

1880

DATE

6-14-89

INSTRUCTIONS: Originator attaches Part 2 to laboratory results and forwards to Medical Services.

INDUSTRIAL HYGIENE SURVEY DATA - AIR MONITORING KM-4293-A

FACILITY Southwestern	WORK LOCATION Cat I - I-Beams
EMPLOYEE NAME (LAST, FIRST) WOLFORD, Roy Norman	EMPLOYEE NUMBER 453 - 23 - 1404
JOB TITLE Insulator	SURVEYOR Settler

TYPE OF PERSONAL PROTECTIVE EQUIPMENT	RESPIRATOR MSH Comfo II half-face	SAMPLING CONDITIONS	TEMPERATURE 82 °F	CALIBRATION RECORD	PUMP MANUFACTURER/S N. MSH #1
	BODY		RELATIVE HUMIDITY 53 %		PRE FLOW RATE 2.04 l/min
	GLOVES		BAROMETRIC PRESSURE 29.85 "Hg		POST FLOW RATE 2.09 l/min
	OTHER		AIR VELOCITY fpm mph		DIFFERENCE FLOW D.O.S

SAMPLING DATA	Lab Sample Number	89137			
	I.D. Number	1880			
	Time On	0900			
	Time Off	1130			
	Total Time (min.)	150			TOTAL TIME
	Flow Rate (LPM)	2.04 l/min			
	Sample Media	25mm MCEP (0.8 AP) w/cowl EXT.			
	Volume (Liters)	300			TOTAL VOLUME
Net Sample Wt.	-				

LABORATORY RESULTS	1.	ASBESTOS	0.1 f/cc			
	2.					
	3.					
	4.					
	5.					
	6.					

FOR MEDICAL SERVICES USE ONLY SAMPLE ANALYSIS	SUBSTANCE	TWA (Time)	TWA 8(hr)	UNITS	AUTHORITY	STND. NO.	SEVERITY	ANALYTICAL METHOD
	1. ASBESTOS		0.03	PPM f/cc				NIOSH 7400
	2.							
	3.							
	4.							
	5.							
	6.							

LABORATORY USED HAGER	
(WORK ACTIVITIES, OPERATION LOCATION, VENTILATION, CONTROLS) REMOVING ACM FROM I-BEAMS USING GLOVE BAG.	
REVIEWED BY	DATE
COMMENTS	
BLANKS (No.)	
BULKS (No.)	

1B 002201

RS

E0677

INSTRUCTIONS: Originator attaches Part 2 to laboratory results and forwards to Medical Services.

ID./SAMPLE NO	1879
DATE	6-14-89

INDUSTRIAL HYGIENE SURVEY DATA - AIR MONITORING KM-4293-A

FACILITY	Southwestern	WORK LOCATION	Cat I I-Beams
EMPLOYEE NAME (LAST, FIRST)	VALLEJO, VICTOR	EMPLOYEE NUMBER	464 - 58 - 2722
JOB TITLE	Insulator	SURVEYOR	Settles

TYPE OF PERSONAL PROTECTIVE EQUIPMENT	RESPIRATOR	MSA - HALF-FACE w/ HEPA	SAMPLING CONDITIONS	TEMPERATURE	82 °F	CALIBRATION RECORD	PUMP MANUFACTURER/S.N.	MSA # 2
	BODY	TYVEK		RELATIVE HUMIDITY	53 %		PRE FLOW RATE	2.0 l/min
	GLOVES	PVC		BAROMETRIC PRESSURE	29.85 "Hg		POST FLOW RATE	1.99 l/min
	OTHER	H.HAT / S.GLASSES		AIR VELOCITY	fpm mph		DIFFERENCE FLOW	0.01

SAMPLING DATA	Lab Sample Number	89138		
	I.D. Number	1879		
	Time On	0900		
	Time Off	1130		
	Total Time (min.)	150		TOTAL TIME
	Flow Rate (LPM)	2.0 l/min		
	Sample Media	25mm cassette w/ cond extension MCEP (0.8 AA)		
	Volume (Liters)	300		TOTAL VOLUME
Net Sample Wt.	—			

LABORATORY RESULTS	1.	ASBESTOS	0.21 f/cc		
	2.				
	3.				
	4.				
	5.				
	6.				

