

ASBESTOS, INC.
REMOVAL AND REFINISHING
P. O. BOX 1277
RAPID CITY, SD 57709-1277
(605) 342-5634

HELENA HOUSING AUTHORITY
LEAD REMOVAL
HELENA, MT LEWIS AND CLARK COUNTY
FINAL LOGS
VOLUME VII
OCTOBER 26, 1992 TO APRIL 30, 1993

PROJECT DOCUMENTATION

DUPLICATE

AIR MONITORING REPORTS

VOLUME VII

TABLE OF CONTENTS
FINAL SUBMITTAL

VII

VOLUME

Chen-Northern, Inc.

A member of the **HIH** group of companies

1610 B STREET
P. O. BOX 4699
HELENA, MT 59604
(406) 443-5210
FAX (406) 449-3729

REPORT TO: Asbestos, Inc.
Attn: Mr. Dick Galbraith
P.O. Box 4498
Helena, MT 59604

DATE: October 30, 1992
JOB NUMBER: 92-3432
SHEET: 1 OF 3
INVOICE NO.: 127337

REPORT OF: Wipe Sample Analysis - LBP Abatement, Helena Housing Authority - Apt. 401

Sample Identification

On October 27, 1992, these wipe samples (laboratory numbers 134176 through 134179) were received in our laboratory for analysis. Tests were conducted in accordance with the "NIOSH Manual of Analytical Methods", Third Edition.

The test results are shown on the following pages. A < sign indicates the value reported was the practical quantitation limit for this sample using the method described. Concentrations of analyte, if present, below this were not quantifiable.

Reviewed by: James B. Boyer



TECHNICAL REPORT

RECEIVED NOV 23 1992

METALS
Lead as Pb (Total) >0.002 mg/wipe 10/28/92

PARAMETER
MEASURED VALUE
ANALYZED DATE

Laboratory No.: 134177
Sample Name: 401-B BEDROOM (8) FLOOR CENTER OF ROOM
Sample Date: 10/26/92
Collected by: E. JOHNSON
Time Sampled: NONE GIVEN
Sample Type: WIFE SAMPLE

METALS
Lead as Pb (Total) 0.002 mg/wipe 10/28/92

PARAMETER
MEASURED VALUE
ANALYZED DATE

Laboratory No.: 134176
Sample Name: 401-A BEDROOM (8) FLOOR IN FRONT OF CLOSET
Sample Date: 10/26/92
Collected by: E. JOHNSON
Time Sampled: NONE GIVEN
Sample Type: WIFE SAMPLE

Client Name: CHEN-NORTHERN, INC. HELENA, MT
Project No.: 87-911
Project Name: LBP Abatement, Helena Housing Authority - Apt. 401
October 30, 1992
Sheet 2 of 3

Client Name: CHEN-NORTHERN, INC. HELENA, MT
 Project No.: 87-911
 Project Name: LBP Abatement, Helena Housing Authority - Apt. 401
 Laboratory No.: 134178

Sample Name: 401-C HALL (12) FLOOR AT TOP OF STAIRS
 Sample Date: 10/26/92
 Collected by: E. JOHNSON
 Time Sampled: NONE GIVEN
 Sample Type: WIPE SAMPLE

PARAMETER	MEASURED VALUE	DATE ANALYZED
METALS	<0.002 mg/wipe	10/28/92
Lead as Pb (Total)		

Laboratory No.: 134179
 Sample Name: 401-D LIVINGROOM (1) CENTER OF FLOOR
 Sample Date: 10/26/92
 Collected by: E. JOHNSON
 Time Sampled: NONE GIVEN
 Sample Type: WIPE SAMPLE

PARAMETER	MEASURED VALUE	DATE ANALYZED
METALS	<0.002 mg/wipe	10/28/92
Lead as Pb (Total)		

Asbestos, Inc.

