard, TWA/8 Hrs.: TLV® 0.2F/cc; OSHA 0.2F/cc; UCC 0.2F/cc;
Short Term Exposure Limit (STEL) ——; Ceiling Limit ——

(3) Please notify monitored employees of results in accordance with Plant 514 Safety/

UCC 0012342

UNION CARBIDE

INTERNAL CORRESPONDENCE

UNION CARBIDE CORPORATION P.O. BOX 8004, SOUTH CHARLESTON, WV 25303

SILICONES AND URETHANE INTERMEDIATES

SOUTH CHARLESTON PLANT

To: J. K. CORRIE

(Record date received _____)

Within 5 days of date of receipt notify: J. A. HUDSON
(Monitored Employee)

235-82-8290
(Soc. Sec. Number)

Date: 1-27-87

Orig. Dept. Safety and Health

Subject: Employee Notification of Occupational Exposure Monitoring Results

On the following date(s) 1-21-87, at the described plant location SOUTH OF BLDG 36 (REMOVING INSULATION FROM PIPES IN DUMPSTER), your personal exposure to ~~chemical~~/~~physical agent(s)~~ ASBESTOS was determined to be 003F/CC using prescribed Industrial Hygiene measurement methods (Reference: NIOSH 7400). Compliance Status: In compliance/Non-compliance/ *

No established exposure limit/Exposure appears substantially low/Other appropriate comment, e.g., respiratory protection used, etc. SURVIVAIR 1090 CARTRIDGE RESPIRATOR

Applicable Standard, 8-Hr. Time Weighed Average (TWA_8): TLV® 0.2 f/cc OSHA 0.2 f/cc;

UCC 0.2 f/cc Short Term Exposure Limit (STEL) ——; Ceiling Limit ——

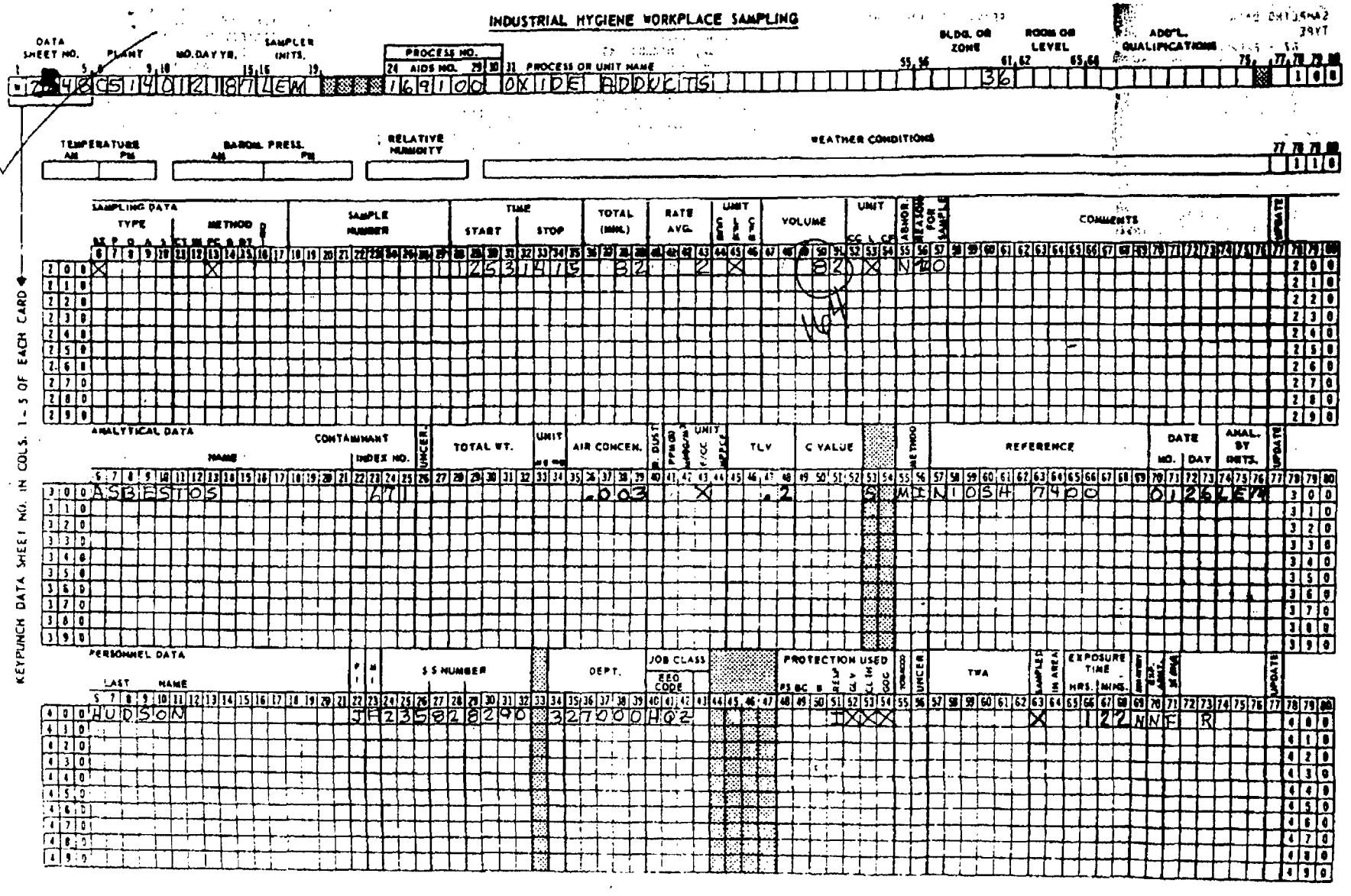
Action to be taken to prevent recurrence of overexposure: _____