FOR MEDICAL SERVICES USE ONLY SAMPLE ANALYSIS	SUBSTANCE	TWA (Time)	TWA 8(hr)	UNITS	AUTHORITY	STND. NO.	SEVERITY	ANALYTICAL METHOD
	1. ASBESTOS		0.07	PPM f/cc				NIOSH 7400
	2.							
	3.							
	4.							
	5.							
	6.							

LABORATORY USED		HAGER	
WORK ACTIVITIES, OPERATION, LOCATION, VENTILATION, CONTROLS			
REMOVING INSULATION (ACM) FROM I-BEAMS USING GLOVE BAG METHOD.			
REVIEWED BY		DATE	
BLANKS (No.)			
BULKS (No.)		SWRI/Asbestos 2225	

EMPLOYEE MONITORING NOTIFICATION KM-4772-B

ID NUMBER 11-7
DATE 11-18-89

SUBSIDIARY/DIVISION
FACILITY
EMPLOYEE NAME (LAST, FIRST)
JOB TITLE
WORK LOCATION
EMPLOYEE NUMBER

NOISE SURVEY
EMPLOYEE'S ACTUAL 8 HOUR-TIME-WEIGHTED AVERAGE
EMPLOYEE'S REPRESENTATIVE 8 HOUR-TIME-WEIGHTED AVERAGE
OSHA PERMISSIBLE EXPOSURE
OSHA ACTION LEVEL
TYPE/BRAND HEARING PROTECTION WORN
EMPLOYEE ENROLLED IN HEARING CONSERVATION PROGRAM

SUBSTANCE SURVEY	SUBSTANCE	EMPLOYEE'S 8 HOUR-TIME-WEIGHTED AVERAGE	OSHA 8 HOUR PERMISSIBLE EXPOSURE LIMIT	CEILING EXPOSURE LEVEL		SHORT TERM EXPOSURE LEVEL		PERSONAL PROTECTIVE EQUIPMENT WORN		OSHA ACTION LEVEL
				EMPLOYEE	OSHA/ACGIH	EMPLOYEE	OSHA/ACGIH	YES	NO	

PERSONAL PROTECTIVE EQUIPMENT
RESPIRATOR
BODY
GLOVES
OTHER
SURVEY PERFORMED BY
ENGINEERING CONTROL
SURVEY DATE

ACTION TAKEN
11-18-89
1B 002197

EMPLOYEE SIGNATURE
COMPANY REPRESENTATIVE SIGNATURE
DATE

DISTRIBUTION: ORIGINAL - Employee
COPY - Facility File
COPY - Corporate Medical Services

EMPLOYEE MONITORING NOTIFICATION

KM-4772-B

ID NUMBER

DATE

SUBSIDIARY/DIVISION

FACILITY

EMPLOYEE NAME (LAST, FIRST)

EMPLOYEE NUMBER

JOB TITLE

WORK LOCATION

NOISE SURVEY

EMPLOYEE'S ACTUAL 8 HOUR-TIME-WEIGHTED AVERAGE

TYPE/BRAND HEARING PROTECTION WORN

EMPLOYEE'S REPRESENTATIVE 8 HOUR-TIME-WEIGHTED AVERAGE

OSHA PERMISSIBLE EXPOSURE

OSHA ACTION LEVEL

EMPLOYEE ENROLLED IN HEARING CONSERVATION PROGRAM

SUBSTANCE SURVEY

SUBSTANCE	EMPLOYEE'S 8 HOUR-TIME-WEIGHTED AVERAGE	OSHA 8 HOUR PERMISSIBLE EXPOSURE LIMIT	CEILING EXPOSURE LEVEL		SHORT TERM EXPOSURE LEVEL		PERSONAL PROTECTIVE EQUIPMENT WORN		OSHA ACTION LEVEL
			EMPLOYEE	OSHA/ACGIH	EMPLOYEE	OSHA/ACGIH	YES	NO	
ASBESTOS	6.07	1.27	-	-	-	-	Y		1.27

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATOR
ASBESTOS (TYPE II) w/ HEPA FILTERS
BODY
T-SHIRT
GLOVES
PVC
OTHER
HAT / S. GLASSES

