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A Division of Shell Oil Company



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EIR

Deer Park Manufacturing Complex
P.O. Box 100
Deer Park, Texas 77536

February 1, 1989

Brown & Root, Inc.
ATTN Mr. Bill Smithson
c/o Shell Intercompany

PLAINTIFF'S EXHIBIT

SH-3246

Dear Sir:

Attached are industrial hygiene sampling results for asbestos collected on Brown & Root employees working on various asbestos removal jobs - around the Complex. The sampling results include short-term measurements, which are typically collected during specific work tasks and can be compared to the OSHA Short-term Excursion Limit for asbestos of 0.1 fibers/cc.

We appreciate the cooperation of your employees for participating in this important endeavor. We encourage you to communicate these results to your personnel.

If you have any questions, please contact me at 476-7374.

Sincerely,

A handwritten signature in cursive script that reads "Wayne".

W. B. Austin
Sr. Industrial Hygienist
Health & Safety

Attachment

LAM 006451

DPMC-18314

bc: C. J. Cook
T. A. English
G. S. Maryman
B. J. Matusek
ECB Satellite
WBA Chron

DPMC-18315

MONITORING RESULTS FORM

DEPARTMENT/PROCESS: _____ DOCKS _____ JOB DESCRIPTION: _____ INSULATOR (BROWN & ROOT)

NAME	EMP. NO.	DATE	TIME	SAMPLE RESULTS (f/cc)		SAMPLE PERIOD (MIN)	WORK DESCRIPTION	(1)	(2)
				OSHA SHORT-TERM EXCURSION LIMIT = 0.1 FIBERS/CC				8-HR TWA	RESP
		11/23/88	1351 1415	0.08		24	Chipped off and bagged tar wrap (contains asbestos) off old orthoxylyene line at lower Dock Road. Used proper protective equipment.		X
		11/23/88	1351 1415	<0.01		24	Chipped off and bagged tar wrap (contains asbestos) off old orthoxylyene line at lower Dock Road. Used proper protective equipment.		X

LAM 006453

DPMC-18316

(1) X indicates that the sample result is a measure of the eight-hour time-weighted average exposure.
 (2) X indicates that a respirator was worn during the sampling period.

CHBT8903201 - 0001.0.0

MONITORING RESULTS FORM

DEPARTMENT/PROCESS: A OPERATIONS JOB DESCRIPTION: INSULATOR (BROWN & ROOT)

NAME	EMP. NO.	DATE	TIME	SAMPLE RESULTS (f/cc)		SAMPLE PERIOD (MIN)	WORK DESCRIPTION	(1)	(2)
				OSHA SHORT-TERM EXCURSION LIMIT = 0.1 FIBERS/CC				8-HR TWA	RESP
		11/17/88	1035 1105	<0.01		30	Picked up, swept up, and vacuumed up asbestos on pad. Worker used proper clothing and respirator.		X
		11/17/88	1035 1105	<0.01		30	Picked up asbestos and bagged it. Worker used proper clothing and respirator.		X
		11/21/88	1020 1048	0.49		28	Removed asbestos insulation off pipe in pipe rack in A Plant. Worker used proper protective equipment.		X
		11/21/88	1055 1111	<0.01		16	Bagged and double-bagged asbestos in A Plant pipe rack. Cleaned up area when finished. Also, emptied HEPA vacuum.		X
		12/05/88	1005 1130	0.03		85	Removed asbestos insulation from Mantius ring header (A-302). Worker used proper protective equipment.		X

LAM 006454
DPMC-18317

(1) X indicates that the sample result is a measure of the eight-hour time-weighted average exposure.
(2) X indicates that a respirator was worn during the sampling period.

MONITORING RESULTS FORM

DEPARTMENT/PROCESS: A OPERATIONS JOB DESCRIPTION: INSULATOR (BROWN & ROOT)

SAMPLE RESULTS (f/cc)					
NAME	EMP. NO.	DATE	TIME	OSHA SHORT-TERM EXCURSION LIMIT = 0.1 FIBERS/CC	SAMPLE PERIOD (MIN)
		12/05/88	1005 1120	0.60	75
					Removed asbestos insulation from Mantius ring header (A-302). Worker used proper protective equipment.
					(1) 8-HR TWA (2) RESP X

LAM 006455

DPMC-18318

(1) X indicates that the sample result is a measure of the eight-hour time-weighted average exposure.
 (2) X indicates that a respirator was worn during the sampling period.