cc: Mr. Merle Listoe, Chen-Northern, Billings

Reviewed by *[Signature]*

On November 6 through November 23, 1992, our personnel performed pre-abatement and clearance wipe sample tests for the above referenced project. Tests were conducted in accordance with the "NIOSH Manual of Analytical Methods", Third Edition. The test results are shown on the following pages. A > sign indicates the value reported was the practical quantitation limit for this sample using the method described. Concentrations of analyte, if present, below this were not quantifiable. Clearance criteria for this project specify the lead dust wipe tests to be at or below the pre-abatement levels. Pre-abatement levels, for the purposes of this project, are defined as the results of the pre-abatement wipe test or 8 µg/sf, whichever is greater.

Sample Identification

REPORT OF: Wipe Sample Analysis - LBP Abatement, Helena Housing Authority; Helena, MT

REPORT TO: Helena Housing Authority
Attn: Ms. Sherron Massman
812 Abbey Street
Helena, MT 59601

DATE: December 14, 1992
JOB NUMBER: 92-3357
SHEET: 1 OF 7
INVOICE NO.: 127409

1610 B STREET
P. O. BOX 4699
HELENA, MT 59604
(406) 443-5210
FAX (406) 449-3729

A member of the **HHI** group of companies

Chen-Northern, Inc.

TECHNICAL REPORT

FILE COPY



RECEIVED 12 14 1992

Helena Housing Authority
 Attn: Ms. Sherron Massman
 812 Abbey Street
 Helena, MT 59601

December 14, 1992
 92-3357
 2 of 7
 127409

**WIPE TEST RESULTS
 FOR LBP ABATEMENT
 PROJECT 4-1 AND 4-2**

Unit/Sample No.	Location	Pre-Abatement (mg/st)	Clearance (mg/st)
402-1	Living Room ¹	.016	< .002
402-2	Kitchen ²	.007	
402-3	Bathroom ¹⁰	.003	
402-4	Hall ¹²	< .002	
402-5	Bedroom ⁶	.011	< .002
402-6	Bedroom ⁸	.008	

Unit/Sample No.	Location	Pre-Abatement (mg/st)	Clearance (mg/st)
403-1	Living room ¹	< .002	< .002
403-2	kitchen ²	< .002	
403-3	bathroom ¹⁰	< .002	
403-4	hall ¹²	.005	.005
403-5	bedroom ⁶	.004	
403-6	bedroom ⁸	.004	

NOTE: Clearance sample wipe tests were not performed at all pre-abatement locations.

Helena Housing Authority
 Attn: Ms. Sherron Massman
 812 Abbey Street
 Helena, MT 59601

December 14, 1992
 92-3357
 3 of 7
 127409

**WIPE TEST RESULTS
 FOR LBP ABATEMENT
 PROJECT 4-1 AND 4-2**

Unit/Sample No.	Location	Pre-Abatement (mg/st)	Clearance (mg/st)
405-1	living room ¹	.004	.002
405-2	utility room ³	.006	
405-3	bedroom ⁸	.003	
405-4	bedroom ⁶	.003	
405-5	bedroom ¹⁴	.003	
405-6	hall ¹²	<.002	<.002
405-7	bathroom ¹⁰	<.002	
406-1	living room ¹	.005	.005
406-2	utility room ³	<.002	
406-3	hall ¹²	<.002	
406-4	bathroom ¹⁰	<.002	.004
406-5	bedroom ⁴	.002	
406-6	bedroom ⁶	.003	
406-7	bedroom ⁸	<.002	

Helena Housing Authority
 Attn: Ms. Sherron Massman
 812 Abbey Street
 Helena, MT 59601

