



Effective Date:  
Monday, June 17, 2013

## New Tests and Test Updates

### Immediate Action

Modified Date: 05/06/2013

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, June 17, 2013

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**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.

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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.



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## New Tests and Test Updates

Test Code	Test Name	New Test	Test Name	Method / CPT Code	Specimen Req.	Stability	Scope	Units	Reference Comments	Discontinue
0410SP	Antimony, Serum/Plasma				•	•			•	
0410U	Antimony, Urine				•	•			•	
0460UH	Arsenic, 24 Hour Urine				•	•			•	
0460SP	Arsenic, Serum/Plasma			•		•				
0460U	Arsenic, Urine				•	•			•	
0519SP	Barium, Serum/Plasma				•	•			•	
0519U	Barium, Urine				•				•	
0680SP	Bismuth, Serum/Plasma								•	
0680U	Bismuth, Urine				•	•			•	
1042U	Cesium, Urine					•				
6303U	Firefighter Core Baseline Profile, Urine								•	
2243U	Heavy Metals Panel 4, Urine (CSA)					•			•	
2241U	Heavy Metals Panel 5A, Urine (CSA)								•	
2242U	Heavy Metals Panel 5B, Urine (CSA)					•			•	
2406SP	Indium, Serum/Plasma				•					
2406U	Indium, Urine				•	•			•	
2492UH	Lead, 24 Hour Urine				•	•			•	
2492U	Lead, Urine				•	•				
2233U	Metals Panel 2, Urine (CSA)								•	
2664UH	Metals Panel 4 (Arsenic, Cadmium, Lead, Mercury), 24 Hour Urine				•				•	
2664U	Metals Panel 4 (Arsenic, Cadmium, Lead, Mercury), Urine				•				•	
2693SP	Metals/Metalloids Acute Poisoning Panel, Serum/Plasma				•		•		•	
2693U	Metals/Metalloids Acute Poisoning Panel, Urine				•				•	
2244U	Metals/Metalloids Panel (11), Urine (CSA)								•	
2661U	Metals/Metalloids Panel 1, Urine				•				•	
2663U	Metals/Metalloids Panel 3, Urine								•	
2240U	Metals/Metalloids Panel, Urine (CSA)								•	
6317U	Semi Conductor Panel, Urine								•	
4212SP	Strontium, Serum/Plasma					•			•	
4212U	Strontium, Urine				•	•			•	



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Test Code	Test Name	New Test	Test Name	Method / CPT Code	Specimen Req.	Stability	Scope	Units	Reference Comments	Discontinue
4370SP	Thallium, Serum/Plasma					•				
4370U	Thallium, Urine					•				
4485SP	Tin - Total, Serum/Plasma				•					
4485U	Tin - Total, Urine					•				
4730SP	Tungsten, Serum/Plasma					•				
4730U	Tungsten, Urine					•			•	



# New Tests and Test Updates

## Test Changes

### 0410SP Antimony, Serum/Plasma

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

Specimen Requirements: 1 mL Serum or Plasma  
Transport Temperature: Refrigerated  
Specimen Container: Plasma: Royal Blue top tube (Trace metal-free; EDTA), Serum: Royal Blue top tube (Trace metal-free; No additive)  
Light Protection: Not Required  
Special Handling: Collect sample in Glass Container (see Specimen Container). Promptly centrifuge and separate Serum or Plasma into an acid washed plastic screw capped vial using approved guidelines. Acid washed Polypropylene vial is preferred.  
Rejection Criteria: Gray top tube (Sodium Fluoride / Potassium Oxalate). Polymer gel separation tube (SST or PST).  
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 1 mcg/L.  NMS Labs has demonstrated that certain collection tubes can artifactually increase measured antimony concentrations rendering reported concentrations difficult to interpret.

### 0410U Antimony, Urine

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

Specimen Requirements: 3 mL Urine  
Transport Temperature: Refrigerated  
Specimen Container: Plastic container (Acid washed or Trace metal-free), Plastic container (preservative-free)  
Light Protection: Not Required  
Special Handling: Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection.  
Rejection Criteria: Received Room Temperature.



