



Effective Date:
Monday, July 15, 2013

New Tests and Test Updates

Immediate Action

In our continuing effort to provide you with the highest quality toxicology laboratory services available, we have compiled important changes regarding a number of tests we perform. Listed below are the types of changes that may be included in this notification, effective Monday, July 15, 2013

New Tests - Tests recently added to the NMS Labs test menu. *New Tests are effective immediately.*

Test Changes - Tests that have had changes to the method/ CPT code, units of measurement, scope of analysis, reference comments, or specimen requirements.

Discontinued Tests - Tests being discontinued with alternate testing suggestions.

Please use this information to update your computer systems/records. These changes are important to ensure standardization of our mutual laboratory databases.

If you have any questions about the information contained in this notification, please call our Client Support Department at (866) 522-2206. Thank you for your continued support of NMS Labs and your assistance in implementing these changes.

The CPT Codes provided in this document are based on AMA guidelines and are for informational purposes only. NMS Labs does not assume responsibility for billing errors due to reliance on the CPT Codes listed in this document.



Effective Date:
Monday, July 15, 2013

New Tests and Test Updates

Test Code	Test Name	New Test	Test Name	Method / CPT Code	Specimen Req.	Stability	Scope	Units	Reference Comments	Discontinue
0410B	Antimony, Blood				•	•			•	
0410R	Antimony, RBCs				•				•	
0460B	Arsenic, Blood				•	•				
0460R	Arsenic, RBCs				•				•	
0519B	Barium, Blood				•	•			•	
0519R	Barium, RBCs				•				•	
0680B	Bismuth, Blood					•			•	
0680R	Bismuth, RBCs				•				•	
1042B	Cesium, Blood					•				
1042R	Cesium, RBCs				•				•	
8103B	Environmental Exposure Screen, Blood (Forensic)				•		•		•	
6303B	Firefighter Core Baseline Profile, Blood								•	
2406B	Indium, Blood				•	•				
2406R	Indium, RBCs				•				•	
6364R	Inorganic Panel 64, RBCs				•				•	
2490B	Lead and ZPP, Blood				•				•	
2492B	Lead, Blood				•	•			•	
2494B	Lead, Micro and EP (Pediatric), Blood				•				•	
2492R	Lead, RBCs				•				•	
2697B	Metals Acute Poisoning Panel, Blood (CSA)				•		•		•	
2693B	Metals/Metalloids Acute Poisoning Panel, Blood				•		•		•	
2693R	Metals/Metalloids Acute Poisoning Panel, RBCs				•		•		•	
2661B	Metals/Metalloids Panel 1, Blood				•				•	
2663B	Metals/Metalloids Panel 3, Blood				•				•	
4212B	Strontium, Blood				•	•			•	
4212R	Strontium, RBCs				•				•	
4370B	Thallium, Blood					•				
4370R	Thallium, RBCs				•				•	
4485B	Tin - Total, Blood					•				
4485R	Tin - Total, RBCs				•				•	
4730B	Tungsten, Blood					•				



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Test Code	Test Name	New Test	Test Name	Method / CPT Code	Specimen Req.	Stability	Scope	Units	Reference Comments	Discontinue
4730R	Tungsten, RBCs				•				•	



New Tests and Test Updates

Test Changes

0410B Antimony, Blood

Summary of Changes: Specimen Requirements (Special Handling) were changed.
Specimen Requirements (Rejection Criteria) were changed.
Stability was changed.
Reference Comment was changed.

Specimen Requirements: 1 mL Blood
 Transport Temperature: Refrigerated
 Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
 Light Protection: Not Required
 Special Handling: Clotted Blood specimens are not acceptable. Collect sample in Glass Container (see Specimen Container).
 Submit in container with a non-Heparin based anticoagulant. Tubes containing Heparin based anticoagulants are not acceptable.
 Rejection Criteria: Plastic container. Light Green top tube (Lithium Heparin). Tan top tube - glass (Sodium Heparin). Royal Blue top tube (Trace metal-free; Sodium Heparin). Gray top tube (Sodium Fluoride / Potassium Oxalate). Green top tube (Sodium Heparin).
 Stability: Room Temperature: 30 day(s)
 Refrigerated: 30 day(s)
 Frozen (-20 °C): 30 day(s)
 Scope of Analysis: ICP/MS (83018): Antimony
 Method (CPT Code)

Compound Name	Units	Reference Comment
Antimony	mcg/L	Normally: Less than 5 mcg/L.

NMS Labs has demonstrated that certain collection tubes can artifactually increase measured antimony concentrations rendering reported concentrations difficult to interpret.

0410R Antimony, RBCs

Summary of Changes: Specimen Requirements were changed.
Specimen Requirements (Special Handling) were changed.
Specimen Requirements (Rejection Criteria) were changed.
Reference Comment was changed.



New Tests and Test Updates

Test Changes

Specimen Requirements: 2 mL RBCs
 Transport Temperature: Refrigerated
 Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
 Light Protection: Not Required
 Special Handling: Collect sample in Glass Container (see Specimen Container).
 Centrifuge and separate RBCs into an acid washed glass vial within two hours of collection.
 Rejection Criteria: Received Frozen. Plastic container.
 Scope of Analysis: ICP/MS (83018): Antimony
 Method (CPT Code)

Compound Name	Units	Reference Comment
Antimony	mcg/L	<p>No reference data available. The RBC sample used for analysis was measured by weight and multiplied by the density of human RBC (1.10 g/mL) Not for clinical diagnostic purposes.</p> <p>NMS Labs has demonstrated that certain collection tubes can artifactually increase measured antimony concentrations rendering reported concentrations difficult to interpret.</p>

0460B Arsenic, Blood

Summary of Changes: Specimen Requirements (Special Handling) were changed.
 Specimen Requirements (Rejection Criteria) were changed.
 Stability was changed.

Specimen Requirements: 1 mL Blood
 Transport Temperature: Refrigerated
 Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
 Light Protection: Not Required
 Special Handling: Clotted Blood specimens are not acceptable.
 Avoid seafood consumption for 48 hours prior to sample collection. Submit in container with a non-Heparin based anticoagulant. Tubes containing Heparin based anticoagulants are not acceptable.
 Rejection Criteria: Light Green top tube (Lithium Heparin). Tan top tube - glass (Sodium Heparin).
 Royal Blue top tube (Trace metal-free; Sodium Heparin). Green top tube (Sodium Heparin).
 Stability: Room Temperature: 30 day(s)
 Refrigerated: 30 day(s)
 Frozen (-20 °C): 30 day(s)

0460R Arsenic, RBCs



New Tests and Test Updates

Test Changes

Summary of Changes: Specimen Requirements were changed.
Reference Comment was changed.

