

SWL

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

File No. _____

Report No. 1889

Report Date 11/4/86

P.O. #545

Client: Armco, Inc.
Mr. Paul Hernadi
Greens Port Industrial Park
13609 Industrial Road
Houston, Texas 77015

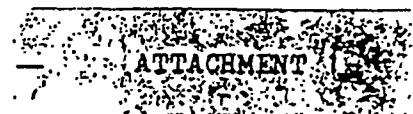
Project: Analysis of insulation samples taken by John Luton on October 21-28, 1986 and received in our lab on 10/31/86.

RESULTS



<u>Sample I.D.</u>	<u>SWL Lab No.</u>	<u>Asbestos Type</u>	<u>% Asbestos*</u>
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
#2 EF Shop Office Insulation	1889-5	None	None
#2 EF Shop Instrument Line	1889-6	Chrysotile	40
#1 EF Mold x Fer Pipe Insulation, White layer	1889-7a	Chrysotile	85
#1 EF Mold x Fer Pipe Insulation, Brown layer	1889-7b	None	None
#1 EF Vac. Degas boiler	1889-8	None	None
#1 EF Vac Degas boiler Piping	1889-9	None	None
Blooming mill misc. on Grd.	1889-10	None	None
Blooming mill 6" steam line and drops	1889-11	Chrysotile	85.

ARM 217



ARM000113

Client: Armco, Inc.

File No. _____

Project: Analysis of insulation samples

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RESULTS

<u>Sample I.D.</u>	<u>SwL Lab No.</u>	<u>Asbestos Type</u>	<u>% Asbestos*</u>
Blooming mill 8" steam line	1889-12	None	None
Combo mill 3" steam line N. side	1889-13	Amosite	40
Slab yard bldg. 3" steam line outside East wall	1889-14	Amosite	35
Wire mill bldg. 1" steam line	1889-15	Chrysotile	30
Outside #4 substation 2" steam line	1889-16	Amosite Chrysotile	<1 65
Bar heat treat. 3" steam line	1889-17	Amosite Chrysotile	25 40
North of struct. mill (behind maint.) 10'x14' metal bldg.	1889-18	None	None
Structural mill 2-FCES.	1889-20	None	None
Stracutral mill 1 furnace door	1889-21	None	None
Main power house 10" steam line	1889-23	None	None
Works Eng. south wall pipe insulation	1889-24	Amosite Chrysotile	40 15

ARM 218

Method of Analysis: CFR-47, No. 103, Appendix A (Polarized Light Microscopy)

* The percentage of asbestos is visually estimated.

Technician: Phillip Yokley

Copies: 3 - Armco, Inc.
cc: Mr. John Luton
pm

SOUTHWESTERN LABORATORIES


 Russell J. DiRaimo, P.E., Manager
 Environmental Engineering Service

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ARM000114



SOUTHWESTERN LABORATORIES

681002

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

File No. _____

Report No. 1889

Report Date 11/4/86

P.O. #545

Client: Armco, Inc.
Mr. Paul Hernadi
Greens Port Industrial Park
13609 Industrial Road
Houston, Texas 77015

Project: Analysis of insulation samples taken by John Luton on October 21-23, 1986 and received in our lab on 10/31/86.

RESULTS

<u>Sample I.D.</u>	<u>SwL Lab No.</u>	<u>Asbestos Type</u>	<u>% Asbestos*</u>
Wide flange mill, walking beam furnace	1889-1	None	None
Wide flange mill, boiler piping	1889-2	Chrysotile	20
Hot air line National U.S. water heater wide flange #3	1889-3	Amosite	50
Wide flange mill, Elec. sub	1889-4	None	None
#2 EF Shop Office Insulation	1889-5	None	None
#2 EF Shop Instrument Line	1889-6	Chrysotile	40
#1 EF Mold x Fer Pipe Insulation, White layer	1889-7a	Chrysotile	85
#1 EF Mold x Fer Pipe Insulation, Brown layer	1889-7b	None	None
#1 EF Vac. Degas boiler	1889-8	None	None
#1 EF Vac Degas boiler Piping	1889-9	None	None
Blooming mill misc. on Grd.	1889-10	None	None
Blooming mill 6" steam line and drops	1889-11	Chrysotile	85