# New Tests and Test Updates

## Test Changes

Stability: Room Temperature: 5 day(s)  
Refrigerated: 30 day(s)  
Frozen (-20 °C): 30 day(s)

Scope of Analysis: Colorimetry (82570): Creatinine  
Method (CPT Code) ICP/MS (83018): Antimony, Antimony (Creatinine corrected)

Compound Name	Units	Reference Comment
Antimony	mcg/L	Normally: Less than 1 mcg/L

### 0460UH Arsenic, 24 Hour Urine

Summary of Changes: Specimen Requirements (Special Handling) were changed.  
Stability was changed.  
Reference Comment was changed.  
Arsenic [mcg/24 hr] was renamed to: Arsenic (Urine Volume corrected)

Specimen Requirements: 1 mL 24 Hour Urine  
Transport Temperature: Refrigerated  
Specimen Container: Plastic container (Acid washed or Trace metal-free)  
Light Protection: Not Required  
Special Handling: Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection. Avoid seafood consumption for 48 hours prior to sample collection.  
Rejection Criteria: None  
Stability: Room Temperature: 30 day(s)  
Refrigerated: 30 day(s)  
Frozen (-20 °C): 30 day(s)  
Scope of Analysis: ICP/MS (82175): Urine Volume, Arsenic, Arsenic (Urine Volume corrected)  
Method (CPT Code)

Compound Name	Units	Reference Comment
Arsenic (Urine Volume corrected)	mcg/24 hr	Total Arsenic is generally less than 200 mcg/24 hr in urine. Concentrations are highly variable based on diet, environment and time since exposure. Seafood consumption within 2 to 3 days before specimen collection can markedly increase total Arsenic levels.  Calculated result based on documented urine volume. Result is dependent on 24 hour volume specified by client.  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.

### 0460SP Arsenic, Serum/Plasma



# New Tests and Test Updates

## Test Changes

Summary of Changes: Stability was changed.  
**Methods/CPT Codes were changed [ICP/MS (82175)]**

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

Scope of Analysis: ICP/MS (82175): Arsenic  
 Method (CPT Code)

### 0460U Arsenic, Urine

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

Specimen Requirements: 3 mL Urine

Transport Temperature: Refrigerated

Specimen Container: Plastic container (Acid washed or Trace metal-free), Plastic container (preservative-free)

Light Protection: Not Required

Special Handling: Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection. Avoid seafood consumption for 48 hours prior to sample collection.

Rejection Criteria: Received Room Temperature.

Stability: Room Temperature: 5 day(s)  
 Refrigerated: 30 day(s)  
 Frozen (-20 °C): 30 day(s)

Scope of Analysis: Colorimetry (82570): Creatinine  
 Method (CPT Code) ICP/MS (82175): Arsenic, Arsenic (Creatinine corrected)

Compound Name	Units	Reference Comment
Arsenic	mcg/L	Total Arsenic is generally less than 100 mcg/L in urine. Concentrations are highly variable based on diet, environment and time since exposure. Seafood consumption within 2 to 3 days before specimen collection can markedly increase total Arsenic levels.  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.

### 0519SP Barium, Serum/Plasma



# New Tests and Test Updates

## Test Changes

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 Serum or Plasma  
 Transport Temperature: Refrigerated  
 Specimen Container: Plasma: Royal Blue top tube (Trace metal-free; EDTA), Serum: Royal Blue top tube (Trace metal-free; No additive)  
 Light Protection: Not Required  
 Special Handling: Collect sample in plastic container (see Specimen Container). Promptly centrifuge and separate Serum or Plasma into an acid washed plastic screw capped vial using approved guidelines.  
 Rejection Criteria: Glass container. Polymer gel separation tube (SST or PST).  
 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.

### 0519U Barium, Urine

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

Specimen Requirements: 1 mL Urine  
 Transport Temperature: Room Temperature  
 Specimen Container: Plastic container (Acid washed or Trace metal-free)  
 Light Protection: Not Required  
 Special Handling: Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection.  
 Rejection Criteria: 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	Normally: Less than 10 mcg/L

### 0680SP Bismuth, Serum/Plasma

Summary of Changes: Reference Comment was changed.

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

Compound Name	Units	Reference Comment
Bismuth	mcg/L	Normal: less than 0.5 mcg/L.

### 0680U Bismuth, Urine

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

Specimen Requirements: 1 mL Urine  
 Transport Temperature: Refrigerated  
 Specimen Container: Plastic container (Acid washed or Trace metal-free)  
 Light Protection: Not Required  
 Special Handling: Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection.  
 Rejection Criteria: None  
 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	Normally: Less than 3 mcg/L

### 1042U Cesium, Urine

Summary of Changes: Stability was changed.