December 14, 1992
 92-3357
 4 of 7
 127409

WIPE TEST RESULTS
 FOR LBP ABATEMENT
 PROJECT 4-1 AND 4-2

Unit/Sample No.	Location	Pre-Abatement (mg/st)	Clearance (mg/st)
407-1	living room ¹	.002	.002
407-2	utility room ³	<.002	.006
407-3	hall ¹²	.006	.002
407-4	bathroom ¹⁰	<.002	.008
407-5	bedroom ¹⁴	<.002	.002
407-6	bedroom ⁸	<.002	.002
407-7	bedroom ⁶	<.002	.002
409-1	dinette ²	<.002	.003
409-2	utility room ⁴	.003	<.002
409-3	living room ¹	<.002	<.005
409-4	bedroom ⁵	<.002	<.005
409-5	bedroom ¹³	<.002	<.005
409-6	bedroom ¹¹	<.002	<.005
409-7	bedroom ⁹	<.002	<.005
409-8	bathroom ¹⁶	<.002	<.005
409-9	storage ¹⁷	<.002	<.005
409-10	hall ¹⁵	.004	<.005

Helena Housing Authority
 Attn: Ms. Sherron Massman
 812 Abbey Street
 Helena, MT 59601

December 14, 1992
 92-3357
 5 of 7
 127409

**WIPE TEST RESULTS
 FOR LBP ABATEMENT
 PROJECT 4-1 AND 4-2**

Unit/Sample No.	Location	Pre-Abatement (mg/st)	Clearance (mg/st)
413-1	living room ¹	<.002	<.005
413-2	kitchen ²	<.002	<.005
413-3	hall ¹²	<.002	<.005
413-4	bathroom ¹⁰	<.002	<.005
413-5	bedroom ⁸	.003	<.005
413-6	bedroom ⁶	.005	<.005
417-1	living room ¹	<.002	<.005
417-2	utility room ³	.007	<.005
417-3	hall ¹²	.006	<.005
417-4	bathroom ¹⁰	.010	<.005
417-5	bedroom ⁸	.008	<.005
417-6	bedroom ⁶	.007	<.005

Helena Housing Authority
 Attn: Ms. Sherron Massman
 812 Abbey Street
 Helena, MT 59601

December 14, 1992
 92-3357
 6 of 7
 127409

**WIPE TEST RESULTS
 FOR LBP ABATEMENT
 PROJECT 4-1 AND 4-2**

Unit/Sample No.	Location	Pre-Abatement (mg/sf)	Clearance (mg/sf)
418-1	living room ¹	.011	<.005
418-2	kitchen ²	.006	<.005
418-3	hall ¹²	.008	<.005
418-4	bathroom ¹⁰	.003	<.005
418-5	bedroom ⁶	.020	<.005
418-6	bedroom ⁸	.003	<.005
420-1	living room ¹	.010	<.005
420-2	kitchen ²	.006	<.005
420-3	hall ¹²	.004	<.005
420-4	bathroom ¹⁰	.005	<.005
420-5	bedroom ⁸	.007	<.005
420-6	bedroom ⁶	.006	<.005

Helena Housing Authority
 Attn: Ms. Sherron Massman
 812 Abbey Street
 Helena, MT 59601

December 14, 1992
 92-3357
 7 of 7
 127409

**WIPE TEST RESULTS
 FOR LBP ABATEMENT
 PROJECT 4-1 AND 4-2**

Unit/Sample No.	Location	Pre-Abatement (mg/st)	Clearance (mg/st)
310-1	living room ¹	<.002	<.005
310-2	utility room ³	.029	
310-3	hall ¹²	<.002	
310-4	bathroom ¹⁰	.009	<.005
310-5	bedroom ⁶	.007	
310-6	bedroom ⁸	<.002	
310-7	bedroom ¹⁴	<.002	

Unit/Sample No.	Location	Pre-Abatement (mg/st)	Clearance (mg/st)
128-1	living room ¹	.004	*
128-2	utility room ³	<.002	
128-3	kitchen ²	<.002	
128-4	bathroom ¹⁰	<.002	
128-5	hall ⁹	.007	
128-6	bedroom ⁶	.003	
128-7	bedroom ⁷	<.002	

* Unit has not been abated by contractor, no clearance wipe tests were performed.

