

Attachment 6C: Sample Results Letter to a Pregnant Woman or Woman of Child Bearing Age aged 15 to <45 Years

Flesch-Kincaid Reading level – 8.0

(ATSDR Letterhead)

DATE _____

Name XXXXX

Address XXXX

Dear _____

Thank you for participating in the Agency for Toxic Substances and Disease Registry’s (ATSDR) Exposure Investigation (EI) in Hayden and Winkelman, AZ. The goal of the EI is to determine whether people living in Hayden and Winkelman, AZ, are being exposed to lead and arsenic.

ATSDR collected a blood and urine sample from you on [Month Day, Year]. This letter contains the results of your blood lead and urine arsenic tests.

Your test results are shown below.

Blood Lead and Total Urine Arsenic Test Results for Firstname Lastname																							
Test	Test Result		Investigation Exposure Level																				
Blood Lead	XXX µg/dL		5 µg/dL ¹																				
Total Urine Arsenic	XXX µg/g of creatinine		28.4 µg/g of creatinine ²																				
Inorganic Urine Arsenic*	XXX µg/g of creatinine		See below ³																				
Organic Urine Arsenic*	XXX µg/g of creatinine		See below ⁴																				
<p>¹The investigation exposure level for blood lead is 5 µg/dL. This value is the upper reference interval value of the 97.5th percentile of the distribution of the combined 2007-2008 and 2009-2010 cycles of the Centers for Diseases Control and Prevention (CDC) National Health and Nutrition Examination Survey ((CDC 2013- http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6213a3.htm)).</p> <p>² The total urine arsenic exposure level is the lowest 95th percentile total urine arsenic value reported for all age groups in the 2009-2010 CDC National Health and Nutrition Examination Survey. 95th percentile means that 95 percent of the population will have a value at or below the number indicated as the exposure level. Results are reported in micrograms per gram of creatinine (µg/g). Adjusting for creatinine is a standard method used to report the amount of arsenic present in urine samples. If the total creatinine level was above 28.4 µg/g, further analysis was done to determine the amount of organic and inorganic arsenic in the total.</p> <p><i>{*Results will be reported if total urinary arsenic is above 28.4; and speciation is conducted. Otherwise delete these two rows and two footnotes below.}</i></p> <p>³ Speciated Inorganic Arsenic Reference Levels in µg/g of creatinine (95 percentile), based on 2009-2010 survey years.</p> <table border="1"> <thead> <tr> <th></th> <th>6-11 years</th> <th>12-19 years</th> <th>20 years and older</th> </tr> </thead> <tbody> <tr> <td>Arsenic (V) Acid</td> <td>< LOD</td> <td>< LOD</td> <td>< LOD</td> </tr> <tr> <td>Arsenous (III) Acid</td> <td>< LOD</td> <td>1.95</td> <td>< LOD</td> </tr> <tr> <td>Dimethylarsinic Acid</td> <td>16.5</td> <td>10.0</td> <td>16.1</td> </tr> <tr> <td>Monomethylarsonic Acid</td> <td>3.16</td> <td>2.56</td> <td>2.91</td> </tr> </tbody> </table> <p>LOD – Level of Detection</p>					6-11 years	12-19 years	20 years and older	Arsenic (V) Acid	< LOD	< LOD	< LOD	Arsenous (III) Acid	< LOD	1.95	< LOD	Dimethylarsinic Acid	16.5	10.0	16.1	Monomethylarsonic Acid	3.16	2.56	2.91
	6-11 years	12-19 years	20 years and older																				
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Centers for Disease Control and Prevention. Fourth Report on Human Exposure to Environmental Chemicals, Updated Tables, (August, 2014). Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. <http://www.cdc.gov/exposurereport/> (http://www.cdc.gov/exposurereport/pdf/fourthreport_updatedtables_aug2014.pdf)

⁴Speciated Organic Arsenic Reference Levels in µg/g of creatinine (95 percentile), based on 2009-2010 survey years.

	6-11 years	12-19 years	20 years and older
Arsenobetaine	24.9	14.0	57.0
Arsenocholine	< LOD	< LOD	< LOD
Trimethylarsine oxide	< LOD	< LOD	< LOD

LOD = Level of Detection

Centers for Disease Control and Prevention. Fourth Report on Human Exposure to Environmental Chemicals, Updated Tables, (August, 2014). Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. <http://www.cdc.gov/exposurereport/> (http://www.cdc.gov/exposurereport/pdf/fourthreport_updatedtables_aug2014.pdf)

Reporting women blood lead level:

Insert G. Blood Lead Level below Investigation Exposure Level (IEL)

Insert H. Blood Lead Level equal to or above Investigation Exposure Level (IEL)

Reporting women urine arsenic:

Insert I. Total Urine Arsenic Level below the Investigation Exposure Level (IEL)

Insert J. Total Urine Arsenic Level equal to or above the Investigation Exposure Level (IEL), Organic Arsenic elevated, Inorganic Arsenic normal

Insert K. Total Urine Arsenic Level equal to or above the Investigation Exposure Level (IEL), Organic Arsenic normal, Inorganic Arsenic elevated

Insert L. Total Urine Arsenic equal to or above Investigation Exposure Level (IEL), both Organic and Inorganic Arsenic elevated.

ATSDR's recommendations for reducing exposure to lead and arsenic are in the enclosed factsheets.

If you have questions concerning this Exposure Investigation or your test results, please contact me at 770-488-0771 or by email at BTierney@cdc.gov.

Sincerely,

Bruce C. Tierney, MD
 Lead Investigator – Asarco Hayden Smelter Exposure Investigation
 ATSDR Division of Community Health Investigations, Exposure Investigation Team

Enclosures {Factsheet B and C}