* INSUFFICIENT SAMPLE TIME FOR TWA_8

(Supervisor's Signature/Date)

I, _____ (employee), on _____ (date), acknowledge having been notified of the above occupational exposure monitoring results in accordance with South Charleston Plant Safety and Health Policy/Procedure, Informing Employees of Health Hazards 2.16.

NOTE - This document or a signed copy shall become a permanent record maintained in the department file described in IV.5.C. of the above procedure.



INDUSTRIAL HYGIENE WORKPLACE SAMPLING

DATA SHEET NO.	PLANT	MO. DAY YR.	SAMPLER INITS.	PROCESS NO. / AIDS NO.	PROCESS OR UNIT NAME	BLDG. OR ZONE	ROOM OR LEVEL	ADD'L. QUALIFICATIONS
2048	C514	012187	LEM	169100	OXIDE ADDUCTS	36		

TEMPERATURE AM	TEMPERATURE PM	BAROM. PRESS. AM	BAROM. PRESS. PM	RELATIVE HUMIDITY	WEATHER CONDITIONS

SAMPLING DATA

Line	TYPE	METHOD	SAMPLE NUMBER	TIME START	TIME STOP	TOTAL (MIN.)	RATE AVG.	UNIT	VOLUME	UNIT	ABNOR.	REASON FOR SAMPLE	COMMENTS	UPDATE
200	X	X		1253	1415	82	2	X	82	X	N	10		

164

ANALYTICAL DATA

Line	NAME	CONTAMINANT INDEX NO.	UNCER.	TOTAL WT.	UNIT	AIR CONCEN.	R. DUST	PPM (D)	UNIT	TLV	C VALUE		METHOD	REFERENCE	DATE MO.	DATE DAY	ANAL. BY INITS.	UPDATE
300	ASBESTOS	671				.003		X		.2		S	MI	NIOSH 7400	01	26	LEM	

PERSONNEL DATA

Line	LAST NAME	P I	M I	S S NUMBER	DEPT.	JOB CLASS / EEO CODE	PROTECTION USED	TOBACCO	UNCER	TWA	SAMPLED IN AREA	EXPOSURE TIME HRS.	EXPOSURE TIME MINS.				UPDATE
400	HUDSON	J	F	235828290	327000	HQZ	I X X X				X	1	22	N	N	F	R