1610 B STREET
P. O. BOX 4699
HELENA, MT 59604
(406) 443-5210
FAX (406) 449-3729

REPORT TO: Helena Housing Authority
Attn: Ms. Sherron Massman
812 Abbey Street
Helena, MT 59601

DATE: January 27, 1993
JOB NUMBER: 92-3357
SHEET: 1 OF 7
INVOICE NO.: 127501

REPORT OF: Wipe Sample Analysis - LBP Abatement, Helena Housing Authority; Helena, MT

SAMPLE IDENTIFICATION:

On November 24, through December 22, 1992, our personnel performed pre-abatement and clearance wipe sample tests for the above referenced project. Tests were conducted in accordance with the "NIOSH Manual of Analytical Methods", Third Edition.

The test results are shown on the following pages. A > sign indicates the value reported was the practical quantitation limit for this sample using the method described. Concentrations of analyte, if present, below this were not quantifiable. Clearance criteria for this project specify the lead dust wipe tests to be at or below the pre-abatement levels. Pre-abatement levels, for the purposes of this project, are defined as the results of the pre-abatement wipe test or 8 µg/sf, whichever is greater.

Distribution: Mr. Merle Listoe
Asbestos, Inc.

Reviewed By:

Journal B. Bowen



TECHNICAL REPORT

RECEIVED JAN 28 1993

Helena Housing Authority
 Attn: Ms. Sherron Massman
 812 Abbey Street
 Helena, MT 59601

January 27, 1993
 92-3357
 Sheet 2 of 5
 127501

Helena Housing Authority; Helena, MT

TEST RESULTS:

WIPE TEST RESULTS
 FOR LBP ABATEMENT
 PROJECT 4-1 AND 4-2

Unit/Sample No.	Location	Pre-Abatement (mg/sf)	Clearance (mg/sf)
128-1	Living Room (1)	.004*	<.002
128-2	Utility Room (3)	<.002*	<.002
128-3	Kitchen (2)	<.002*	<.002
128-4	Bathroom (10)	<.002*	<.002
128-5	Hall (12)	.007*	<.002
128-6	Bedroom (6)	.003*	<.002
128-7	Bedroom (7)	<.002*	<.002
129-1	Bedroom (6)	.005	.005
129-2	Living Room (1)	.005	<.002
305-1	Hall (6)	.006	<.002
305-2	Bedroom (8)	.006	.005
306-1	Bathroom (4)	.006	.008
306-2	Bedroom (8)	.006	.007
307-1	Bedroom (8)	.014	.003
307-2	Bathroom (4)	.014	<.002

*Pre-abatement wipe tests were performed on November 6, 1992.

Helena Housing Authority
 Attn: Ms. Sherron Massman
 812 Abbey Street
 Helena, MT 59601

January 27, 1993
 92-3357
 Sheet 3 of 5
 127501

Helena Housing Authority; Helena, MT

TEST RESULTS:

WIPE TEST RESULTS
 FOR LBP ABATEMENT
 PROJECT 4-1 AND 4-2

Unit/Sample No.	Location	Pre-Abatement (mg/sf)	Clearance (mg/sf)
313-1	Bathroom (10)	.007	.005
313-2	Living Room (1)		.004
314-1	Living Room (1)	.006	<.002
314-2	Bedroom (6)		.002
315-1	Bedroom (14)	.008	.003
315-2	Living Room (1)		<.002
323-1	Bedroom (8)	.007	.005
323-2	Living Room (1)		.005
408-1	Living Room (1)	<.005	<.005
408-2	Bedroom (14)		<.005
421-1	Bedroom (8)	<.005	<.005
421-2	Living Room (1)		<.005

Helena Housing Authority
 Attn: Ms. Sherron Massman
 812 Abbey Street
 Helena, MT 59601

January 27, 1993
 92-3357
 Sheet 4 of 5
 127501

Helena Housing Authority; Helena, MT

TEST RESULTS:

