

# Environmental Lead Testing at the CT DPH Lab

George Garrison- Principal Chemist

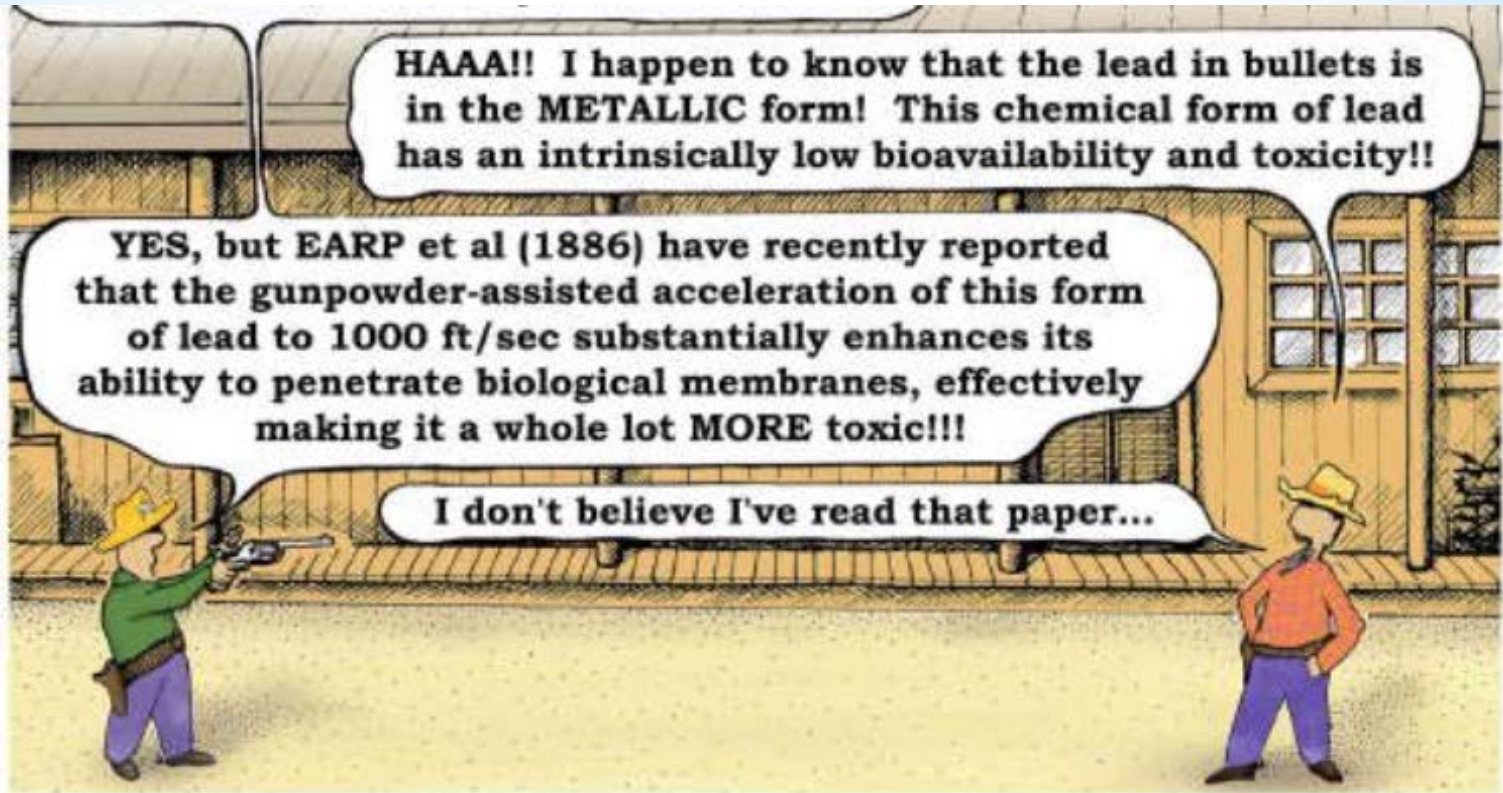
Dr. Katherine A. Kelley State Public Health Laboratory



Connecticut Department of Public Health  
*Keeping Connecticut Healthy*



# Chemistry Humor



**ENVIRONMENTAL SCIENTISTS IN THE WILD WEST**

# Connecticut's New Laboratory



- \* The Connecticut Department of Public Health Laboratory (CT DPHL) is a new, state-of-the-art Public Health Laboratory
  - \* Started moving in in August 2012
- \* It is an approximately 105,000 square foot facility designed around the open laboratory concept to allow maximum flexibility to reconfigure laboratory space around changing business needs
- \* One of the key drivers in the design process was the incorporation of the all hazards concept for emergency response

# The DPH Laboratory is

licensed, certified or accredited by 14 different programs, such as:

- \* US Environmental Protection Agency
- \* US Food and Drug Administration
- \* USDA
- \* CMS - CLIA
- \* CDC
- \* AIHA





# Lead Program at the Lab

- \* Accredited by the American Industrial Hygiene Association to ISO-17025
  - \* One of the most stringent programs to ensure highest data quality
- \* Annual "Routine" Lead Testing Sample Volume
  - \* Dust Wipes - 5600
  - \* Soil - 260
  - \* Paint Chips - 200
- \* Also do "Unusual" matrices when necessary
  - \* Spices, "medicines", supplements, toys, etc.