KEYPUNCH DATA SHEET NO. IN COLS. 1 - 5 OF EACH CARD

UCC 0012544

INDUSTRIAL HYGIENE WORKPLACE SAMPLING SUPPLEMENTAL COMMENTS

1–5	6–9 PLANT	10–15 MO DAY YR
W2248	C514	011287

UPDATE | LINE NO. 78–80: 101

REMOVING INSULATION FROM PIPES IN DUMPSTER

SIGNATURE | DATE

UCC 0012545

2345 ✓ WV-0195 #176

WORKPLACE ENVIRONMENT MONITORING - FIELD DATA SHEET Page ___ of ___

Date 1-20-87 Project ASBESTOS Department DG4010

General Operating Conditions: CONTRACTOR REMOVING INSULATION INSIDE BLDG 135

Sampling Method and Equipment: Personal ___ : Area ✓ : Portable Sampler Pump ✓ : Charcoal Tube ___ Bag ___ : Other ___

Remarks: ___

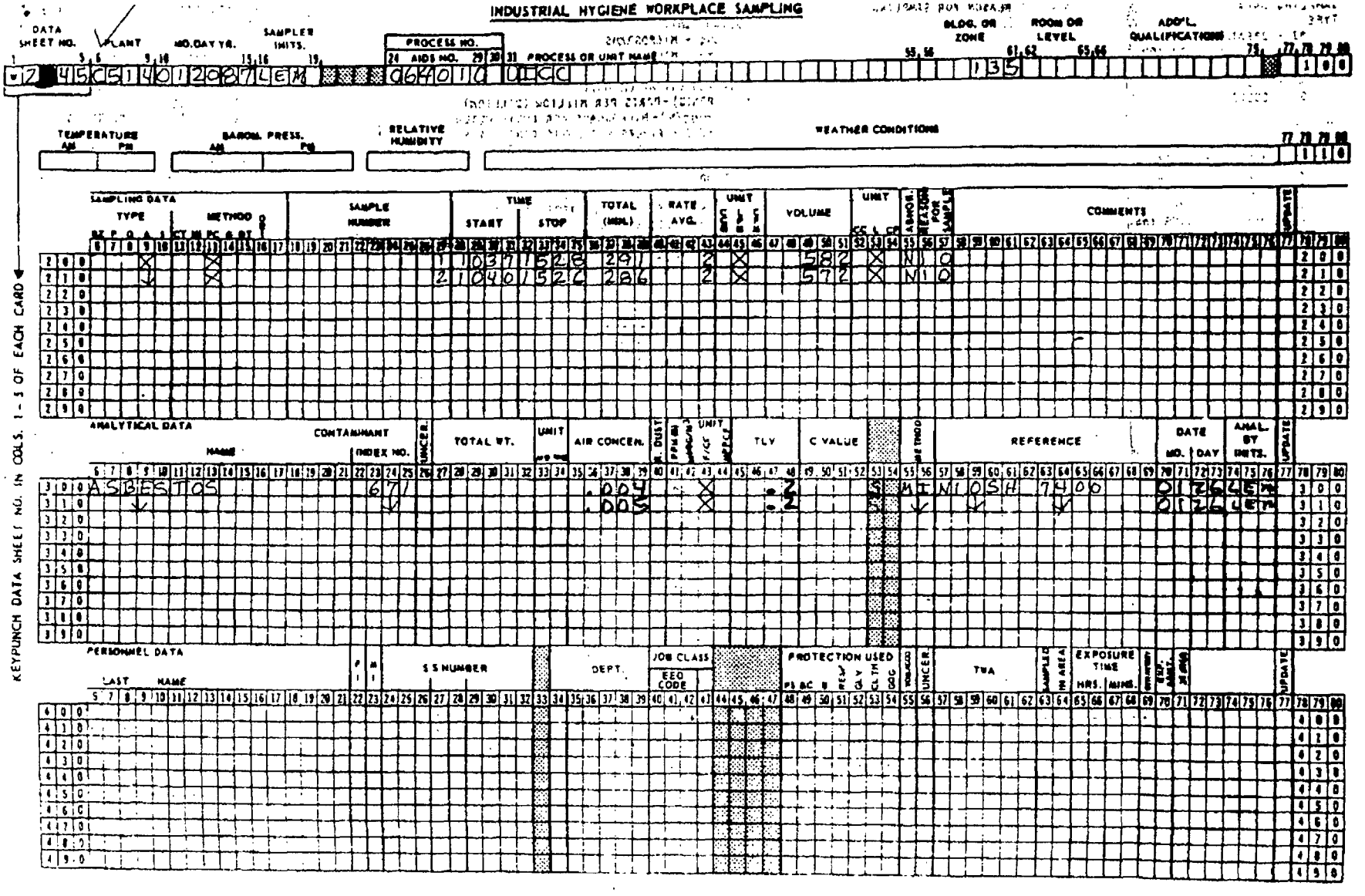
Shift: Day ✓ Eve. ___ Mid. ___ No. Employees ___ Sampled by LEM III CLS II