WIPE TEST RESULTS
 FOR LBP ABATEMENT
 PROJECT 4-1 AND 4-2

Unit/Sample No.	Location	Pre-Abatement (mg/sf)	Clearance (mg/sf)
422-1	Bathroom (10)	<.005	<.005
422-2	Living Room (1)		<.005
Unit/Sample No.	Location	Pre-Abatement (mg/sf)	Clearance (mg/sf)
424-1	Bedroom (6)	<.005	<.005
424-2	Bedroom (8)		<.005
Unit/Sample No.	Location	Pre-Abatement (mg/sf)	Clearance (mg/sf)
426-1	Hall (12)	<.005	<.005
426-2	Bedroom (6)		<.005
Unit/Sample No.	Location	Pre-Abatement (mg/sf)	Clearance (mg/sf)
428-1	Bedroom (5)	<.005	<.005
428-2	Hall (15)		<.005
Unit/Sample No.	Location	Pre-Abatement (mg/sf)	Clearance (mg/sf)
429-1	Living Room (1)	.008	<.002
429-2	Hall (12)		.003
429-3	Blank		.004
Unit/Sample No.	Location	Pre-Abatement (mg/sf)	Clearance (mg/sf)
430-1	Hall (12)	.004	.008
430-2	Living Room (1)		.009 .005 (re-test)

Helena Housing Authority
 Attn: Ms. Sherron Massman
 812 Abbey Street
 Helena, MT 59601

Helena Housing Authority; Helena, MT

TEST RESULTS:

WIPE TEST RESULTS
 FOR LBP ABATEMENT
 PROJECT 4-1 AND 4-2

Unit/Sample No.	Location	Pre-Abatement (mg/sf)	Clearance (mg/sf)
431-1	Hall (12)	.004	.008
431-2	Living Room (1)		.007
432-1	Bedroom (6)	.006	.007
432-2	Hall (12)		.007
433-1	Living Room (1)	.014	<.002
433-2	Bedroom (8)		<.002

1610 B STREET
P. O. BOX 4699
HELENA, MT 59604
(406) 443-5210
FAX (406) 449-3729

REPORT TO:

Helena Housing Authority
Attn: Ms. Sherron Massman
812 Abbey Street
Helena, MT 59601

REPORT OF:

Wipe Sample Analysis - LBP Abatement, Helena Housing Authority; Helena, MT

DATE: February 11, 1993
JOB NUMBER: 92-3357
SHEET: 1 OF 6
INVOICE NO.: 127545

TECHNICAL REPORT



SAMPLE IDENTIFICATION:

On January 04 through January 29, 1993, our personnel performed pre-abatement and clearance wipe sample tests for the above referenced project. Tests were conducted in accordance with the "NIOSH Manual of Analytical Methods", Third Edition. The test results are shown on the following pages. A > sign indicates the value reported was the practical quantitation limit for this sample using the method described. Concentrations of analyte, if present, below this were not quantifiable. Clearance criteria for this project specify the lead dust wipe tests to be at or below the pre-abatement levels. Pre-abatement levels, for the purposes of this project, are defined as the results of the pre-abatement wipe test or 8 $\mu\text{g}/\text{sf}$, whichever is greater.

Distribution: Mr. Merle Listoe
Asbestos, Inc.

Reviewed By:

Helena Housing Authority
 Attn: Ms. Sherron Massman
 812 Abbey Street
 Helena, MT 59601

Helena Housing Authority; Helena, MT

**WIPE TEST RESULTS
 FOR LBP ABATEMENT
 PROJECT 4-1 AND 4-2**

Unit/Sample No.	Location	Pre-Abatement (mg/sf)	Clearance (mg/sf)
219-1	Bedroom (8)	< .002	.002
219-2	Hall (12)		.002
220-1	Kitchen (2)	.004	< .002
220-2	Bedroom (12)		< .002
223-1	Hall (5)	.006	< .002
223-2	Livingroom (1)		< .002
223-3	Blank		< .002
224-1	Kitchen	.002	< .002
224-2	Bedroom (10)		< .002