CHBT8903201 - 0003.0.0

MONITORING RESULTS FORM

DEPARTMENT/PROCESS: BA/SR JOB DESCRIPTION: INSULATOR (BROWN & ROOT)

SAMPLE RESULTS (f/cc)						(1)	(2)
NAME	EMP. NO.	DATE	TIME	OSHA SHORT-TERM EXCURSION LIMIT = 0.1 FIBERS/CC	SAMPLE PERIOD (MIN)	WORK DESCRIPTION	8-HR TWA RESP
		11/21/88	1305 1344	0.02	39	Collected and placed asbestos insulation into plastic bag. Used proper personal protective equipment.	X
		11/21/88	1305 1344	<0.01	39	Cut and removed asbestos insulation from pipe in pipe rack. Used proper personal protective equipment.	X
		11/23/88	1255 1323	0.02	28	Placed asbestos insulation into bag and then doubled-bagged. Worker used proper personal protective equipment.	X
		11/23/88	1255 1323	<0.01	28	Cut and removed asbestos insulation flat sections off furnace F-1203C. Worker used proper personal protective equipment.	X

LAM 006456

DPMC-18319

(1) X indicates that the sample result is a measure of the eight-hour time-weighted average exposure.
 (2) X indicates that a respirator was worn during the sampling period.

CHBT8903201 - 0004.0.0.

MONITORING RESULTS FORM

DEPARTMENT/PROCESS: BA/SR JOB DESCRIPTION: INSULATOR (BROWN & ROOT)

SAMPLE RESULTS (f/cc)

NAME	EMP. NO.	DATE	TIME	OSHA SHORT-TERM EXCURSION LIMIT = 0.1 FIBERS/CC	SAMPLE PERIOD (MIN)	WORK DESCRIPTION	(1) 8-HR TWA	(2) RESP
		11/29/88	1310 1337	0.08	27	Placed asbestos insulation in plastic bags and double-bagged. Worker used protective equipment.		X
		11/29/88	1310 1337	0.11	27	Pulled asbestos insulation off furnace tubes at "U" turns on end of F-1201B. Worker used protective equipment.		X
		11/29/88	0846 0915	0.06	29	Placed asbestos insulation in plastic bags and double-bagged. Worker used protective equipment.		X
		11/29/88	0846 0915	0.05	29	Wetted down and chipped insulation off steel beams and expansion joints with pneumatic chisel between two columns. Used protective equipment.		X

LAM 006457

DPMC-18320

(1) X indicates that the sample result is a measure of the eight-hour time-weighted average exposure.
(2) X indicates that a respirator was worn during the sampling period.

CHBT8903201 - 0005.0.0

MONITORING RESULTS FORM

DEPARTMENT/PROCESS: BA/SR JOB DESCRIPTION: INSULATOR (BROWN & ROOT)

NAME	EMP. NO.	DATE	TIME	SAMPLE RESULTS (f/cc)		SAMPLE PERIOD (MTN)	WORK DESCRIPTION	(1)	(2)
				OSHA SHORT-TERM EXCURSION LIMIT = 0.1 FIBERS/CC				8-HR TWA	RESP
		11/30/88	1429 1447	0.02		18	Opened HEPA vacuum cleaner, changed out filter bag, cleaned and reassembled for use. Worker used proper protective equipment.		X
		11/30/88	1142 1147	<0.01		5	Vacuumed clothing and boots, removed coveralls, washed hard hat, goggles and respirator. Worker used protective equipment.		X
		11/30/88	1429 1447	0.08		18	Opened HEPA vacuum cleaner, changed out filter bag, cleaned and reassembled for use. Worker used proper protective equipment.		X
		11/30/88	1142 1147	<0.01		5	Vacuumed clothing, boots, and removed coveralls. Washed hard hat, goggles and respirator. Worker used protective equipment.		X

LAM 006458

DPMC-18321

- (1) X indicates that the sample result is a measure of the eight-hour time-weighted average exposure.
 (2) X indicates that a respirator was worn during the sampling period.

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MONITORING RESULTS FORM

DEPARTMENT/PROCESS: BA/SR JOB DESCRIPTION: INSULATOR (BROWN & ROOT)

NAME	EMP. NO.	DATE	TIME	SAMPLE RESULTS (f/cc)		SAMPLE PERIOD (MIN)	WORK DESCRIPTION	(1)	(2)
				OSHA SHORT-TERM EXCURSION LIMIT = 0.1 FIBERS/CC				8-HR TWA	RESP
		12/01/88	1005 1011	0.26		6	Vacuumed clothing, boots, and removed coveralls. Washed hard hat, goggles, and respirator. Worker used protective equipment.		X
		12/05/88	1400 1426	<0.01		26	Helped lower transite sheets to the ground, and carried them to the stack on a pallet. Worker used protective equipment.		X
		12/05/88	1355 1421	<0.01		26	Cut bolts and removed transite, then lowered it to the ground at EA Plant. Worker used protective equipment.		X
		12/08/88	0744 0805	<0.01		21	Opened HEPA vacuum cleaner, changed out filter bag, and cleaned and reassembled for use. Worker used proper protective equipment.		X

LAM 006459

DPMC-18322

- (1) X indicates that the sample result is a measure of the eight-hour time-weighted average exposure.
 (2) X indicates that a respirator was worn during the sampling period.

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