Employee Name, Job Title, Payroll No., Soc. Sec. No., Bldg. No. - Monitoring Loc. Smoke - Chew?	Sample No.	Pump Ser. Number	Pump Kv	Pump Flow Control Set	Initial Pump Reading	Final Pump Reading	Net Pump Reading	Start (Time)	Stop (Time)	Net Sample Time, Min.	Volume, Liters.	
ON TOP OF BREATHING AIR BOX S END 1ST LEVEL BLDG 135	1	6307			2LPM			1037	1528	291	582	.004
ON LEDGE AT ENTRANCE N END 1ST LEVEL BLDG 135	2	6308			2LPM			1040	1526	286	572	.005
#1 5-1 = 4F/100 Fields .004 F/CC												
#2 7-1 = 6F/100 Fields .005 F/CC												

Marks: (See Reverse Side)

UCC 0012546

INDUSTRIAL HYGIENE WORKPLACE SAMPLING



UCC 0012547

INDUSTRIAL HYGIENE WORKPLACE SAMPLING SUPPLEMENTAL COMMENTS

1 — 5	6 PLANT 9	10 MO DAY YR 15
W2245	C514	012087

UPDATE | LINE NO.

CONTRACTOR REMOVING INSULATION FROM INSIDE BLDG 135		101
ON TOP OF BREATHING BIE BOX SOUTH END 1ST LEVEL BLDG 135		201
ON LEDGE AT ENTRANCE NORTH END 1ST LEVEL BLDG 135		211

SIGNATURE | DATE

UCC 0012548

PAUL WARD
PORRIE

2346

WV-0195 #117 3/25
111 3

WORKPLACE ENVIRONMENT MONITORING - FIELD DATA SHEET

Page ____ of ____

Date 1-20-87 Project ASBESTOS Department

General Operating Conditions: STRIPPING ASBESTOS FROM PIPERACK ACROSS ROADWAY N OF 174 + S OF 157. ROAD CLOSED, SIGNS UP AREA BARRICADED.

Sampling Method and Equipment: Personal ✓: Area ____: Portable Sampler Pump ✓: Charcoal Tube ____: Bag ____: Other

Remarks:

Shift: Day ✓ Eve. ____ Mid. ____ No. Employees 2 Sampled By LEM III / CLS II

Employee Name, Job Title, Payroll No., Soc. Sec. No., Bldg. No. - Monitoring Loc. Smoke - Chew?	Sample No.	Pump Ser. Number	Pump Kv	Pump Flow Control Set	Initial Pump Reading	Final Pump Reading	Net Pump Reading	Start (Time)	Stop (Time)	Net Sample Time, Min.	Volume, Liters.	~~Conc. ppm~~
L. A. CARTER 235-72-4006 M S	1	6309			2LPM	→	→	1248 12 60	1430	102	204	.037
R. M. HUGGETT 235-88-7811 M	2	6320			2LPM	→	→	1254	1430	96	192	.034
3188												
#1 16-1 = 15F/100 Fields .037 F/CC												
#2 = 14-1 = 13F/100 Fields .034 F/CC												

Marks: (See Reverse Side)

UCC 0012549

INDUSTRIAL HYGIENE SURVEY REPORT

SOUTH CHARLESTON PLANT

To: T.K. CORRIE

Date: 1-27-87

cc: T.R. DEMENT
D.F. TETER, M.D.
M.J. SHOEMAKER
B.N. GLIATTA

From: W.J.VINCENT
L.E.MILLER III

Middle ISLAND CHEM complex

Survey Date 1-20-87 Department/Location 12101013270000 - Bldg-114

Contaminants ASBESTOS File No. OH

Area/Source (7.3)(1), ✓ Occupational Exposure (7.4),

Employee Monitored	JOB TITLE	Duration: Minutes	Exposure Concentration: ppmV, mg/m3 (TWA/8 Hrs.)	Status
Sample location:				
L.A. CARTER	INSULATOR	102	.037F/cc	*TST
R.W. HUGGETT	INSULATOR	96	.037F/cc	*TST