February 11, 1993
 92-3357
 Sheet 2 of 6
 127545

Helena Housing Authority
 Attn: Ms. Sherron Massman
 812 Abbey Street
 Helena, MT 59601

February 11, 1993
 92-3357
 Sheet 3 of 6
 127545

Helena Housing Authority, Helena, MT

**WIPE TEST RESULTS
 FOR LBP ABATEMENT
 PROJECT 4-1 AND 4-2**

Unit/Sample No.	Location	Pre-Abatement (mg/sf)	Clearance (mg/sf)	Retest
225-1	Bedroom (12)	.011	< .002	< .002
225-2	Livingroom (1)		< .002	
226-1	Bathroom (4)	.006	< .002	.004
226-2	Livingroom (1)		< .002	
301-1	Bathroom (4)	.005	.012	retest .004
301-2	Hall (6)		.009	retest .002
302-1	Bedroom (8)	.052	.007	
302-2	Bathroom (4)		.009	retest < .002

Helena Housing Authority
 Attn: Ms. Sherron Massman
 812 Abbey Street
 Helena, MT 59601

Helena Housing Authority; Helena, MT

**WIPE TEST RESULTS
 FOR LBP ABATEMENT
 PROJECT 4-1 AND 4-2**

Unit/Sample No.	Location	Pre-Abatement (mg/sf)	Clearance (mg/sf)
303-1	Hall (6)	.008	.014
303-2	Bedroom (8)		.007
304-1	Bedroom (8)	.005	.007
304-2	Bathroom (4)		.055
			retest .002
309-1	Livingroom (1)	.003	<.002
309-2	Bathroom (10)		<.002
311-1	Hall (12)	.008	.003
311-2	Bedroom (14)		<.002

February 11, 1993
 92-3357
 Sheet 4 of 6
 127545

Helena Housing Authority
 Attn: Ms. Sherron Massman
 812 Abbey Street
 Helena, MT 59601

February 11, 1993
 92-3357
 Sheet 5 of 6
 127545

Helena Housing Authority; Helena, MT

**WIPE TEST RESULTS
 FOR LBP ABATEMENT
 PROJECT 4-1 AND 4-2**

Unit/Sample No.	Location	Pre-Abatement (mg/sf)	Clearance (mg/sf)
312-1	Livingroom (1)	.003	.003
312-2	Bedroom (14)		.006
316-1	Bedroom (6)	.005	.002
316-2	Livingroom (1)		<.002
317-1	Bedroom (8)	.005	<.002
317-2	Hall (6)		.002
318-1	Hall (5)	.008	.005
318-2	Bedroom (8)		.005

Helena Housing Authority
Attn: Ms. Sherron Massman
812 Abbey Street
Helena, MT 59601

February 11, 1993
92-3357
Sheet 6 of 6
127545

Helena Housing Authority; Helena, MT

**WIPE TEST RESULTS
FOR LBP ABATEMENT
PROJECT 4-1 AND 4-2**

Unit/Sample No.	Location	Pre-Abatement (mg/sf)	Clearance (mg/sf)
319-1	Bathroom (4)	.005	<.002
319-2	Bedroom (8)		.003
320-1	Hall (6)	.005	.007
320-2	Bedroom (8)		.009
410-1	Bedroom (9)	.004	.004
410-2	Livingroom (1)		.006

1610 B STREET
P. O. BOX 4699
HELENA, MT 59604
(406) 443-5210
FAX (406) 449-3729

Job 3002

DATE: March 15, 1993
JOB NUMBER: 92-3357
SHEET: 1 OF 7
INVOICE NO.: 127601

REPORT TO: Helena Housing Authority
Attn: Ms. Sherron Massman
812 Abbey Street
Helena, MT 59601

REPORT OF: Wipe Sample Analysis - LBP Abatement, Helena Housing Authority; Helena, MT

Sample Identification

On February 1 through February 26, 1993, our personnel performed pre-abatement and clearance wipe sample tests for the above referenced project. Tests were conducted in accordance with the "NIOSH Manual of Analytical Methods", Third Edition.