Specimen Requirements: 2 mL RBCs
 Transport Temperature: Refrigerated
 Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
 Light Protection: Not Required
 Special Handling: Avoid seafood consumption for 48 hours prior to sample collection. Centrifuge and separate RBCs into an acid washed plastic screw capped vial within two hours of collection.
 Rejection Criteria: Received Frozen.
 Scope of Analysis: ICP/MS (82175): Arsenic
 Method (CPT Code)

Compound Name	Units	Reference Comment
Arsenic	mcg/L	<p>Reported overnight fasting reference range: 0.47 - 22 mcg/L</p> <p>Mean = 4.8 mcg/L Median = 2.0 mcg/L 19 of 21 normal subjects had concentrations less than 9.5 mcg/L The RBC sample used for analysis was measured by weight and multiplied by the density of human RBC (1.10 g/mL) Not for clinical diagnostic purposes.</p> <p>Various states require that levels above certain cutoffs must be reported to the state in which the patient resides. Please contact NMS Labs if you need assistance in supplying your state with the required information.</p>

0519B Barium, Blood

Summary of Changes: Specimen Requirements (Special Handling) were changed.
 Specimen Requirements (Rejection Criteria) were changed.
 Stability was changed.
 Reference Comment was changed.



New Tests and Test Updates

Test Changes

Specimen Requirements: 1 mL Blood
 Transport Temperature: Refrigerated
 Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
 Light Protection: Not Required
 Special Handling: Clotted Blood specimens are not acceptable. Collect sample in plastic Container (see Specimen Container).
 Submit in container with a non-Heparin based anticoagulant. Tubes containing Heparin based anticoagulants are not acceptable.
 Rejection Criteria: Light Green top tube (Lithium Heparin). Glass container. Tan top tube - glass (Sodium Heparin). Royal Blue top tube (Trace metal-free; Sodium Heparin). Gray top tube (Sodium Fluoride / Potassium Oxalate). Green top tube (Sodium Heparin).
 Stability: Room Temperature: 30 day(s)
 Refrigerated: 30 day(s)
 Frozen (-20 °C): 30 day(s)
 Scope of Analysis: ICP/MS (83018): Barium
 Method (CPT Code)

Compound Name	Units	Reference Comment
Barium	mcg/L	Reported Normal: Less than 10 mcg/L. NMS Labs has demonstrated that certain collection tubes can artifactually increase measured barium concentrations rendering reported concentrations difficult to interpret.

0519R Barium, RBCs

Summary of Changes: Specimen Requirements were changed.
 Specimen Requirements (Special Handling) were changed.
 Specimen Requirements (Rejection Criteria) were changed.
 Reference Comment was changed.

Specimen Requirements: 2 mL RBCs
 Transport Temperature: Refrigerated
 Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
 Light Protection: Not Required
 Special Handling: Collect sample in plastic container (see Specimen Container).
 Centrifuge and separate RBCs into an acid washed plastic screw capped vial within two hours of collection.
 Rejection Criteria: Received Frozen. Glass container.
 Scope of Analysis: ICP/MS (83018): Barium
 Method (CPT Code)



New Tests and Test Updates

Test Changes

Compound Name	Units	Reference Comment
Barium	mcg/L	No reference data available. The RBC sample used for analysis was measured by weight and multiplied by the density of human RBC (1.10 g/mL) Not for clinical diagnostic purposes.
<p>NMS Labs has demonstrated that certain collection tubes can artifactually increase measured barium concentrations rendering reported concentrations difficult to interpret.</p>		

0680B Bismuth, Blood

Summary of Changes: Stability was changed.
Reference Comment was changed.

Stability: Room Temperature: 30 day(s)
Refrigerated: 30 day(s)
Frozen (-20 °C): 30 day(s)

Scope of Analysis: ICP/MS (83018): Bismuth
Method (CPT Code)

Compound Name	Units	Reference Comment
Bismuth	mcg/L	Normal: Less than 1.0 mcg/L

0680R Bismuth, RBCs

Summary of Changes: Specimen Requirements were changed.
Reference Comment was changed.

Specimen Requirements: 2 mL RBCs

Transport Temperature: Refrigerated

Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)

Light Protection: Not Required

Special Handling: Centrifuge and separate RBCs into an acid washed plastic screw capped vial within two hours of collection.

Rejection Criteria: Received Frozen.

Scope of Analysis: ICP/MS (83018): Bismuth
Method (CPT Code)



New Tests and Test Updates

Test Changes

Compound Name	Units	Reference Comment
Bismuth	mcg/L	No reference data available. The RBC sample used for analysis was measured by weight and multiplied by the density of human RBC (1.10 g/mL) Not for clinical diagnostic purposes.

1042B Cesium, Blood

Summary of Changes: Stability was changed.

Stability: Room Temperature: 30 day(s)
Refrigerated: 30 day(s)
Frozen (-20 °C): 30 day(s)

1042R Cesium, RBCs

Summary of Changes: Specimen Requirements were changed.
Reference Comment was changed.

Specimen Requirements: 2 mL RBCs
Transport Temperature: Refrigerated
Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
Light Protection: Not Required
Special Handling: Centrifuge and separate RBCs into an acid washed plastic screw capped vial within two hours of collection.
Rejection Criteria: Received Frozen.
Scope of Analysis: ICP/MS (83018): Cesium
Method (CPT Code)

Compound Name	Units	Reference Comment
Cesium	mcg/L	No reference data available. The RBC sample used for analysis was measured by weight and multiplied by the density of human RBC (1.10 g/mL) Not for clinical diagnostic purposes.

8103B Environmental Exposure Screen, Blood (Forensic)

Summary of Changes: Specimen Requirements (Specimen Container) were changed.
Specimen Requirements (Special Handling) were changed.
Specimen Requirements (Rejection Criteria) were changed.
Scope of Analysis was changed.
Reference Comment was changed.
Barium was removed.



