

1610 B STREET
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REPORT TO:

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

REPORT OF:

Laboratory Analysis of Solid Waste, Helena Housing Authority LBP Abatement

TECHNICAL REPORT



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

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:

PARAMETER	REGULATORY ACTION LEVEL	MEASURED VALUE	DATE ANALYZED
Laboratory No.: 139089	Blasting Sand		
Sample Name:			
Sample Date:	03/30/93		
Collected by:	Ed Johnson		
Time Sampled:	None Given		
Sample Type:	Solid Waste		
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 4-1 and 4-2

UNIT / SAMPLE NO.	LOCATION	PRE-ABATEMENT	CLEARANCE 1 ST 2 ND	BACKGROUND
324-1		4.002	≤ .002	
* 324-2		4.002		
324-3		4.002	≤ .002	
324-4		1.004	.003	
324-5		1.004	≤ .002	
324-6		1.002	.002	

* Location behind critical barrier, all wipe test passed.

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

UNIT / SAMPLE NO.	LOCATION	PRE- ABATEMENT	CLEARANCE 1 ST 2 ND	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 ballist, No clearance wipe test was perform.

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

UNIT / SAMPLE NO.	LOCATION	PRET. ABATEMENT	CLEARANCE 1 ST 2 ND	BACKGROUND
404-1		.005	4.002	
* 404-2		.006		
404-3		.004	.003	
404-4		.006	4.002	
404-5		.003	4.002	
404-6		.006	4.002	

* 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 PRE-ABATEMENT CLEARANCE 1ST 2ND 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. _____ DATE _____ BY _____
 SUBJECT _____ CHECKED _____ SHEET _____ OF _____

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

UNIT / SAMPLE NO.	LOCATION	PRE-ABATEMENT	CLEARANCE 1 ST 2 ND	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	

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

UNIT / SAMPLE NO.	LOCATION	PRE- ABATEMENT	CLEARANCE		BACKGROUND
			1 st	2 nd	
H14-1		1,006	< 0.02		
* H14-2		1,005			
H14-3		1,004	< 0.02		
H14-4		1,001	< 0.02		
H14-5		8001	0.003		

* Location behind critical barrier, no clearance test performed

JOB NO. _____ JOB TITLE _____ DATE _____ BY _____
 SUBJECT _____ CHECKED _____ SHEET _____ OF _____

UNIT / SAMPLE NO.	LOCATION	PRE-ABATEMENT	CLEARANCE 1 ST 2 ND	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
1ST 2ND

BACKGROUND

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

4/6-1

4/6-2

4/6-3

4/6-4

4/6-5

,008

,010

,009

,007

,006

2,002

4,002

,002

,002

,002

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

UNIT / SAMPLE NO.	LOCATION	PRE- ABATEMENT	CLEARANCE 1 ST	CLEARANCE 2 ND	BACKGROUND
423-1		1,006	1,002		
* 423-2		1,003			
423-3		1,004	1,002		
423-4		1,004	1,008		
423-5		1,003	1,002		
423-6		1,005	0,038 Failed	4,002	

* 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	PRE- ABATEMENT	CLEARANCE		BACKGROUND
			1 st	2 nd	
425-1		.005	.005		
425-2		.004	.005		
425-3		.007	.003		
425-4		.004	.003		
425-5		.004	.002		
425-6		.006	.002		

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

UNIT / SAMPLE NO.	LOCATION	PRET ABATEMENT	CLEARANCE 1 ST 2 ND	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 location was behind a critical barrier,
 No clearance wipe test was performed.

UNIT / SAMPLE NO.	LOCATION	PRE-ABATEMENT	CLEARANCE 1 ST 2 ND	BACKGROUND
435-1		.009	.005	
435-2		.003	.002	
435-3		.003	1.002	
435-4		.006	.007	
435-5		.005	.006	
435-6		.007	1.002	

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

JOB NO. _____ JOB TITLE _____ DATE _____ BY _____
 SUBJECT _____ CHECKED _____ SHEET _____ OF _____

UNIT / SAMPLE NO.	LOCATION	PRE-ABATEMENT	CLEARANCE 1 ST 2 ND	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

1610 B STREET
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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/sf, whichever is greater.

Reviewed by: *Robert B. Bourke*
cc Mr. Merle Listoe, Chen-Northern, Billings, MT
Asbestoc, Inc.



TECHNICAL REPORT

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**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

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

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

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**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)	.005	.002
222-2	Bedroom (10)	>.002	>.002

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

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

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

March 15, 1993
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Unit/Sample No.	Location	Pre-Abatement (mg/st)	Clearance (mg/st)
118-1	Kitchen (2)	.014	.003
118-2	Hall (5)		.007

Unit/Sample No.	Location	Pre-Abatement (mg/st)	Clearance (mg/st)
109-1	Bathroom (4)	.006	<.002
109-2	Bedroom (8)		.003

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**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