The test results are shown on the following pages. A > sign indicates the value reported was the practical quantitation limit for this sample using the method described. Concentrations of analyte, if present, below the practical quantitation limit were not quantifiable. Clearance criteria for this project specify the lead dust wipe tests to be at or below the pre-abatement levels. Pre-abatement levels, for the purposes of this project, are defined as the results of the pre-abatement wipe test or 8 µg/st, whichever is greater.

Reviewed by: *Journal B. Bowser*
cc Mr. Merle Listoe, Chen-Northern, Billings, MT
Asbestos, Inc.



TECHNICAL REPORT

Helena Housing Authority
 Attn: Ms. Sherron Massman
 812 Abbey Street
 Helena, MT 59601

**WIPE TEST RESULTS
 FOR LBP ABATEMENT
 PROJECT 4-1 AND 4-2**

Unit/Sample No.	Location	Pre-Abatement (mg/st)	Clearance (mg/st)
105-1	Kitchen (2)	.005	<.002
105-2	Bedroom (12)		<.002
209-1	Bedroom (11)	.002	.003
209-2	Livingroom (1)		.003

Helena Housing Authority
Attn: Ms. Sherron Massman
812 Abbey Street
Helena, MT 59601

**WIPE TEST RESULTS
FOR LBP ABATEMENT
PROJECT 4-1 AND 4-2**

Unit/Sample No.	Location	Pre-Abatement (mg/st)	Clearance (mg/st)
210-1	Bathroom (4)	.003	<.002
210-2	Hall (5)	.003	.003
216-1	Bedroom (8)	.002	.002
216-2	Bathroom (4)	.002	<.002

Helena Housing Authority
Attn: Ms. Sherron Massman
812 Abbey Street
Helena, MT 59601

**WIPE TEST RESULTS
FOR LBP ABATEMENT
PROJECT 4-1 AND 4-2**

Unit/Sample No.	Location	Pre-Abatement (mg/st)	Clearance (mg/st)
221-1	Livingroom (1)	.005	<.002
221-2	Kitchen (2)	.004	.004
222-1	Hall (5)	.002	.002
222-2	Bedroom (10)	>.002	>.002

Helena Housing Authority
Attn: Ms. Sherron Massman
812 Abbey Street
Helena, MT 59601

**WIPE TEST RESULTS
FOR LBP ABATEMENT
PROJECT 4-1 AND 4-2**

Unit/Sample No.	Location	Pre-Abatement (mg/st)	Clearance (mg/st)
114-1	Hall (5)	.003	.004
114-2	Bathroom (4)		<.002
117-1	Bedroom (12)	.003	<.002
117-2	Livingroom (1)		>.002

Helena Housing Authority
Attn: Ms. Sherron Massman
812 Abbey Street
Helena, MT 59601

**WIPE TEST RESULTS
FOR LBP ABATEMENT
PROJECT 4-1 AND 4-2**

Unit/Sample No.	Location	Pre-Abatement (mg/sf)	Clearance (mg/sf)
118-1	Kitchen (2)	.014	.003
118-2	Hall (5)		.007
109-1	Bathroom (4)	.006	>.002
109-2	Bedroom (8)		.003

Helena Housing Authority
Attn: Ms. Sherron Massman
812 Abbey Street
Helena, MT 59601

**WIPE TEST RESULTS
FOR LBP ABATEMENT
PROJECT 4-1 AND 4-2**

Unit/Sample No.	Location	Pre-Abatement (mg/st)	Clearance (mg/st)
110-1	Livingroom (1)	.012	<.002
110-2	Hall (5)		.004
113-1	Kitchen (2)	.008	<.002
113-2	Bedroom (10)		>.002