New Tests and Test Updates

Test Changes

- Specimen Requirements: 10 mL Blood
 Transport Temperature: Refrigerated
 Specimen Container: Lavender top tube (EDTA)
 Light Protection: Not Required
 Special Handling: For Cyanide analysis, blood must be submitted in a Lavender Top Tube. Clotted Blood specimens are not acceptable.
 Avoid seafood consumption for 48 hours prior to sample collection. Submit in container with a non-Heparin based anticoagulant. Tubes containing Heparin based anticoagulants are not acceptable. The validity of the methemoglobin result will be compromised if the analysis is not performed within FOUR hours of sample collection. Collect sample in Glass Container (see Specimen Container).
 Rejection Criteria: Plastic container. Light Green top tube (Lithium Heparin). Tan top tube - glass (Sodium Heparin). Royal Blue top tube (Trace metal-free; Sodium Heparin). Gray top tube (Sodium Fluoride / Potassium Oxalate). Green top tube (Sodium Heparin).
 Scope of Analysis: MD (80101): Cyanide
 Method (CPT Code) Colorimetry (80101): Bromides
 Headspace GC (82055): Ethanol, Blood Alcohol Concentration (BAC), Methanol, Isopropanol, Acetone
 ICP/MS (83655): Lead
 ICP/MS (82175): Arsenic
 ICP/MS (84255): Selenium
 ICP/MS (83018): Thallium
 ICP/MS (83825): Mercury
 GC (83921): Trichloroacetic Acid
 Headspace GC (84600): Volatiles
 GC (84600): Hydrocarbon Gases
 GC (84600): Halocarbons
 ICP/MS (83018): Bismuth
 ICP/MS (83018): Antimony
 EZA (82480): Cholinesterase
 SP (80101): Carboxyhemoglobin
 SP (83050): Methemoglobin, Sulfhemoglobin

Compound Name	Units	Reference Comment
Antimony	mcg/L	Normally: Less than 5 mcg/L. NMS Labs has demonstrated that certain collection tubes can artifactually increase measured antimony concentrations rendering reported concentrations difficult to interpret.
Bismuth	mcg/L	Normal: Less than 1.0 mcg/L



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Test Changes

Compound Name	Units	Reference Comment
Lead	mcg/dL	<p>Reported geometric mean blood lead concentration for US population (both adults and children) is less than 2 mcg/dL (taking into account the 95% CI).</p> <p>The following are the reported age-based 50th and 95th percentiles (with 95% CI)*:</p> <p>Age 1 - 5 years: 50th Percentile: 1.15 mcg/dL (1.03 - 1.27) 95th Percentile: 3.37 mcg/dL (2.63 - 4.11)</p> <p>Age 6 - 11 years: 50th Percentile: 0.81 mcg/dL (0.74 - 0.84) 95th Percentile: 2.01 mcg/dL (1.88 - 2.25)</p> <p>Age 12 - 19 years: 50th Percentile: 0.66 mcg/dL (0.59 - 0.70) 95th Percentile: 1.72 mcg/dL (1.52 - 1.86)</p> <p>Age 20 years and above: 50th Percentile: 1.20 mcg/dL (1.14 - 1.25) 95th Percentile: 3.57 mcg/dL (3.29 - 3.84)</p> <p>*National Health and Nutrition Examination Survey, 2009-2010 data; Fourth National Report on Human Exposure to Environmental Chemicals, Updated Tables, September 2012. Department of Health and Human Services, Centers for Disease Control and Prevention.</p> <p>The US Centers for Disease Control and Prevention (CDC) reference value based on the 97.5th percentile of the blood lead level distribution in US children aged 1-5 years is 5 mcg/dL.</p> <p>It is reported that blood lead levels in the range of 5 - 9 mcg/dL have been associated with adverse health effects in children aged 6 years and younger.</p> <p>Additionally, the following guidelines are offered by US Centers for Disease Control and Prevention, especially in respect to children: 10 - 14 mcg/dL is moderately high and may require re-screening. 20 - 44 mcg/dL is high and may require immediate medical attention. 45 - 69 mcg/dL requires urgent attention. Greater than 70 mcg/dL is a medical emergency.</p>



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Test Changes

Compound Name	Units	Reference Comment
		Refer to OSHA's website for workplace information. Various states require that levels above certain cutoffs must be reported to the state in which the patient resides. Please contact NMS Labs if you need assistance in supplying your state with the required information.

6303B Firefighter Core Baseline Profile, Blood

Summary of Changes: Reference Comment was changed.

Scope of Analysis: ICP/MS (83655): Lead
 Method (CPT Code) H (84202): ZPP
 Headspace GC (84600): Benzene, Ethylbenzene, Styrene, Toluene, Xylenes (o,m,p), n-Heptane, n-Hexane, Methylpentanes (2- and 3- Isomers), Pentane, n-Butanol, Ethanol, Isopropanol, n-Propanol, Methanol, Acetaldehyde, Acetone, Methyl Ethyl Ketone, Methyl Isobutyl Ketone, Methyl n-Butyl Ketone, Ethyl Acetate, Diethyl Ether, Methyl Acrylate, Methyl Tertiary Butyl Ether

Compound Name	Units	Reference Comment
Lead	mcg/dL	Reported geometric mean blood lead concentration for US population (both adults and children) is less than 2 mcg/dL (taking into account the 95% CI).

The following are the reported age-based 50th and 95th percentiles (with 95% CI)*:

- Age 1 - 5 years:
 - 50th Percentile: 1.15 mcg/dL (1.03 - 1.27)
 - 95th Percentile: 3.37 mcg/dL (2.63 - 4.11)
- Age 6 - 11 years:
 - 50th Percentile: 0.81 mcg/dL (0.74 - 0.84)
 - 95th Percentile: 2.01 mcg/dL (1.88 - 2.25)
- Age 12 - 19 years:
 - 50th Percentile: 0.66 mcg/dL (0.59 - 0.70)
 - 95th Percentile: 1.72 mcg/dL (1.52 - 1.86)
- Age 20 years and above:
 - 50th Percentile: 1.20 mcg/dL (1.14 - 1.25)
 - 95th Percentile: 3.57 mcg/dL (3.29 - 3.84)

*National Health and Nutrition Examination Survey, 2009-2010 data; Fourth National Report on Human Exposure to Environmental Chemicals, Updated Tables, September 2012. Department of Health and Human Services, Centers for Disease Control and Prevention.

The US Centers for Disease Control and Prevention (CDC) reference value based on the 97.5th percentile of the blood lead level distribution in US children aged



New Tests and Test Updates

Test Changes

Compound Name	Units	Reference Comment
		<p>1-5 years is 5 mcg/dL.</p> <p>It is reported that blood lead levels in the range of 5 - 9 mcg/dL have been associated with adverse health effects in children aged 6 years and younger.</p> <p>Additionally, the following guidelines are offered by US Centers for Disease Control and Prevention, especially in respect to children: 10 - 14 mcg/dL is moderately high and may require re-screening. 20 - 44 mcg/dL is high and may require immediate medical attention. 45 - 69 mcg/dL requires urgent attention. Greater than 70 mcg/dL is a medical emergency.</p> <p>Refer to OSHA's website for workplace information. Various states require that levels above certain cutoffs must be reported to the state in which the patient resides. Please contact NMS Labs if you need assistance in supplying your state with the required information.</p>

2406B Indium, Blood

Summary of Changes: Specimen Requirements (Special Handling) were changed.
Stability was changed.