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

### 6303U Firefighter Core Baseline Profile, Urine

Summary of Changes: Reference Comment was changed.





## New Tests and Test Updates

### Test Changes

Scope of Analysis: Colorimetry (82570): Creatinine  
 Method (CPT Code) ICP/MS (82300): Cadmium, Cadmium (Creatinine corrected)  
 ICP/MS (83018): Antimony, Antimony (Creatinine corrected)  
 ICP/MS (83825): Mercury, Mercury (Creatinine corrected)

Compound Name	Units	Reference Comment
Antimony	mcg/L	Normally: less than 1 mcg/L

#### 2243U Heavy Metals Panel 4, Urine (CSA)

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

Stability: Room Temperature: 5 day(s)  
Refrigerated: 14 day(s)  
Frozen (-20 °C): 14 day(s)

Scope of Analysis: Colorimetry (82570): Creatinine  
 Method (CPT Code) ICP/MS (83018): Bismuth  
 ICP/MS (82175): Arsenic, Arsenic (Creatinine corrected)  
 ICP/MS (83018): Antimony, Antimony (Creatinine corrected)  
 ICP/MS (83825): Mercury, Mercury (Creatinine corrected)

Compound Name	Units	Reference Comment
Antimony	mcg/L	Normally: Less than 1 mcg/L
Arsenic	mcg/L	Total Arsenic is generally less than 100 mcg/L in urine. Concentrations are highly variable based on diet, environment and time since exposure. Seafood consumption within 2 to 3 days before specimen collection can markedly increase total Arsenic levels.  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.
Bismuth	mcg/L	Normally: Less than 3 mcg/L

#### 2241U Heavy Metals Panel 5A, Urine (CSA)

Summary of Changes: Reference Comment was changed.

Scope of Analysis: Colorimetry (82570): Creatinine  
 Method (CPT Code) ICP/MS (83655): Lead, Lead (Creatinine corrected)  
 ICP/MS (82175): Arsenic, Arsenic (Creatinine corrected)  
 ICP/MS (83018): Strontium, Strontium (Creatinine corrected)  
 ICP/MS (83825): Mercury, Mercury (Creatinine corrected)  
 ICP/MS (82495): Chromium, Chromium (Creatinine corrected)



## New Tests and Test Updates

### Test Changes

Compound Name	Units	Reference Comment
Arsenic	mcg/L	Total Arsenic is generally less than 100 mcg/L in urine. Concentrations are highly variable based on diet, environment and time since exposure. Seafood consumption within 2 to 3 days before specimen collection can markedly increase total Arsenic levels.  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/L	Normally: Less than 5 mcg/L.  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.
Strontium	mcg/L	Normally: Less than 500 mcg/L

#### 2242U Heavy Metals Panel 5B, Urine (CSA)

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

Stability: Room Temperature: 5 day(s)  
Refrigerated: 14 day(s)  
Frozen (-20 °C): 14 day(s)

Scope of Analysis: Colorimetry (82570): Creatinine  
Method (CPT Code) ICP/MS (83018): Bismuth  
ICP/MS (82175): Arsenic, Arsenic (Creatinine corrected)  
ICP/MS (84255): Selenium, Selenium (Creatinine corrected)  
ICP/MS (83018): Tellurium  
ICP/MS (83825): Mercury, Mercury (Creatinine corrected)



## New Tests and Test Updates

### Test Changes

Compound Name	Units	Reference Comment
Arsenic	mcg/L	Total Arsenic is generally less than 100 mcg/L in urine. Concentrations are highly variable based on diet, environment and time since exposure. Seafood consumption within 2 to 3 days before specimen collection can markedly increase total Arsenic levels.  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.
Bismuth	mcg/L	Normally: Less than 3 mcg/L

#### 2406SP Indium, Serum/Plasma

Summary of Changes: Specimen Requirements (Specimen Container) were changed.

Specimen Requirements: 1 mL Serum or Plasma  
 Transport Temperature: Refrigerated  
 Specimen Container: Plasma: Royal Blue top tube (Trace metal-free; EDTA), Serum: Royal Blue top tube (Trace metal-free; No additive)  
 Light Protection: Not Required  
 Special Handling: Promptly centrifuge and separate Serum or Plasma into an acid washed plastic screw capped vial using approved guidelines.  
 Rejection Criteria: Polymer gel separation tube (SST or PST).