Comments:

BOTH WORE SURVIVAIR 1000 CARTRIDGE RESPIRATORS

* INSUFFICIENT SAMPLE TIME FOR TWAs

(1) (n.n) = Plant SI4 Safety File Reference

(2) IC = In Compliance; NC = Non-Compliance; NEEL = No Established Exposure Limit

Applicable Standard, TWA/8 Hrs.: TLV® 0.2 ; OSHA 0.2 ; UCC 0.2 ;

Short Term Exposure Limit (STEL) — ; Ceiling Limit —

UNION CARBIDE

INTERNAL CORRESPONDENCE

UNION CARBIDE CORPORATION P. O. BOX 8004, SOUTH CHARLESTON, WV 25303

SILICONES AND URETHANE INTERMEDIATES

SOUTH CHARLESTON PLANT

To: T. K. Corrie

Date: 1-27-87

(Record date received _____)

Orig. Dept. Safety and Health

Within 5 days of date of receipt notify: R.M. Huggett
(Monitored Employee)

Subject: Employee Notification of Occupational Exposure Monitoring Results

235-88-7811
(Soc. Sec. Number)

On the following date(s) 1-20-87, at the described plant location BLDG 174 PIPERACK Access Roadway, your personal exposure to ~~chemical~~/~~physical agent(s)~~ Asbestos was determined to be _____

_____ 0.3% Flcc using prescribed Industrial Hygiene measurement methods (reference: NIOSH 7400). Compliance Status: In compliance/Non-compliance/* No established exposure limit/Exposure appears substantially low/Other appropriate comment, e.g., respiratory protection used, etc. SUPERVISOR 1000 CARTRIDGE RESPIRATOR

Applicable Standard, 8-Hr. Time Weighted Average (TWA): TLV® 0.2fc OSHA 0.2fc;

UCC 0.2fc Short Term Exposure Limit (STEL) ____; Ceiling Limit ____

Action to be taken to prevent recurrence of overexposure: _____

_____

_____

* INSUFFICIENT SAMPLE TIME FOR TWA8

_____
(Supervisor's Signature/Date)

I, _____(employee), on _____(date), acknowledge having been notified of the above occupational exposure monitoring results in accordance with South Charleston Plant Safety and Health Policy/Procedure, Informing Employees of Health Hazards 2.16.

NOTE - This document or a signed copy shall become a permanent record maintained in the department file described in IV.S.C. of the above procedure.

UNION CARBIDE

INTERNAL CORRESPONDENCE

UNION CARBIDE CORPORATION P. O. BOX 8004, SOUTH CHARLESTON, WV 25303

SILICONES AND URETHANE INTERMEDIATES

SOUTH CHARLESTON PLANT

To: T. K. CORRIE

Date: 1-27-87

(Record date received _____)

Orig. Dept. Safety and Health

Within 5 days of date of receipt notify: L. A. CARTER
(Monitored Employee)

Subject: Employee Notification of Occupational Exposure Monitoring Results

235-72-4006
(Soc. Sec. Number)

On the following date(s) 1-20-87, at the described plant location BLDG 174 PIPERACK Across ROADWAY, your personal exposure to ~~chemical~~/physical agent(s) Asbestos was determined to be _____

reference: NIOSH 7400). Compliance Status: In compliance/Non-compliance* using prescribed Industrial Hygiene measurement methods - 0.2 f/cc

No established exposure limit/Exposure appears substantially low/Other appropriate comment, e.g., respiratory protection used, etc. SURVIVAIR 1000 CARTRIDGE RESPIRATOR

Applicable Standard, 8-Hr. Time Weighted Average (TWA): TLV® 0.2fc OSHA 0.2fc;