# It's Not Just The Lab

- \* The results you get are only as good as the samples you take
  - \* The Sampler is a key member of the team.....If the sample is not collected properly, the rest means NOTHING!!!!
- \* The lab provides sample collection kits that are certified to be free from lead contamination
- \* Errors in measuring the area for dust wipes can have a significant impact on the reported results
  - \* Not just writing down the wrong number, but also ensuring that you wipe a sufficient area to achieve the necessary reporting limit
- \* Make sure to label samples properly!!!

# The Paperwork....



## Inorganic Chemistry Environmental Lead Examination

Katherine A. Kelley State Public Health Laboratory, 395 West Street, Rocky Hill, CT 06067  
Phone Number: (860) 920-6585

**Select Water Source**  
 Public Water Supply  
 Private Well

**Submitter's Information:** Name: My Health Department \_\_\_\_\_ Horizon Profile: 1235 \_\_\_\_\_

Address: 123 Main Street, Anytown, CT 00000 \_\_\_\_\_  
(Street) (City) (State) (Zip Code)

**Sample Information:**

Address: 1432 North Grand Street, Anytown, CT 00000 \_\_\_\_\_  
(Street) (City) (State) (Zip Code)

**Collector's Information:** Name: Sally Collector \_\_\_\_\_ Title: RS \_\_\_\_\_

Date: 07/01/2015 \_\_\_\_\_ Collector's Phone Number: (203) 321-0976 \_\_\_\_\_

TEST REQUESTED			
<input type="checkbox"/> Paint Chips (PB2391-C)	<input checked="" type="checkbox"/> Dust Wipe (PB2391-E)	<input type="checkbox"/> Soil (PB2391-S)	
<input type="checkbox"/> Water (200.8-PB-P)	<input type="checkbox"/> Other		
<b>*** PLEASE GROUP EACH SAMPLE TYPE ON A SEPARATE FORM ***</b>			
LABORATORY USE ONLY	Wipe Area	Sample ID	Location of Sample
1.	12x12	SC-01	Bedroom floor
2.	3.5x 24	SC-02	Bedroom VW
3.	3x22	SC-03	Bedroom WS
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			

# The Final Report



STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH  
Dr. Katherine A. Kelley State Public Health Laboratory  
395 West Street, Rocky Hill, CT 06067  
Phone: (860) 920-6500  
Fax: (860) 920-6718



## LABORATORY TEST REPORT

### Report To

MY HEALTH DISTRICT  
MAIN STREET  
ANYTOWN, CT 00000

**Attention:** S. Collector

November 6, 2013

RE: Workorder: 351094      WorkID: 1432 N. GRAND ST 100913 I

Dear S. Collector,

Enclosed are the analytical results for sample(s) received by the laboratory on Wednesday, October 16, 2013. The signature on this report indicates the samples were analyzed according to the laboratory's standard operating procedures, except as noted in the report narrative.

If you have any questions concerning this report, please contact Jack Bennett at (860)920-6500 or by email at [jack.bennett@ct.gov](mailto:jack.bennett@ct.gov).

Jack Bennett,  
Section Chief,  
Environmental Chemistry

## REPORT OF ANALYSIS

Connecticut Registration No : PH-0905

EPA Certificate No. 2010CT01



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## SAMPLE SUMMARY

Workorder: 351094 1432 N. GRAND ST

Location

Street 1432 N. GRANDST  
Town ANYTOWN  
State CT

Lab ID	Sample ID	Matrix	Date Collected	Date Received
351094001	LR-S-1 LVG RM WS	Dust	10/9/2013	10/16/2013
351094002	LR-F-2 LVG RM FLR - ENT	Dust	10/9/2013	10/16/2013
351094003	BR1-F-3 BDRM 1 - FLOOR	Dust	10/9/2013	10/16/2013
351094004	BR1-S-4 BDRM 1 - SILL	Dust	10/9/2013	10/16/2013
351094005	BR2-F-5 BDRM 2 - FLOOR	Dust	10/9/2013	10/16/2013
351094006	BR3-F-6 BDRM 3 - FLOOR	Dust	10/9/2013	10/16/2013
351094007	BLANK-7 BLANK	Dust	10/9/2013	10/16/2013
351094008	K-F-8 KITCHEN FLOOR	Dust	10/9/2013	10/16/2013
351094009	K-S-9 KITCHEN SILL	Dust	10/9/2013	10/16/2013
351094010	BA1-F-10 BTHRM 1ST FL BATH FL	Dust	10/9/2013	10/16/2013
351094011	BA1-S-11 BTHRM 1ST FLR SILL	Dust	10/9/2013	10/16/2013
351094012	HF-12 HALLWAY FLOOR	Dust	10/9/2013	10/16/2013
351094013	BA2-F-13 BTHRM 2ND FLR BATH FL	Dust	10/9/2013	10/16/2013
351094014	BA2-S-14 BATHRM 2ND FLR - SIL	Dust	10/9/2013	10/16/2013
351094015	BLANK-15 BLANK	Dust	10/9/2013	10/16/2013
351094016	BR4-F1-16 BDRM 4 - FLOOR 1	Dust	10/9/2013	10/16/2013
351094017	BR4-F2-17 BDRM 4 FLR 2	Dust	10/9/2013	10/16/2013
351094018	BR4-S-18 BDRM 4 - SILL	Dust	10/9/2013	10/16/2013