- Specimen Requirements: 1 mL Blood
- Transport Temperature: Refrigerated
- Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
- Light Protection: Not Required
- Special Handling: Clotted Blood specimens are not acceptable.
Submit in container with a non-Heparin based anticoagulant. Tubes containing Heparin based anticoagulants are not acceptable.
- Rejection Criteria: Light Green top tube (Lithium Heparin). Tan top tube - glass (Sodium Heparin).
Royal Blue top tube (Trace metal-free; Sodium Heparin). Green top tube (Sodium Heparin).
- Stability: Room Temperature: 30 day(s)
Refrigerated: 30 day(s)
Frozen (-20 °C): 30 day(s)

2406R Indium, RBCs

Summary of Changes: Specimen Requirements were changed.
Reference Comment was changed.



New Tests and Test Updates

Test Changes

Specimen Requirements: 2 mL RBCs
 Transport Temperature: Refrigerated
 Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
 Light Protection: Not Required
 Special Handling: Centrifuge and separate RBCs into an acid washed plastic screw capped vial within two hours of collection.
 Rejection Criteria: Received Frozen.
 Scope of Analysis: ICP/MS (83018): Indium
 Method (CPT Code)

Compound Name	Units	Reference Comment
Indium	mcg/L	No reference data available. The RBC sample used for analysis was measured by weight and multiplied by the density of human RBC (1.10 g/mL) Not for clinical diagnostic purposes.

6364R Inorganic Panel 64, RBCs

Summary of Changes: Specimen Requirements were changed.
Reference Comment was changed.

Specimen Requirements: 6 mL RBCs
 Transport Temperature: Refrigerated
 Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
 Light Protection: Not Required
 Special Handling: Avoid seafood consumption for 48 hours prior to sample collection. Centrifuge and separate RBCs into an acid washed plastic screw capped vial within two hours of collection.
 Rejection Criteria: Received Frozen.
 Scope of Analysis: ICP/MS (83655): Lead
 Method (CPT Code) ICP/MS (82175): Arsenic
 ICP/MS (82108): Aluminum
 ICP/MS (82300): Cadmium
 ICP/MS (83885): Nickel
 ICP/MS (83825): Mercury

Compound Name	Units	Reference Comment
Arsenic	mcg/L	Reported overnight fasting reference range: 0.47 - 22 mcg/L Mean = 4.8 mcg/L Median = 2.0 mcg/L 19 of 21 normal subjects had concentrations less than 9.5 mcg/L



New Tests and Test Updates

Test Changes

Compound Name	Units	Reference Comment
		The RBC sample used for analysis was measured by weight and multiplied by the density of human RBC (1.10 g/mL) Not for clinical diagnostic purposes.
		Various states require that levels above certain cutoffs must be reported to the state in which the patient resides. Please contact NMS Labs if you need assistance in supplying your state with the required information.
Lead	mcg/dL	NMS Labs derived data: 10th - 90th Percentile Data: Mean, 3.1 mcg/dL +/- 1.3 (SD); range, 1.1 - 6.9 mcg/dL (N = 26). The RBC sample used for analysis was measured by weight and multiplied by the density of human RBC (1.10 g/mL) Not for clinical diagnostic purposes.

2490B Lead and ZPP, Blood

Summary of Changes: Specimen Requirements were changed.
Specimen Requirements (Special Handling) were changed.
Reference Comment was changed.

Specimen Requirements: 3 mL Blood
 Transport Temperature: Refrigerated
 Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
 Light Protection: Yes
 Special Handling: Clotted Blood specimens are not acceptable.
 Submit in container with a non-Heparin based anticoagulant. Tubes containing Heparin based anticoagulants are not acceptable.
 Rejection Criteria: Not received Light Protected. Light Green top tube (Lithium Heparin). Tan top tube - glass (Sodium Heparin). Royal Blue top tube (Trace metal-free; Sodium Heparin). Green top tube (Sodium Heparin).
 Scope of Analysis: ICP/MS (83655): Lead
 Method (CPT Code) H (84202): ZPP

Compound Name	Units	Reference Comment
Lead	mcg/dL	Reported geometric mean blood lead concentration for US population (both adults and children) is less than 2 mcg/dL (taking into account the 95% CI). The following are the reported age-based 50th and 95th percentiles (with 95% CI)*: Age 1 - 5 years:



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Test Changes

Compound Name	Units	Reference Comment
		<p>50th Percentile: 1.15 mcg/dL (1.03 - 1.27) 95th Percentile: 3.37 mcg/dL (2.63 - 4.11) Age 6 - 11 years: 50th Percentile: 0.81 mcg/dL (0.74 - 0.84) 95th Percentile: 2.01 mcg/dL (1.88 - 2.25) Age 12 - 19 years: 50th Percentile: 0.66 mcg/dL (0.59 - 0.70) 95th Percentile: 1.72 mcg/dL (1.52 - 1.86) Age 20 years and above: 50th Percentile: 1.20 mcg/dL (1.14 - 1.25) 95th Percentile: 3.57 mcg/dL (3.29 - 3.84)</p> <p>*National Health and Nutrition Examination Survey, 2009-2010 data; Fourth National Report on Human Exposure to Environmental Chemicals, Updated Tables, September 2012. Department of Health and Human Services, Centers for Disease Control and Prevention.</p> <p>The US Centers for Disease Control and Prevention (CDC) reference value based on the 97.5th percentile of the blood lead level distribution in US children aged 1-5 years is 5 mcg/dL.</p> <p>It is reported that blood lead levels in the range of 5 - 9 mcg/dL have been associated with adverse health effects in children aged 6 years and younger.</p> <p>Additionally, the following guidelines are offered by US Centers for Disease Control and Prevention, especially in respect to children: 10 - 14 mcg/dL is moderately high and may require re-screening. 20 - 44 mcg/dL is high and may require immediate medical attention. 45 - 69 mcg/dL requires urgent attention. Greater than 70 mcg/dL is a medical emergency.</p> <p>Refer to OSHA's website for workplace information. Various states require that levels above certain cutoffs must be reported to the state in which the patient resides. Please contact NMS Labs if you need assistance in supplying your state with the required information.</p>

2492B Lead, Blood



New Tests and Test Updates

Test Changes

Summary of Changes: Specimen Requirements (Special Handling) were changed.
Stability was changed.
Reference Comment was changed.