UCC 0.2fc Short Term Exposure Limit (STEL) ____; Ceiling Limit ____

Action to be taken to prevent recurrence of overexposure: _____

_____

_____

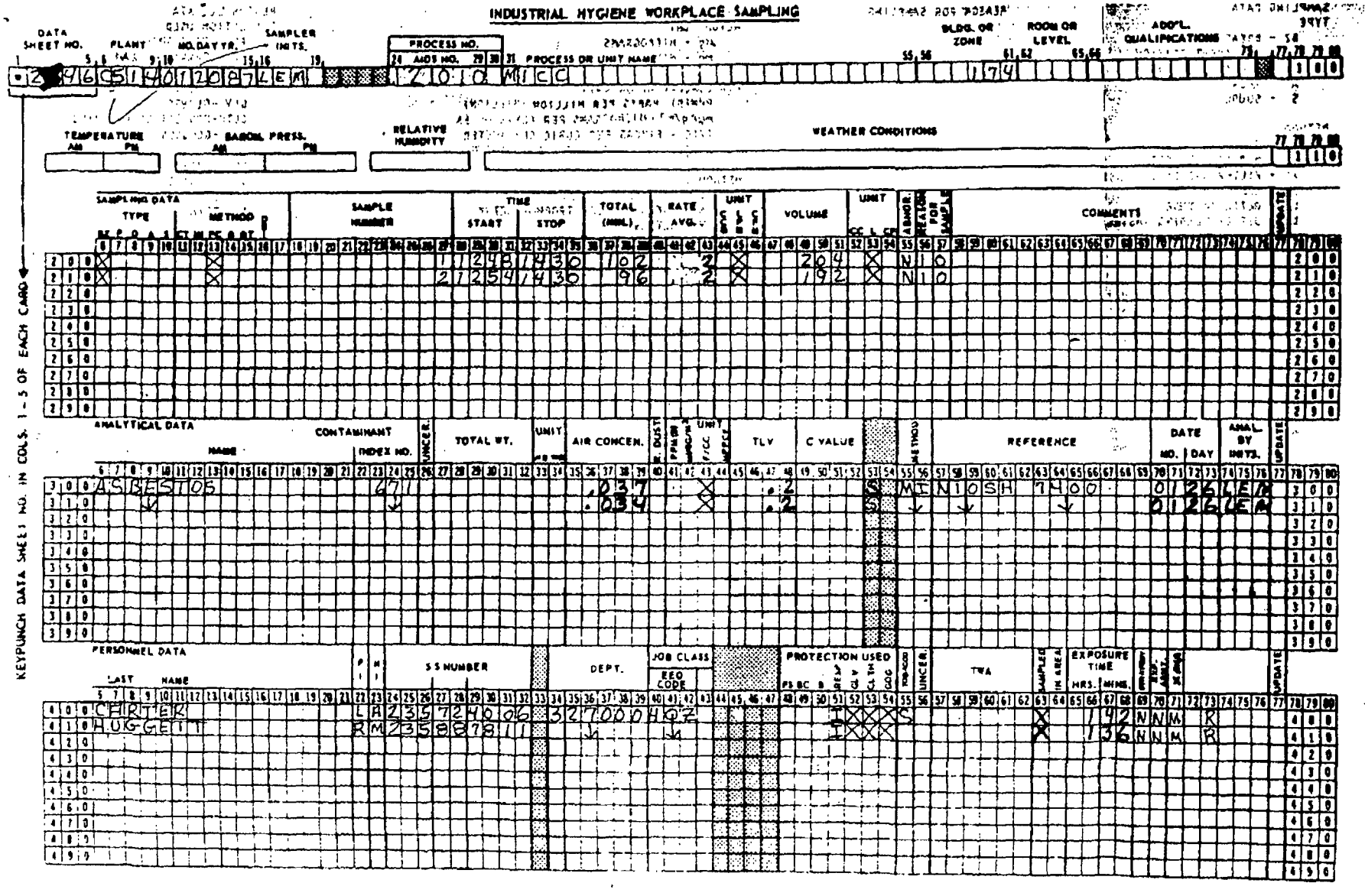
* INSUFFICIENT SAMPLE TIME FOR TWA8

(Supervisor's Signature/Date)

I, _____(employee), on _____(date), acknowledge having been notified of the above occupational exposure monitoring results in accordance with South Charleston Plant Safety and Health Policy/Procedure, Informing Employees of Health Hazards 2.16.

NOTE - This document or a signed copy shall become a permanent record maintained in the department file described in IV.S.C. of the above procedure.