SURVEY PERFORMED BY

SURVEY DATE

ENGINEERING CONTROL

ACTION TAKEN

3012 RECALIBRATED

1B 002198

EMPLOYEE SIGNATURE

COMPANY REPRESENTATIVE SIGNATURE

DATE

DISTRIBUTION: ORIGINAL - Employee
COPY - Facility File
COPY - Corporate Medical Services

CALIBRATION OF PERSONAL SAMPLING EQUIPMENT

KM-5260-A

Adventer Cat 1

Roy/Victor - I-BEAMS

MONITORING CONDITIONS

PRE	DATE 6-14-89	INITIALS SJS	AIR TEMPERATURE 82 °F	BAROMETRIC PRESSURE 29.85 "Hg	RELATIVE HUMIDITY 53 %
POST	DATE 6-16-89	INITIALS SJS	AIR TEMPERATURE 69 °F	BAROMETRIC PRESSURE 30.02 "Hg	RELATIVE HUMIDITY 84 %

SAMPLING EQUIPMENT Mnfg/SN	ROTAMETER SETTING		* / Δ T (SEC.)		SAMPLING MEDIA	FLOW RATE	
	PRE	POST	PRE	POST		PRE	POST
MSA 2 -	14.79	14.40					
	14.92	14.99					
	15.03	15.25					
	14.98	15.26					
	14.93	15.04				2.04 l/min	1.99 l/min
MSA 4 -		14.99					2.04 l/min
	14.68	14.28					
	14.70	14.38					
	14.70	14.30					
	14.63	14.40					
	14.68	14.34				2.04 l/min	2.09 l/min
		14.51					2.0 l/min

* / Δ T - amount of time for bubble to travel length of buret.

NOTE: To determine flowrate, calculate as follows:

a ÷ X 60 sec./min = flowrate

a - volume expressed as cc or ml

b - time expressed as seconds

To determine liters per minute, divide above calculation by 1000.

1B 002199



11234 East Caley Avenue
Englewood, Colorado 80111
(303) 790-2727 (800) 282-1835
FAX # (303) 790-2756

*Received
7-6-89*

REPORT ON SERVICE NUMBER 42649AH
June 30, 1989

Customer Project Code: 2034

To: Ms. Stephanie Settles
Southwestern Refining
P.O. Box 9217
Corpus Christi, TX 78469

Analysis: The following samples were submitted for analysis:
Two membrane filter samples for asbestos count.

Method: FIBER (count)
The fiber concentration of each filter sample was determined following NIOSH Method 7400 (A Rules). Wedges from each filter were examined at 400 power using phase contrast microscopy. All fibers longer than five (5) microns with a length-to-width ratio of 3:1 or more were counted.

Results: The results are found on Table 1.

Discussion: The present OSHA permissible exposure limit (PEL) for asbestos is 0.2 fibers/cc.

The results contained in this report are expressed strictly in terms of the concentration per sample volume and are computed based upon data provided by the client. These values are not necessarily comparable to any specific permissible exposure limit (PEL), nor have they been corrected for variation in temperature, altitude or atmospheric pressure. PEL's for the reported substances are listed for your convenience.

Hager Laboratories, Inc., has been accredited by the American Industrial Hygiene Association (AIHA) since 1977 and is enrolled in the AIHA Proficiency Analytical Testing (PAT) Program for phase contrast microscopy. Microscopists have completed the NIOSH 582 course "Sampling and Evaluating Airborne Asbestos Dust".

Laboratory data are filed and available upon request. A portion of each sample is retained for subsequent review and future analysis.

If you have any questions, please contact John Kroll or Nancy Dow, of our Technical Services Department, at (303) 790-2727 or toll free at (800) 282-1835.

Submitted by:

Patricia G. Manning
Patricia G. Manning
Microscopy Supervisor

PM/agg

SWRf/Asbestos 2229

1B 002203

SN 42649AH
June 30, 1989

TABLE 1

Sample Number	Counted (fibers)	Counted (fields)	Total (fibers)	Air Volume (liters)	Air Concentration (fibers/cc)
89137	65.	100.	31900.	300.	0.1
89138	100.	79.	62100.	300.	0.21

SWRf/Asbestos 2230

1B 002204