Specimen Requirements: 1 mL Blood
 Transport Temperature: Refrigerated
 Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
 Light Protection: Not Required
 Special Handling: Clotted Blood specimens are not acceptable.
 Submit in container with a non-Heparin based anticoagulant. Tubes containing Heparin based anticoagulants are not acceptable.
 Rejection Criteria: Light Green top tube (Lithium Heparin). Tan top tube - glass (Sodium Heparin). Royal Blue top tube (Trace metal-free; Sodium Heparin). Green top tube (Sodium Heparin).
 Stability: Room Temperature: 30 day(s)
 Refrigerated: 30 day(s)
 Frozen (-20 °C): 30 day(s)
 Scope of Analysis: ICP/MS (83655): Lead
 Method (CPT Code)

Compound Name	Units	Reference Comment
Lead	mcg/dL	<p>Reported geometric mean blood lead concentration for US population (both adults and children) is less than 2 mcg/dL (taking into account the 95% CI).</p> <p>The following are the reported age-based 50th and 95th percentiles (with 95% CI)*:</p> <p>Age 1 - 5 years: 50th Percentile: 1.15 mcg/dL (1.03 - 1.27) 95th Percentile: 3.37 mcg/dL (2.63 - 4.11)</p> <p>Age 6 - 11 years: 50th Percentile: 0.81 mcg/dL (0.74 - 0.84) 95th Percentile: 2.01 mcg/dL (1.88 - 2.25)</p> <p>Age 12 - 19 years: 50th Percentile: 0.66 mcg/dL (0.59 - 0.70) 95th Percentile: 1.72 mcg/dL (1.52 - 1.86)</p> <p>Age 20 years and above: 50th Percentile: 1.20 mcg/dL (1.14 - 1.25) 95th Percentile: 3.57 mcg/dL (3.29 - 3.84)</p> <p>*National Health and Nutrition Examination Survey, 2009-2010 data; Fourth National Report on Human Exposure to Environmental Chemicals, Updated Tables, September 2012. Department of Health and Human Services, Centers for Disease Control and Prevention.</p>

The US Centers for Disease Control and Prevention (CDC)



New Tests and Test Updates

Test Changes

Compound Name	Units	Reference Comment
		<p>reference value based on the 97.5th percentile of the blood lead level distribution in US children aged 1-5 years is 5 mcg/dL.</p> <p>It is reported that blood lead levels in the range of 5 - 9 mcg/dL have been associated with adverse health effects in children aged 6 years and younger.</p> <p>Additionally, the following guidelines are offered by US Centers for Disease Control and Prevention, especially in respect to children: 10 - 14 mcg/dL is moderately high and may require re-screening. 20 - 44 mcg/dL is high and may require immediate medical attention. 45 - 69 mcg/dL requires urgent attention. Greater than 70 mcg/dL is a medical emergency.</p> <p>Refer to OSHA's website for workplace information. Various states require that levels above certain cutoffs must be reported to the state in which the patient resides. Please contact NMS Labs if you need assistance in supplying your state with the required information.</p>

2494B Lead, Micro and EP (Pediatric), Blood

Summary of Changes: Specimen Requirements were changed.
 Specimen Requirements (Special Handling) were changed.
 Reference Comment was changed.

Specimen Requirements: 3 mL Blood
 Transport Temperature: Refrigerated
 Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
 Light Protection: Yes
 Special Handling: Clotted Blood specimens are not acceptable.
 Submit in container with a non-Heparin based anticoagulant. Tubes containing Heparin based anticoagulants are not acceptable.
 Rejection Criteria: Not received Light Protected. Light Green top tube (Lithium Heparin). Tan top tube - glass (Sodium Heparin). Royal Blue top tube (Trace metal-free; Sodium Heparin). Green top tube (Sodium Heparin).
 Scope of Analysis: ICP/MS (83655): Lead
 Method (CPT Code) H (84202): EP Pediatric



New Tests and Test Updates

Test Changes

Compound Name	Units	Reference Comment
Lead	mcg/dL	<p>Reported geometric mean blood lead concentration for US population (both adults and children) is less than 2 mcg/dL (taking into account the 95% CI).</p> <p>The following are the reported age-based 50th and 95th percentiles (with 95% CI)*:</p> <p>Age 1 - 5 years: 50th Percentile: 1.15 mcg/dL (1.03 - 1.27) 95th Percentile: 3.37 mcg/dL (2.63 - 4.11)</p> <p>Age 6 - 11 years: 50th Percentile: 0.81 mcg/dL (0.74 - 0.84) 95th Percentile: 2.01 mcg/dL (1.88 - 2.25)</p> <p>Age 12 - 19 years: 50th Percentile: 0.66 mcg/dL (0.59 - 0.70) 95th Percentile: 1.72 mcg/dL (1.52 - 1.86)</p> <p>Age 20 years and above: 50th Percentile: 1.20 mcg/dL (1.14 - 1.25) 95th Percentile: 3.57 mcg/dL (3.29 - 3.84)</p> <p>*National Health and Nutrition Examination Survey, 2009-2010 data; Fourth National Report on Human Exposure to Environmental Chemicals, Updated Tables, September 2012. Department of Health and Human Services, Centers for Disease Control and Prevention.</p> <p>The US Centers for Disease Control and Prevention (CDC) reference value based on the 97.5th percentile of the blood lead level distribution in US children aged 1-5 years is 5 mcg/dL.</p> <p>It is reported that blood lead levels in the range of 5 - 9 mcg/dL have been associated with adverse health effects in children aged 6 years and younger.</p> <p>Additionally, the following guidelines are offered by US Centers for Disease Control and Prevention, especially in respect to children: 10 - 14 mcg/dL is moderately high and may require re-screening. 20 - 44 mcg/dL is high and may require immediate medical attention. 45 - 69 mcg/dL requires urgent attention. Greater than 70 mcg/dL is a medical emergency.</p>



New Tests and Test Updates

Test Changes

Compound Name	Units	Reference Comment
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Various states require that levels above certain cutoffs must be reported to the state in which the patient resides.
Please contact NMS Labs if you need assistance in supplying your state with the required information.

2492R Lead, RBCs

Summary of Changes: Specimen Requirements were changed.
Reference Comment was changed.

- Specimen Requirements: 2 mL RBCs
- Transport Temperature: Refrigerated
- Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
- Light Protection: Not Required
- Special Handling: Centrifuge and separate RBCs into an acid washed plastic screw capped vial within two hours of collection.
- Rejection Criteria: Received Frozen.
- Scope of Analysis: ICP/MS (83655): Lead
- Method (CPT Code)

Compound Name	Units	Reference Comment
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Lead	mcg/dL	<p>NMS Labs derived data: 10th - 90th Percentile Data: Mean, 3.1 mcg/dL +/- 1.3 (SD); range, 1.1 - 6.9 mcg/dL (N = 26).</p> <p>The RBC sample used for analysis was measured by weight and multiplied by the density of human RBC (1.10 g/mL) Not for clinical diagnostic purposes.</p>
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2697B Metals Acute Poisoning Panel, Blood (CSA)

Summary of Changes: Specimen Requirements (Special Handling) were changed.
Specimen Requirements (Rejection Criteria) were changed.
Scope of Analysis was changed.
Reference Comment was changed.
Boron was removed.