INDUSTRIAL HYGIENE WORKPLACE SAMPLING



DATA SHEET NO. | PLANT | MO. DAY YR. | SAMPLER INITS. | PROCESS NO. (AIOS NO.) | PROCESS OR UNIT NAME | BLDG. OR ZONE | ROOM OR LEVEL | ADD'L. QUALIFICATIONS

KEYPUNCH DATA SHEET NO. IN COLS. 1 - 5 OF EACH CARD

TEMPERATURE AM / PM | BAROM. PRESS. AM / PM | RELATIVE HUMIDITY | WEATHER CONDITIONS

SAMPLING DATA: TYPE | METHOD | SAMPLE NUMBER | TIME START / STOP | TOTAL (MIN.) | RATE AVG. | UNIT | VOLUME | UNIT | ABNOR. CONDITION FOR SAMPLE | COMMENTS | UPDATE

ANALYTICAL DATA: NAME | CONTAMINANT INDEX NO. | UNCER. | TOTAL WT. | UNIT | AIR CONCEN. | R. DUST (PPM OR MPPCF) | UNIT | TLV | C VALUE | METHOD | REFERENCE | DATE MO. / DAY | ANAL. BY INITS. | UPDATE

PERSONNEL DATA: LAST NAME | F / I | SS NUMBER | DEPT. | JOB CLASS EEO CODE | PROTECTION USED (PS, BC, R, RESP, CLTH, GOG) | TWA | SAMPLED IN AREA | EXPOSURE TIME HRS. / MINS. | UPDATE

| | | |

INDUSTRIAL HYGIENE WORKPLACE SAMPLING SUPPLEMENTAL COMMENTS

1–5	6 PLANT 9	10 MO	DAY	YR 15
W2246	C514	01	20	86

UPDATE | LINE NO.

REMOVING INSULATION FROM PIPE RACK ACROSS ROADWAY NORTH OF BLDG		101
DG 174 AND SOUTH OF BLDG 157. ROADWAY CLOSED, SIGNS UP, AREA		102
RR ICADED.		103

SIGNATURE | DATE

UCC 0012554

2340

WV-0195 #174

WORKPLACE ENVIRONMENT MONITORING - FIELD DATA SHEET Page ___ of ___

Date 1-15-87 Project ASBESTOS Department 305210

General Operating Conditions: CHECKING FOR ASBESTOS IN BLDG 106 - ROOMS 105 & 106

Sampling Method and Equipment: Personal ___ : Area ✓ : Portable Sampler Pump ✓ : Charcoal Tube ___ : Bag ___ : Other FILTER CASSETTE 25mm

Remarks:

Shift: Day ___ Eve. ✓ Mid. ___ No. Employees ___ Sampled By LEMIT / CLSII

Employee Name, Job Title, Payroll No., Soc. Sec. No., Bldg. No. - Monitoring Loc. Smoke - Chew?	Sample No.	Pump Ser. Number	Pump Kv	Pump Flow Control Set	Initial Pump Reading	Final Pump Reading	Net Pump Reading	Start (Time)	Stop (Time)	Net Sample Time, Min.	Volume, Liters.	F/CC
INSIDE LAB BENCH SOUTH WALL of ROOM 106	1	6307			2	2	2	1530	2330	480	960	.0005
ON FILE CABINET NORTH WALL ROOM 106	2	6309			2	2	2	1530	2330	480	960	.0005

#1 = 2 FIBERS
- 1 BLANK
1 FIBER/100 FIELDS

$\frac{1 \div 100 \times 385}{7.85 \times 960} = .0005$ F/CC

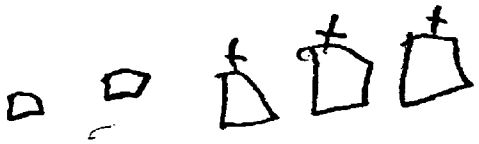
#2 = 1 FIBER
- 1 BLANK
0 = NO FIBERS

.0005 F/CC

Remarks: (See Reverse Side)

