

1610 B STREET  
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HELENA, MT 59604  
(406) 443-5210  
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**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

**TECHNICAL REPORT**



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

**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  $\mu\text{g}/\text{sf}$ , whichever is greater.

Distribution: Mr. Merle Listoe  
Asbestos, Inc.

Reviewed By:

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

April 19, 1993  
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**WIPE TEST RESULTS  
 FOR LBP ABATEMENT  
 PROJECT 4-1 AND 4-2**

LBP Abatement

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

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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

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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

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**REPORT TO:**

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

**REPORT OF:**

Laboratory Analysis of Solid Waste, Helena Housing Authority LBP Abatement

DATE: April 19, 1993  
 JOB NUMBER: 92-3357  
 SHEET: 1 OF 1  
 INVOICE NO.: 127683



## TECHNICAL REPORT

**SAMPLE IDENTIFICATION:**

On March 30, 1993 our personnel sampled the blasting sand used for removing lead base paint from radiator covers removed from apartment units at the above referenced project. The sand was sampled at Asbestos, Inc workshop located in Helena, Montana. The tests were conducted in accordance with the U.S. Environmental Protection Agency Manual SW-846, Test Methods for Evaluating Solid Waste, 3rd Edition, November, 1986 with updates, and Method 1311 published June 29, 1990 in 40 CFR Part 302. The results of the analysis for Toxicity Characteristic Leaching Procedure (TCLP) have not been adjusted for spike recovery. Nonhazardous waste specified for this project will have TCLP test results below 5 mg/L.

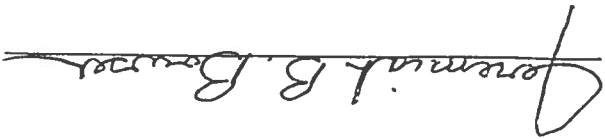
The test results are as follows:

Laboratory No.: 139089  
 Sample Name: Blasting Sand  
 Sample Date: 03/30/93  
 Collected by: Ed Johnson  
 Time Sampled: None Given  
 Sample Type: Solid Waste

PARAMETER	REGULATORY ACTION LEVEL	MEASURED VALUE	ANALYZED DATE
Lead as Pb	5.0 mg/l	1.2 mg/l	04/08/93

**TOXICITY CHARACTERISTIC LEACHING PROCEDURE - METALS:**

Reviewed By:



Distribution:

WIPE TEST RESULTS  
 FOR LBP ABATEMENT  
 PROJECTS H-1 and H-2

UNIT / SAMPLE NO.	LOCATION	PRE- ABATEMENT	CLEARANCE 1 <sup>ST</sup> 2 <sup>ND</sup>	BACKGROUND
324-1		1.002	1.002	
* 324-2		1.002		
324-3		1.002	1.002	
324-4		1.004	1.003	
324-5		1.004	1.002	
324-6		1.002	1.002	

\* Location behind critical barrier. All wipe test performed.

**WIPE TEST RESULTS  
 FOR LBP ABATEMENT  
 PROJECTS 4-1 and 4-2**

UNIT / SAMPLE NO.	LOCATION	PRE- ABATEMENT	CLEARANCE 1 <sup>ST</sup> 2 <sup>ND</sup>	BACKGROUND
401-1		4.002	4.002	
* 401-2		.003		
401-3		.003	4.002	
401-4		.002	4.002	
401-5		4.002	4.002	
401-6		.006	.002	

\* Wipe test location was behind a critical barrier.  
 No clearance wipe test was performed.

WIPE TEST RESULTS  
 FOR LBP ABATEMENT  
 PROJECTS 4-1 and 4-2

UNIT / SAMPLE NO. LOCATION PRET ABATEMENT CLEARANCE 1st 2nd BACKGROUND

404-1		1005	4.002	
* 404-2		1006		
404-3		1004	1.003	
404-4		1006	4.002	
404-5		1003	4.002	
404-6		1006	4.002	

\* Wipe test location was behind a critical barrier.  
 No clearance wipe test was performed.



WIPE TEST RESULTS  
 FOR LBP ABATEMENT  
 PROJECTS H-1 and H-2

UNIT / SAMPLE NO. LOCATION PRE-ABATEMENT CLEARANCE 1<sup>ST</sup> 2<sup>ND</sup> BACKGROUND

411-1

< .002

.003

\* 411-2

.003

411-3

.004

< .002

411-4

.006

< .002

411-5

.004

< .002

411-6

Blank

.004

\* Location behind critical barrier, no clearance test performed.