New Tests and Test Updates

Test Changes

- Specimen Requirements: 10 mL Blood
 Transport Temperature: Refrigerated
 Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
 Light Protection: Not Required
 Special Handling: Clotted Blood specimens are not acceptable. Collect sample in Glass Container (see Specimen Container).
 Avoid seafood consumption for 48 hours prior to sample collection. Submit in container with a non-Heparin based anticoagulant. Tubes containing Heparin based anticoagulants are not acceptable.
 Rejection Criteria: Plastic container. Light Green top tube (Lithium Heparin). Tan top tube - glass (Sodium Heparin). Royal Blue top tube (Trace metal-free; Sodium Heparin). Gray top tube (Sodium Fluoride / Potassium Oxalate). Green top tube (Sodium Heparin). Lavender top tube (EDTA).
 Scope of Analysis: ICP/MS (82495): Chromium, Cobalt
 Method (CPT Code) ICP/MS (82300): Cadmium
 ICP/MS (83018): Antimony
 ICP/MS (82175): Arsenic
 ICP/MS (84255): Selenium
 ICP/MS (83018): Molybdenum
 ICP/MS (83018): Bismuth
 ICP/MS (83018): Tellurium
 GFAAS (83018): Vanadium
 ICP/MS (83885): Nickel
 ICP/OES (84630): Zinc
 ICP/OES (82525): Copper
 ICP/MS (83825): Mercury

Compound Name	Units	Reference Comment
Antimony	mcg/L	Normally: Less than 5 mcg/L. NMS Labs has demonstrated that certain collection tubes can artifactually increase measured antimony concentrations rendering reported concentrations difficult to interpret.
Bismuth	mcg/L	Normal: Less than 1.0 mcg/L

2693B Metals/Metalloids Acute Poisoning Panel, Blood

- Summary of Changes: Specimen Requirements were changed.
 Specimen Requirements (Special Handling) were changed.
 Specimen Requirements (Rejection Criteria) were changed.
 Scope of Analysis was changed.
 Reference Comment was changed.
 Barium was removed.



New Tests and Test Updates

Test Changes

- Specimen Requirements: 7 mL Blood
 Transport Temperature: Refrigerated
 Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
 Light Protection: Not Required
 Special Handling: Clotted Blood specimens are not acceptable. Collect sample in Glass Container (see Specimen Container).
 Avoid seafood consumption for 48 hours prior to sample collection. Submit in container with a non-Heparin based anticoagulant. Tubes containing Heparin based anticoagulants are not acceptable.
 Rejection Criteria: Plastic container. Light Green top tube (Lithium Heparin). Tan top tube - glass (Sodium Heparin). Royal Blue top tube (Trace metal-free; Sodium Heparin). Gray top tube (Sodium Fluoride / Potassium Oxalate). Green top tube (Sodium Heparin).
 Scope of Analysis: ICP/MS (82175): Arsenic
 Method (CPT Code) ICP/MS (83018): Bismuth
 ICP/MS (83825): Mercury
 ICP/MS (84255): Selenium
 ICP/MS (83018): Thallium
 ICP/MS (83018): Antimony
 ICP/MS (83655): Lead

Compound Name	Units	Reference Comment
Antimony	mcg/L	Normally: Less than 5 mcg/L. NMS Labs has demonstrated that certain collection tubes can artifactually increase measured antimony concentrations rendering reported concentrations difficult to interpret.
Bismuth	mcg/L	Normal: Less than 1.0 mcg/L
Lead	mcg/dL	Reported geometric mean blood lead concentration for US population (both adults and children) is less than 2 mcg/dL (taking into account the 95% CI). The following are the reported age-based 50th and 95th percentiles (with 95% CI)*: Age 1 - 5 years: 50th Percentile: 1.15 mcg/dL (1.03 - 1.27) 95th Percentile: 3.37 mcg/dL (2.63 - 4.11) Age 6 - 11 years: 50th Percentile: 0.81 mcg/dL (0.74 - 0.84) 95th Percentile: 2.01 mcg/dL (1.88 - 2.25) Age 12 - 19 years: 50th Percentile: 0.66 mcg/dL (0.59 - 0.70) 95th Percentile: 1.72 mcg/dL (1.52 - 1.86) Age 20 years and above: 50th Percentile: 1.20 mcg/dL (1.14 - 1.25) 95th Percentile: 3.57 mcg/dL (3.29 - 3.84)



New Tests and Test Updates

Test Changes

Compound Name	Units	Reference Comment
		<p>*National Health and Nutrition Examination Survey, 2009-2010 data; Fourth National Report on Human Exposure to Environmental Chemicals, Updated Tables, September 2012. Department of Health and Human Services, Centers for Disease Control and Prevention.</p> <p>The US Centers for Disease Control and Prevention (CDC) reference value based on the 97.5th percentile of the blood lead level distribution in US children aged 1-5 years is 5 mcg/dL.</p> <p>It is reported that blood lead levels in the range of 5 - 9 mcg/dL have been associated with adverse health effects in children aged 6 years and younger.</p> <p>Additionally, the following guidelines are offered by US Centers for Disease Control and Prevention, especially in respect to children: 10 - 14 mcg/dL is moderately high and may require re-screening. 20 - 44 mcg/dL is high and may require immediate medical attention. 45 - 69 mcg/dL requires urgent attention. Greater than 70 mcg/dL is a medical emergency.</p> <p>Refer to OSHA's website for workplace information. Various states require that levels above certain cutoffs must be reported to the state in which the patient resides. Please contact NMS Labs if you need assistance in supplying your state with the required information.</p>

2693R Metals/Metalloids Acute Poisoning Panel, RBCs

Summary of Changes: Specimen Requirements were changed.
 Specimen Requirements (Special Handling) were changed.
 Specimen Requirements (Rejection Criteria) were changed.
 Scope of Analysis was changed.
 Reference Comment was changed.
 Barium was removed.