1610 B STREET
P. O. BOX 4699
HELENA, MT 59604
(406) 443-5210
FAX (406) 449-3729

REPORT TO:

Helena Housing Authority
Attn: Ms. Sherron Massman
812 Abbey Street
Helena, MT 59601

REPORT OF:

Wipe Sample Analysis - LBP Abatement, Helena Housing Authority; Helena, MT

DATE: April 19, 1993
JOB NUMBER: 92-3357
SHEET: 1 OF 4
INVOICE NO.: 127684

TECHNICAL REPORT



SAMPLE IDENTIFICATION:

On March 1, through April 2, 1993 our personnel performed pre-abatement and clearance wipe sample tests for the above referenced project. Tests were conducted in accordance with the "NIOSH Manual of Analytical Methods", Third Edition.

The test results are shown on the following pages. A < sign indicates the value reported was the practical quantitation limit for this sample using the method described. Concentrations of analyte, if present, below this were not quantifiable. Clearance criteria for this project specify the lead dust wipe tests to be at or below the pre-abatement levels. Pre-abatement levels, for the purposes of this project, are defined as the results of the pre-abatement wipe test or 8 µg/sf, whichever is greater.

Distribution: Mr. Merle Listoe
Asbestos, Inc.

Reviewed By:

Journal B. Brown

Helena Housing Authority
 Attn: Ms. Sherron Massman
 812 Abbey Street
 Helena, MT 59601

LBP Abatement

WIPE TEST RESULTS
 FOR LBP ABATEMENT
 PROJECT 4-1 AND 4-2

Unit/Sample No.	Location	Pre-Abatement (mg/sf)	Clearance (mg/sf)
123-1	Livingroom (1)	.004	<.002
123-2	Bathroom (10)		<.002
124-1	Bedroom (7)	.003	<.002
124-2	Hall (9)		<.002
125-1	Bedroom (6)	.020	.003
125-2	Kitchen (2)		<.002
126-1	Livingroom (1)	.050	<.002
126-2	Hall (9)		.003
127-1	Bedroom (7)	.004	<.002
127-2	Bathroom (10)		<.002

Helena Housing Authority
 Attn: Ms. Sherron Massman
 812 Abbey Street
 Helena, MT 59601

LBP Abatement

**WIPE TEST RESULTS
 FOR LBP ABATEMENT
 PROJECT 4-1 AND 4-2**

Unit/Sample No.	Location	Pre-Abatement (mg/sf)	Clearance (mg/sf)
130-1	Bedroom (6)	.004	<.002
130-2	Kitchen (2)		<.002
131-1	Hall (9)	.006	.003
131-2	Livingroom (1)		<.002
132-1	Kitchen (2)	.004	<.002
132-2	Bathroom (10)		.004
133-1	Bedroom (7)	.005	<.002
133-2	Hall (9)		.003
134-1	Bathroom (10)	<.002	.013
134-2	Kitchen (2)		<.005

Retest: <.005

April 19, 1993
 92-3357
 Sheet 3 of 4
 127684

Helena Housing Authority
 Attn: Ms. Sherron Massman
 812 Abbey Street
 Helena, MT 59601

LBP Abatement

WIPE TEST RESULTS
 FOR LBP ABATEMENT
 PROJECT 4-1 AND 4-2

Unit/Sample No.	Location	Pre-Abatement (mg/sf)	Clearance (mg/sf)
135-1	Bedroom (6)	.008	<.002
135-2	Hall (9)		.002
136-1	Livingroom (1)	.002	.004
136-2	Bedroom (7)		<.002
138-1	Livingroom (1)	.005	<.005
138-2	Bathroom (10)		<.005
139-1	Hall (9)	.012	<.005
139-2	Kitchen (2)		<.005
140-1	Bedroom (7)	.012	<.005
140-2	Hall (9)		<.005

April 19, 1993
 92-3357
 Sheet 4 of 4
 127684