#### 2406U Indium, Urine

Summary of Changes: Specimen Requirements (Transport Temperature) were changed.  
 Stability was changed.  
 Reference Comment was changed.

Specimen Requirements: 1 mL Urine  
 Transport Temperature: Room Temperature  
 Specimen Container: Plastic container (Acid washed or Trace metal-free)  
 Light Protection: Not Required  
 Special Handling: Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection.  
 Rejection Criteria: None  
 Stability: Room Temperature: 30 day(s)  
 Refrigerated: 30 day(s)  
 Frozen (-20 °C): 30 day(s)



# New Tests and Test Updates

## Test Changes

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

Compound Name	Units	Reference Comment
Indium	mcg/L	Normally: Less than 0.5 mcg/L

### 2492UH Lead, 24 Hour Urine

Summary of Changes: Specimen Requirements (Special Handling) were changed.  
Stability was changed.  
Reference Comment was changed.  
Lead [mcg/24 hr] was renamed to: Lead (Urine Volume corrected)

Specimen Requirements: 1 mL 24 Hour Urine  
Transport Temperature: Refrigerated  
Specimen Container: Plastic container (Acid washed or Trace metal-free)  
Light Protection: Not Required  
Special Handling: Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection.  
Rejection Criteria: None  
Stability: Room Temperature: 30 day(s)  
Refrigerated: 30 day(s)  
Frozen (-20 °C): 30 day(s)  
Scope of Analysis: ICP/MS (83655): Urine Volume, Lead, Lead (Urine Volume corrected)  
Method (CPT Code)

Compound Name	Units	Reference Comment
Lead (Urine Volume corrected)	mcg/24 hr	Normally less than 10 mcg/24 hours. Calculated result based on documented urine volume. Result is dependent on 24 hour volume specified by client.

### 2492U Lead, Urine

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

Specimen Requirements: 3 mL Urine  
Transport Temperature: Refrigerated  
Specimen Container: Plastic container (Acid washed or Trace metal-free), Plastic container (preservative-free)  
Light Protection: Not Required  
Special Handling: Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection.  
Rejection Criteria: Received Room Temperature.



# New Tests and Test Updates

## Test Changes

Stability: Room Temperature: 5 day(s)  
Refrigerated: 30 day(s)  
Frozen (-20 °C): 30 day(s)

### 2233U Metals Panel 2, Urine (CSA)

Summary of Changes: Reference Comment was changed.

Scope of Analysis: Colorimetry (82570): Creatinine  
Method (CPT Code) ICP/MS (82175): Arsenic, Arsenic (Creatinine corrected)  
ICP/MS (83825): Mercury, Mercury (Creatinine corrected)

Compound Name	Units	Reference Comment
Arsenic	mcg/L	Total Arsenic is generally less than 100 mcg/L in urine. Concentrations are highly variable based on diet, environment and time since exposure. Seafood consumption within 2 to 3 days before specimen collection can markedly increase total Arsenic levels.  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.

### 2664UH Metals Panel 4 (Arsenic, Cadmium, Lead, Mercury), 24 Hour Urine

Summary of Changes: Specimen Requirements were changed.  
Reference Comment was changed.  
Arsenic [mcg/24 hr] was renamed to: Arsenic (Urine Volume corrected)  
Lead [mcg/24 hr] was renamed to: Lead (Urine Volume corrected)  
Cadmium [mcg/24 hr] was renamed to: Cadmium (Urine Volume corrected)  
Mercury [mcg/24 hr] was renamed to: Mercury (Urine Volume corrected)

Specimen Requirements: 4 mL 24 Hour Urine  
Transport Temperature: Refrigerated  
Specimen Container: Plastic container (Acid washed or Trace metal-free)  
Light Protection: Not Required  
Special Handling: Unpreserved urine should be refrigerated immediately and analyzed within 1 week of collection. Acceptable preservatives include: Trace Metal Free Hydrochloric Acid or Nitric Acid (0.1 mL of 12M acid/10 mL urine). Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection. Avoid seafood consumption for 48 hours prior to sample collection.  
Rejection Criteria: None  
Scope of Analysis: ICP/MS (82175): Urine Volume, Arsenic, Arsenic (Urine Volume corrected)  
Method (CPT Code) ICP/MS (83655): Urine Volume, Lead, Lead (Urine Volume corrected)  
ICP/MS (82300): Urine Volume, Cadmium, Cadmium (Urine Volume corrected)  
ICP/MS (83825): Urine Volume, Mercury, Mercury (Urine Volume corrected)