New Tests and Test Updates

Test Changes

- Specimen Requirements: 10 mL RBCs
 Transport Temperature: Refrigerated
 Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
 Light Protection: Not Required
 Special Handling: Collect sample in Glass Container (see Specimen Container).
 Avoid seafood consumption for 48 hours prior to sample collection. Centrifuge and separate RBCs into an acid washed glass vial within two hours of collection.
 Rejection Criteria: Received Frozen. Plastic container.
 Scope of Analysis: ICP/MS (83655): Lead
 Method (CPT Code) ICP/MS (82175): Arsenic
 ICP/MS (83018): Bismuth
 ICP/MS (83825): Mercury
 ICP/MS (84255): Selenium
 ICP/MS (83018): Thallium
 ICP/MS (83018): Antimony

Compound Name	Units	Reference Comment
Antimony	mcg/L	<p>No reference data available. The RBC sample used for analysis was measured by weight and multiplied by the density of human RBC (1.10 g/mL) Not for clinical diagnostic purposes.</p> <p>NMS Labs has demonstrated that certain collection tubes can artifactually increase measured antimony concentrations rendering reported concentrations difficult to interpret.</p>
Arsenic	mcg/L	<p>Reported overnight fasting reference range: 0.47 - 22 mcg/L</p> <p>Mean = 4.8 mcg/L Median = 2.0 mcg/L 19 of 21 normal subjects had concentrations less than 9.5 mcg/L The RBC sample used for analysis was measured by weight and multiplied by the density of human RBC (1.10 g/mL) Not for clinical diagnostic purposes.</p> <p>Various states require that levels above certain cutoffs must be reported to the state in which the patient resides. Please contact NMS Labs if you need assistance in supplying your state with the required information.</p>



New Tests and Test Updates

Test Changes

Compound Name	Units	Reference Comment
Bismuth	mcg/L	No reference data available. The RBC sample used for analysis was measured by weight and multiplied by the density of human RBC (1.10 g/mL) Not for clinical diagnostic purposes.
Lead	mcg/dL	NMS Labs derived data: 10th - 90th Percentile Data: Mean, 3.1 mcg/dL +/- 1.3 (SD); range, 1.1 - 6.9 mcg/dL (N = 26). The RBC sample used for analysis was measured by weight and multiplied by the density of human RBC (1.10 g/mL) Not for clinical diagnostic purposes.
Thallium	mcg/L	No reference data available. The RBC sample used for analysis was measured by weight and multiplied by the density of human RBC (1.10 g/mL) Not for clinical diagnostic purposes.

2661B Metals/Metalloids Panel 1, Blood

Summary of Changes: Specimen Requirements were changed.
Specimen Requirements (Special Handling) were changed.
Specimen Requirements (Rejection Criteria) were changed.
Reference Comment was changed.

Specimen Requirements: 3 mL Blood
 Transport Temperature: Refrigerated
 Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
 Light Protection: Not Required
 Special Handling: Clotted Blood specimens are not acceptable.
 Avoid seafood consumption for 48 hours prior to sample collection. Submit in container with a non-Heparin based anticoagulant. Tubes containing Heparin based anticoagulants are not acceptable.
 Rejection Criteria: Light Green top tube (Lithium Heparin). Tan top tube - glass (Sodium Heparin). Royal Blue top tube (Trace metal-free; Sodium Heparin). Green top tube (Sodium Heparin).
 Scope of Analysis: ICP/MS (83655): Lead
 Method (CPT Code) ICP/MS (82175): Arsenic
 ICP/MS (83825): Mercury



New Tests and Test Updates

Test Changes

Compound Name	Units	Reference Comment
Lead	mcg/dL	<p>Reported geometric mean blood lead concentration for US population (both adults and children) is less than 2 mcg/dL (taking into account the 95% CI).</p> <p>The following are the reported age-based 50th and 95th percentiles (with 95% CI)*:</p> <p>Age 1 - 5 years: 50th Percentile: 1.15 mcg/dL (1.03 - 1.27) 95th Percentile: 3.37 mcg/dL (2.63 - 4.11)</p> <p>Age 6 - 11 years: 50th Percentile: 0.81 mcg/dL (0.74 - 0.84) 95th Percentile: 2.01 mcg/dL (1.88 - 2.25)</p> <p>Age 12 - 19 years: 50th Percentile: 0.66 mcg/dL (0.59 - 0.70) 95th Percentile: 1.72 mcg/dL (1.52 - 1.86)</p> <p>Age 20 years and above: 50th Percentile: 1.20 mcg/dL (1.14 - 1.25) 95th Percentile: 3.57 mcg/dL (3.29 - 3.84)</p> <p>*National Health and Nutrition Examination Survey, 2009-2010 data; Fourth National Report on Human Exposure to Environmental Chemicals, Updated Tables, September 2012. Department of Health and Human Services, Centers for Disease Control and Prevention.</p> <p>The US Centers for Disease Control and Prevention (CDC) reference value based on the 97.5th percentile of the blood lead level distribution in US children aged 1-5 years is 5 mcg/dL.</p> <p>It is reported that blood lead levels in the range of 5 - 9 mcg/dL have been associated with adverse health effects in children aged 6 years and younger.</p> <p>Additionally, the following guidelines are offered by US Centers for Disease Control and Prevention, especially in respect to children: 10 - 14 mcg/dL is moderately high and may require re-screening. 20 - 44 mcg/dL is high and may require immediate medical attention. 45 - 69 mcg/dL requires urgent attention. Greater than 70 mcg/dL is a medical emergency.</p>



New Tests and Test Updates

Test Changes

Compound Name	Units	Reference Comment
		Refer to OSHA's website for workplace information. Various states require that levels above certain cutoffs must be reported to the state in which the patient resides. Please contact NMS Labs if you need assistance in supplying your state with the required information.

2663B Metals/Metalloids Panel 3, Blood

Summary of Changes: Specimen Requirements (Special Handling) were changed.
Specimen Requirements (Rejection Criteria) were changed.
Reference Comment was changed.

- Specimen Requirements: 5 mL Blood
 Transport Temperature: Refrigerated
 Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
 Light Protection: Yes
 Special Handling: Clotted Blood specimens are not acceptable.
 Avoid seafood consumption for 48 hours prior to sample collection. Submit in container with a non-Heparin based anticoagulant. Tubes containing Heparin based anticoagulants are not acceptable.
 Rejection Criteria: Not received Light Protected. Light Green top tube (Lithium Heparin). Tan top tube - glass (Sodium Heparin). Royal Blue top tube (Trace metal-free; Sodium Heparin). Green top tube (Sodium Heparin).
 Scope of Analysis: ICP/MS (82495): Chromium
 Method (CPT Code) ICP/MS (82300): Cadmium
 H (84202): ZPP
 ICP/MS (83655): Lead
 ICP/MS (82175): Arsenic
 ICP/MS (83825): Mercury

Compound Name	Units	Reference Comment
Lead	mcg/dL	Reported geometric mean blood lead concentration for US population (both adults and children) is less than 2 mcg/dL (taking into account the 95% CI). The following are the reported age-based 50th and 95th percentiles (with 95% CI)*: Age 1 - 5 years: 50th Percentile: 1.15 mcg/dL (1.03 - 1.27) 95th Percentile: 3.37 mcg/dL (2.63 - 4.11) Age 6 - 11 years: 50th Percentile: 0.81 mcg/dL (0.74 - 0.84) 95th Percentile: 2.01 mcg/dL (1.88 - 2.25) Age 12 - 19 years: 50th Percentile: 0.66 mcg/dL (0.59 - 0.70) 95th Percentile: 1.72 mcg/dL (1.52 - 1.86)