UCC 0012555

W





5/5 30P 1FLOT

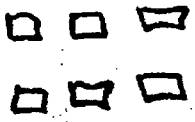




4 4 4

21 7- 12 1

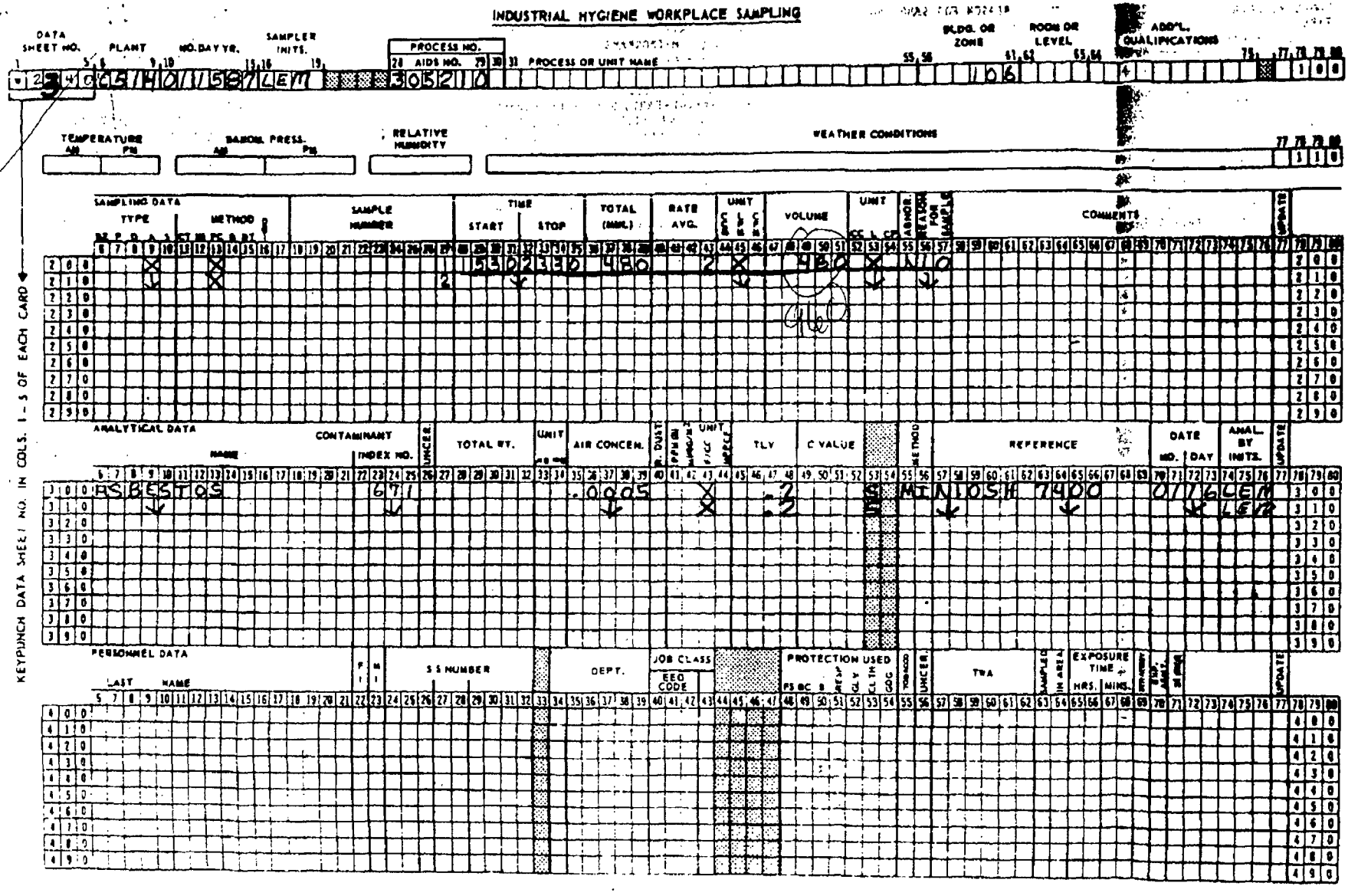
21 7-



7- 11 14

7- 14

INDUSTRIAL HYGIENE WORKPLACE SAMPLING



INDUSTRIAL HYGIENE WORKPLACE SAMPLING SUPPLEMENTAL COMMENTS

1–5	6–9 PLANT	10–15 MO DAY YR
W2240	C514	011587

UPDATE | LINE NO.

CHECKING FOR ASBESTOS IN BLDG 106 ROOMS 105 AND 106	10	1
	20	1
	21	1

SIGNATURE | DATE

UCC 0012558