ARM 103

ARM000081

Client: Armco, Inc.
Project: Analysis of insulation samples
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File No. _____
Report No. 1889
Report Date 11/4/86

RESULTS

<u>Sample I.D.</u>	<u>SwL Lab No.</u>	<u>Asbestos Type</u>	<u>% Asbestos*</u>
Blooming mill 8" steam line	1889-12	None	None
Combo mill 3" steam line N. side	1889-13	Amosite	40
Slab yard bldg. 3" steam line outside East wall	1889-14	Amosite	35
Wire mill bldg. 1" steam line	1889-15	Chrysotile	30
Outside #4 substation 2" steam line	1889-16	Amosite Chrysotile	<1 65
Bar heat treat. 3" steam line	1889-17	Amosite Chrysotile	25 40
North of struct. mill (behind maint.) 10'x14' metal bldg.	1889-18	None	None
Structural mill steam line to OH	1889-19	Chrysotile	85
Structural mill 2-FCES	1889-20	None	None
Structural mill 1 furnace door	1889-21	None	None
Pipe mill steam line insulation	1889-22	Chrysotile	55
Main power house 10" steam line	1889-23	None	None
Works Eng. south wall pipe insulation	1889-24	Amosite Chrysotile	40 15

ARM 104

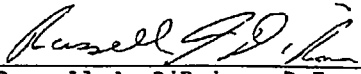
Method of Analysis: CFR-47, No. 103, Appendix A (Polarized Light Microscopy)

* The percentage of asbestos is visually estimated.

Technician: Phillip Yokley

Copies: 3 - Armco, Inc.
cc: Mr. John Luton
pm

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Russell J. DiRaimo, P.E., Manager
Environmental Engineering Services

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ARM000082



SOUTHWESTERN LABORATORIES

692-9151

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

File No. _____

Report No. 1889Report Date 11/4/86

P.O. #545

Client: Armco, Inc.
Mr. Paul Hernadi
Greens Port Industrial Park
13609 Industrial Road
Houston, Texas 77015

Project: Analysis of insulation samples taken by John Luton on October 21-20, 1986 and received in our lab on 10/31/86.

RESULTS

<u>Sample I.D.</u>	<u>SwL Lab No.</u>	<u>Asbestos Type</u>	<u>% Asbestos*</u>
Wide flange mill, walking beam furnace	1889-1	None	None
Wide flange mill, boiler piping	1889-2	Chrysotile	20
Hot air line National U.S. water heater, wide flange #3	1889-3	Amosite	50
Wide flange mill, Elec. sub	1889-4	None	None
#2 EF Shop Office Insulation	1889-5	None	None
#2 EF Shop Instrument Line	1889-6	Chrysotile	40
★ #1 EF Mold x-Fer Pipe Insulation, White layer	1889-7a	Chrysotile	85
★ #1 EF Mold x-Fer Pipe Insulation, Brown layer	1889-7b	None	None
#1 EF Vac. Degas boiler	1889-8	None	None
#1 EF Vac Degas boiler Piping	1889-9	None	None
Blooming mill misc. on Grd.	1889-10	None	None
★ Blooming mill 6" steam line and drops	1889-11	Chrysotile	85

ARM 161

ATTACHMENT 1

ARM000083

Client: Armco, Inc.

Project: Analysis of insulation samples

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File No. _____

Report No. 1889Report Date 11/4/86RESULTS

<u>Sample I.D.</u>	<u>SWL Lab No.</u>	<u>Asbestos Type</u>	<u>% Asbestos*</u>
Blooming mill 8" steam line	1889-12	None	None
Combo mill 3" steam line N. side	1889-13	Amosite	40
Slab yard bldg. 3" steam line outside East wall	1889-14	Amosite	35
Wire mill bldg. 1" steam line	1889-15	Chrysotile	30
Outside #4 substation 2" steam line	1889-16	Amosite Chrysotile	<1 65
Bar heat treat. 3" steam line	1889-17	Amosite Chrysotile	25 40
North of struct. mill (behind maint.) 10'x14' metal bldg.	1889-18	None	None
Structural mill steam line to OH	1889-19	Chrysotile	85
Structural mill 2-FCES	1889-20	None	None
Structural mill 1 furnace door	1889-21	None	None
Pipe mill steam line insulation	1889-22	Chrysotile	55
Main power house 10" steam line	1889-23	None	None
Works Eng. south wall pipe insulation	1889-24	Amosite Chrysotile	40 15