New Tests and Test Updates

Test Changes

Compound Name	Units	Reference Comment
		<p>Age 20 years and above: 50th Percentile: 1.20 mcg/dL (1.14 - 1.25) 95th Percentile: 3.57 mcg/dL (3.29 - 3.84)</p> <p>*National Health and Nutrition Examination Survey, 2009-2010 data; Fourth National Report on Human Exposure to Environmental Chemicals, Updated Tables, September 2012. Department of Health and Human Services, Centers for Disease Control and Prevention.</p> <p>The US Centers for Disease Control and Prevention (CDC) reference value based on the 97.5th percentile of the blood lead level distribution in US children aged 1-5 years is 5 mcg/dL.</p> <p>It is reported that blood lead levels in the range of 5 - 9 mcg/dL have been associated with adverse health effects in children aged 6 years and younger.</p> <p>Additionally, the following guidelines are offered by US Centers for Disease Control and Prevention, especially in respect to children: 10 - 14 mcg/dL is moderately high and may require re-screening. 20 - 44 mcg/dL is high and may require immediate medical attention. 45 - 69 mcg/dL requires urgent attention. Greater than 70 mcg/dL is a medical emergency.</p> <p>Refer to OSHA's website for workplace information. Various states require that levels above certain cutoffs must be reported to the state in which the patient resides. Please contact NMS Labs if you need assistance in supplying your state with the required information.</p>

4212B Strontium, Blood

Summary of Changes: Specimen Requirements (Rejection Criteria) were changed.
Stability was changed.
Reference Comment was changed.



New Tests and Test Updates

Test Changes

Specimen Requirements: 1 mL Blood
 Transport Temperature: Refrigerated
 Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
 Light Protection: Not Required
 Special Handling: Clotted Blood specimens are not acceptable.
 Submit in container with a non-Heparin based anticoagulant. Tubes containing Heparin based anticoagulants are not acceptable.
 Rejection Criteria: Light Green top tube (Lithium Heparin). Tan top tube - glass (Sodium Heparin). Royal Blue top tube (Trace metal-free; Sodium Heparin). Lavender top tube (EDTA). Green top tube (Sodium Heparin).
 Stability: Room Temperature: 30 day(s)
 Refrigerated: 30 day(s)
 Frozen (-20 °C): 30 day(s)
 Scope of Analysis: ICP/MS (83018): Strontium
 Method (CPT Code)

Compound Name	Units	Reference Comment
Strontium	mcg/L	Normally: Less than 40 mcg/L. NMS Labs has demonstrated that certain collection tubes can artifactually increase measured strontium concentrations rendering reported concentrations difficult to interpret.

4212R Strontium, RBCs

Summary of Changes: Specimen Requirements were changed.
 Specimen Requirements (Rejection Criteria) were changed.
 Reference Comment was changed.

Specimen Requirements: 2 mL RBCs
 Transport Temperature: Refrigerated
 Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
 Light Protection: Not Required
 Special Handling: Centrifuge and separate RBCs into an acid washed plastic screw capped vial within two hours of collection.
 Rejection Criteria: Received Frozen. Lavender top tube (EDTA).
 Scope of Analysis: ICP/MS (83018): Strontium
 Method (CPT Code)



New Tests and Test Updates

Test Changes

Compound Name	Units	Reference Comment
Strontium	mcg/L	No reference data available. The RBC sample used for analysis was measured by weight and multiplied by the density of human RBC (1.10 g/mL) Not for clinical diagnostic purposes. NMS Labs has demonstrated that certain collection tubes can artifactually increase measured strontium concentrations rendering reported concentrations difficult to interpret.

4370B **Thallium, Blood**

Summary of Changes: Stability was changed.

Stability: Room Temperature: 30 day(s)
Refrigerated: 30 day(s)
Frozen (-20 °C): 30 day(s)

4370R **Thallium, RBCs**

Summary of Changes: Specimen Requirements were changed.
Reference Comment was changed.

Specimen Requirements: 2 mL RBCs
Transport Temperature: Refrigerated
Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
Light Protection: Not Required
Special Handling: Centrifuge and separate RBCs into an acid washed plastic screw capped vial within two hours of collection.
Rejection Criteria: Received Frozen.
Scope of Analysis: ICP/MS (83018): Thallium
Method (CPT Code)

Compound Name	Units	Reference Comment
Thallium	mcg/L	No reference data available. The RBC sample used for analysis was measured by weight and multiplied by the density of human RBC (1.10 g/mL) Not for clinical diagnostic purposes.

4485B **Tin - Total, Blood**

Summary of Changes: Stability was changed.



New Tests and Test Updates

Test Changes

Stability: Room Temperature: 30 day(s)
Refrigerated: 30 day(s)
Frozen (-20 °C): 30 day(s)

4485R Tin - Total, RBCs

Summary of Changes: Specimen Requirements were changed.
Reference Comment was changed.

Specimen Requirements: 2 mL RBCs
Transport Temperature: Refrigerated
Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
Light Protection: Not Required
Special Handling: Centrifuge and separate RBCs into an acid washed plastic screw capped vial within two hours of collection.
Rejection Criteria: Received Frozen.
Scope of Analysis: ICP/MS (83789): Tin
Method (CPT Code)

Compound Name	Units	Reference Comment
Tin	mcg/L	No reference data available. The RBC sample used for analysis was measured by weight and multiplied by the density of human RBC (1.10 g/mL) Not for clinical diagnostic purposes.

4730B Tungsten, Blood

Summary of Changes: Stability was changed.

Stability: Room Temperature: 30 day(s)
Refrigerated: 30 day(s)
Frozen (-20 °C): 30 day(s)

4730R Tungsten, RBCs

Summary of Changes: Specimen Requirements were changed.
Reference Comment was changed.

Specimen Requirements: 2 mL RBCs
Transport Temperature: Refrigerated
Specimen Container: Royal Blue top tube (Trace metal-free; EDTA)
Light Protection: Not Required
Special Handling: Centrifuge and separate RBCs into an acid washed plastic screw capped vial within two hours of collection.
Rejection Criteria: Received Frozen.



Effective Date:

Monday, July 15, 2013

New Tests and Test Updates

Test Changes

Scope of Analysis: ICP/MS (83018): Tungsten
Method (CPT Code)

Compound Name	Units	Reference Comment
Tungsten	mcg/L	No reference data available. The RBC sample used for analysis was measured by weight and multiplied by the density of human RBC (1.10 g/mL) Not for clinical diagnostic purposes.