JOB NO. \_\_\_\_\_ BY \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED \_\_\_\_\_ SHEET \_\_\_\_\_ OF \_\_\_\_\_ SUBJECT \_\_\_\_\_

WIPE TEST RESULTS  
FOR LBP ABATEMENT  
PROJECTS 4-1 and 4-2

UNIT / SAMPLE NO.	LOCATION	PRE- ABATEMENT	CLEARANCE 1 <sup>ST</sup> 2 <sup>ND</sup>	BACKGROUND
4/2-1		.005	.002	
4/2-2		.011	.011	
4/2-3		.003	.002	
4/2-4		.007	.002	
4/2-5		.007	.002	

UNIT / SAMPLE NO.	LOCATION	PRE-ABATEMENT	CLEARANCE 1 <sup>st</sup> 2 <sup>nd</sup>	BACKGROUND
H14-1		1,006	< 0.02	
* H14-2		1,005		
H14-3		1,004	< 0.02	
H14-4		1,004	< 0.02	
H14-5		1,008	< 0.03	

\* Location behind critical barrier, no clearance test performed

WIPE TEST RESULTS  
 FOR LBP ABATEMENT  
 PROJECTS H-1 and H-2

UNIT / SAMPLE NO.	LOCATION	PRE-ABATEMENT	CLEARANCE 1 <sup>ST</sup> 2 <sup>ND</sup>	BACKGROUND
415-1		1.006	1.004	
* 415-2		1.005		
415-3		1.006	1.002	
415-4		1.006	1.002	
415-5		1.005	1.002	

\* Wipe test location was behind a critical barrier.  
 No clearance wipe test was performed.

WIPE TEST RESULTS  
 FOR LBP ABATEMENT  
 PROJECTS 4-1 and 4-2

SUBJECT

JOB NO.

JOB TITLE

DATE

BY

CHECKED

SHEET

OF

UNIT / SAMPLE NO.	LOCATION	PRE-ABATEMENT	CLEARANCE 1 <sup>ST</sup> 2 <sup>ND</sup>	BACKGROUND
4/16-1		,008	4,002	
4/16-2		,010	4,002	
4/16-3		,009	,002	
4/16-4		,007	,002	
4/16-5		,006	,002	

WIPE TEST RESULTS  
FOR LBP ABATEMENT  
PROJECTS 4-1 and 4-2

WIPE TEST RESULTS  
 FOR LBP ABATEMENT  
 PROJECTS 4-1 and 4-2

UNIT / SAMPLE NO.	LOCATION	PRE- ABATEMENT	CLEARANCE 1 <sup>ST</sup> 2 <sup>ND</sup>	BACKGROUND
423-1		1.006	<.002	
* 423-2		1.003	<.002	
423-3		1.004	<.002	
423-4		1.004	.008	
423-5		1.003	<.002	
423-6		1.005	10.038 Failed	

\* Wipe test location was behind a critical barrier,  
 No clearance wipe test was performed.

WIPE TEST RESULTS  
 FOR LBP ABATEMENT  
 PROJECTS 4-1 and 4-2

UNIT / SAMPLE NO.	LOCATION	PRE- ABATEMENT	CLEARANCE 1 <sup>ST</sup> 2 <sup>ND</sup>	BACKGROUND
425-1		.005	.005	
425-2		.004	.005	
425-3		.007	.003	
425-4		.004	.003	
425-5		.004	.002	
425-6		.006	.002	

JOB NO. \_\_\_\_\_

JOB TITLE \_\_\_\_\_

DATE \_\_\_\_\_

BY \_\_\_\_\_

SUBJECT \_\_\_\_\_

CHECKED \_\_\_\_\_

SHEET \_\_\_\_\_

OF \_\_\_\_\_

UNIT / SAMPLE NO.	LOCATION	PRE-ABATEMENT	CLEARANCE 1 <sup>ST</sup> 2 <sup>ND</sup>	BACKGROUND
427-1		.006	4.002	
* 427-2		.006		
427-3		.009	4.002	
427-4		.005	4.002	
427-5		.007	4.002	
427-6		.005	4.002	
427-7		.004	4.002	
427-8		.004	4.002	

WIPE TEST RESULTS  
FOR LBP ABATEMENT  
PROJECTS 4-1 and 4-2

\* Wipe test location was behind a critical barrier,  
No clearance wipe test was performed.



UNIT / SAMPLE NO.	LOCATION	PRE- ABATEMENT	CLEARANCE 1 <sup>ST</sup> 2 <sup>ND</sup>	BACKGROUND
435-1		1.009	1.005	
435-2		1.003	1.002	
435-3		1.003	1.002	
435-4		1.006	1.004	
435-5		1.005	1.006	
435-6		1.007	1.002	

UNIT / SAMPLE NO.	LOCATION	PRET. ABATEMENT	CLEARANCE 1 <sup>ST</sup> 2 <sup>ND</sup>	BACKGROUND
436-1		.007	.005	
* 436-2		.011		
436-3		.007	.002	
436-4		.005	.007	
436-5		.007	.005	
436-6		.005	.003	
* _____				

\* Wipe test location was behind a critical barrier  
 No clearance wipe test was performed.

WIPE TEST RESULTS  
 FOR LBP ABATEMENT  
 PROJECTS 4-1 and 4-2