MGR. ENV. SERVICES
 RUSSEL DIRAIMO
 MARTIN GIBSON

692-9151

Method of Analysis: CFR-47, No. 103, Appendix A (Polarized Light Microscopy)

* The percentage of asbestos is visually estimated.

Technician: Phillip Yokley

cc: 3 - Armco, Inc.
 cc: Mr. John Luton
 pm

ARM 162

SOUTHWESTERN LABORATORIES

Russell J. DiRaimo
 Russell J. DiRaimo, P.E., Manager
 Environmental Engineering Service

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ARM000084



SOUTHWESTERN LABORATORIES

692-9151

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

File No. _____

Report No. 1889Report Date 11/4/86

P.O. #545

Client: Armco, Inc.
Mr. Paul Hernadi
Greens Port Industrial Park
13609 Industrial Road
Houston, Texas 77015

Project: Analysis of insulation samples taken by John Luton on October 21-28, 1986 and received in our lab on 10/31/86.

RESULTS

<u>Sample I.D.</u>	<u>SWL Lab No.</u>	<u>Asbestos Type</u>	<u>% Asbestos*</u>
Wide flange mill, walking beam furnace	1889-1	None	None
Wide flange mill, boiler piping	1889-2	Chrysotile	20
Hot air line National U.S. water heater wide flange #3	1889-3	Amosite	50
Wide flange mill, Elec. sub	1889-4	None	None
#2 EF Shop Office Insulation	1889-5	None	None
#2 EF Shop Instrument Line	1889-6	Chrysotile	40
#1 EF Mold x-Fer Pipe Insulation, White layer	1889-7a	Chrysotile	85
#1 EF Mold x-Fer Pipe Insulation, Brown layer	1889-7b	None	None
#1 EF Vac. Degas boiler	1889-8	None	None
#1 EF Vac Degas boiler Piping	1889-9	None	None
Blooming mill misc. on Grd.	1889-10	None	None
Blooming mill 6" steam line and drops	1889-11	Chrysotile	85

ARM 089

ATTACHMENT 1

ARM000201T

Client: Armco, Inc.

Project: Analysis of insulation samples

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File No. _____

Report No. 1889Report Date 11/4/86RESULTS

<u>Sample I.D.</u>	<u>SwL Lab No.</u>	<u>Asbestos Type</u>	<u>% Asbestos*</u>
Blooming mill 8" steam line	1889-12	None	None
Combo mill 3" steam line N. side	1889-13	Amosite	40
Slab yard bldg. 3" steam line outside East wall	1889-14	Amosite	35
Wire mill bldg. 1" steam line	1889-15	Chrysotile	30
Outside #4 substation 2" steam line	1889-16	Amosite Chrysotile	<1 65
Bar heat treat. 3" steam line	1889-17	Amosite Chrysotile	25 40
North of struct. mill (behind maint.) 10'x14' metal bldg.	1889-18	None	None
Structural mill steam line to OH	1889-19	Chrysotile	85
Structural mill 2-FCES	1889-20	None	None
Structural mill 1 furnace door	1889-21	None	None
Pipe mill steam line insulation	1889-22	Chrysotile	55
Main power house 10" steam line	1889-23	None	None
Works Eng. south wall pipe insulation	1889-24	Amosite Chrysotile	40 15

MGR. ENV. SERVICES

RUSSEL DIRAIMO

MARTIN GIBSON

692-9151

Method of Analysis: CFR-47, No. 103, Appendix A (Polarized Light Microscopy)

* The percentage of asbestos is visually estimated.

Technician: Phillip Yokley

Copies: 3 - Armco, Inc.
cc: Mr. John Luton
pm

ARM 090

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Russell J. DiRaimo, P.E., Manager
Environmental Engineering Service

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ARM000201U