## REPORT OF ANALYSIS

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## PROJECT SUMMARY

Workorder: 351094 1432 N. GRAND ST 100913 |

Location

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Sample results are not blank corrected.

The results on this report relate only to the items tested.

## REPORT OF ANALYSIS

Connecticut Registration No.: PH-0905

EPA Certificate No. 2010CT01

# The Final Report



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## ANALYTICAL RESULTS

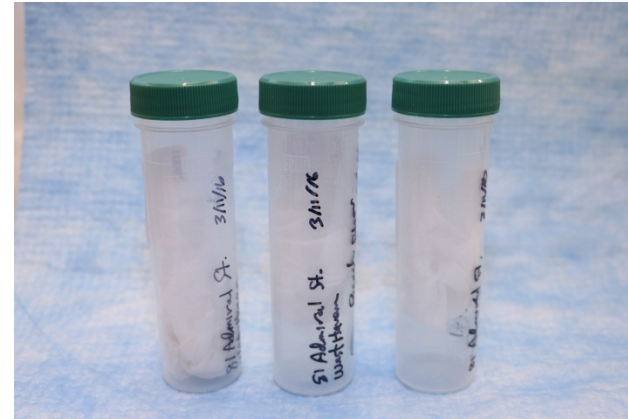
Workorder:	351094 1432 N. GRAND ST 100913 I							Location			
Lab ID:	351094001							Date Received:	10/16/2013 7:37:00 AM	Matrix:	Dust
Sample:	LR-S-1 LVG RM WS							Date Collected:	10/9/2013	Description:	
Parameters	Results	Units	Report Limit	DF Prepared	By	Analyzed	By	RegLmt			
--- METALS ---											
Preparation Method: EPA 3050B (Wipes)											
Analytical Method: EPA 239.1											
Lead	<80.0	ug/sqft	80.0	1	10/22/2013	MBO	10/23/2013	MBO			
Lab ID:	351094002							Date Received:	10/16/2013 7:37:00 AM	Matrix:	Dust
Sample:	LR-F-2 LVG RM FLR - ENT							Date Collected:	10/9/2013	Description:	
Parameters	Results	Units	Report Limit	DF Prepared	By	Analyzed	By	RegLmt			
--- METALS ---											
Preparation Method: EPA 3050B (Wipes)											
Analytical Method: EPA 239.1											
Lead	49.5	ug/sqft	20.0	1	10/22/2013	MBO	10/23/2013	MBO			
Lab ID:	351094003							Date Received:	10/16/2013 7:37:00 AM	Matrix:	Dust
Sample:	BR1-F-3 BDRM 1 - FLOOR							Date Collected:	10/9/2013	Description:	
Parameters	Results	Units	Report Limit	DF Prepared	By	Analyzed	By	RegLmt			
--- METALS ---											
Preparation Method: EPA 3050B (Wipes)											
Analytical Method: EPA 239.1											
Lead	<20.0	ug/sqft	20.0	1	10/22/2013	MBO	10/23/2013	MBO			
Lab ID:	351094004							Date Received:	10/16/2013 7:37:00 AM	Matrix:	Dust
Sample:	BR1-S-4 BDRM 1 - SILL							Date Collected:	10/9/2013	Description:	
Parameters	Results	Units	Report Limit	DF Prepared	By	Analyzed	By	RegLmt			
--- METALS ---											
Preparation Method: EPA 3050B (Wipes)											
Analytical Method: EPA 239.1											
Lead	<80.0	ug/sqft	80.0	1	10/22/2013	MBO	10/23/2013	MBO			

## REPORT OF ANALYSIS

Connecticut Registration No: PH-0805

EPA Certificate No: 2010CT01

# Sample Collection



# Unusual Samples



# Conclusion

- \* Make sure paperwork is completely filled out and matches labeled sample.
- \* Make sure tubes are tightly capped and sample tube matches sample submission form.
- \* 10 Day turnaround for dust wipes/ 14 day for everything else
- \* We can “rush” testing!
  - \* This is a Partnership!!



# Questions??

George.garrison@ct.gov