# New Tests and Test Updates

## Test Changes

Compound Name	Units	Reference Comment
Arsenic	mcg/L	<p>Total Arsenic is generally less than 100 mcg/L in urine. Concentrations are highly variable based on diet, environment and time since exposure. Seafood consumption within 2 to 3 days before specimen collection can markedly increase total Arsenic levels.</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>
Arsenic (Urine Volume corrected)	mcg/24 hr	<p>Total Arsenic is generally less than 200 mcg/24 hr in urine. Concentrations are highly variable based on diet, environment and time since exposure. Seafood consumption within 2 to 3 days before specimen collection can markedly increase total Arsenic levels.</p> <p>Calculated result based on documented urine volume. Result is dependent on 24 hour volume specified by client.</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>
Cadmium (Urine Volume corrected)	mcg/24 hr	<p>Calculated result based on documented urine volume. Result is dependent on 24 hour volume specified by client.</p>
Lead (Urine Volume corrected)	mcg/24 hr	<p>Normally: less than 10 mcg/24 hours. Calculated result based on documented urine volume. Result is dependent on 24 hour volume specified by client.</p>
Mercury (Urine Volume corrected)	mcg/24 hr	<p>Calculated result based on documented urine volume. Result is dependent on 24 hour volume specified by client.</p>

### 2664U Metals Panel 4 (Arsenic, Cadmium, Lead, Mercury), Urine

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



# New Tests and Test Updates

## Test Changes

- Specimen Requirements: 6 mL Urine  
 Transport Temperature: Refrigerated  
 Specimen Container: Plastic container (Acid washed or Trace metal-free), Plastic container (preservative-free)  
 Light Protection: Not Required  
 Special Handling: Unpreserved urine should be refrigerated immediately and analyzed within 1 week of collection. Acceptable preservatives include: Trace Metal Free Hydrochloric Acid or Nitric Acid (0.1 mL of 12M acid/10 mL urine). Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection. Avoid seafood consumption for 48 hours prior to sample collection.  
 Rejection Criteria: Received Room Temperature.  
 Scope of Analysis: Colorimetry (82570): Creatinine  
 Method (CPT Code) ICP/MS (82175): Arsenic, Arsenic (Creatinine corrected)  
 ICP/MS (82300): Cadmium, Cadmium (Creatinine corrected)  
 ICP/MS (83655): Lead, Lead (Creatinine corrected)  
 ICP/MS (83825): Mercury, Mercury (Creatinine corrected)

Compound Name	Units	Reference Comment
Arsenic	mcg/L	Total Arsenic is generally less than 100 mcg/L in urine. Concentrations are highly variable based on diet, environment and time since exposure. Seafood consumption within 2 to 3 days before specimen collection can markedly increase total Arsenic levels.  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/L	Normally less than 5 mcg/L.  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.

### 2693SP Metals/Metalloids Acute Poisoning Panel, Serum/Plasma

- 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: 6 mL Serum or Plasma  
 Transport Temperature: Refrigerated  
 Specimen Container: Plasma: Royal Blue top tube (Trace metal-free; EDTA), Serum: Royal Blue top tube (Trace metal-free; No additive)  
 Light Protection: Not Required  
 Special Handling: Collect sample in plastic container (see Specimen Container).  
 Avoid seafood consumption for 48 hours prior to sample collection. Promptly centrifuge and separate Serum or Plasma into an acid washed plastic screw capped vial using approved guidelines. Acid washed Poly Propylene vial is preferred.  
 Rejection Criteria: Gray top tube (Sodium Fluoride / Potassium Oxalate). Polymer gel separation tube (SST or PST).  
 Scope of Analysis: ICP/MS (82175): Arsenic  
 Method (CPT Code) ICP/MS (83018): Bismuth  
 ICP/MS (83825): Mercury  
 ICP/MS (84255): Selenium  
 ICP/MS (83655): Lead  
 ICP/MS (83018): Antimony  
 ICP/MS (83018): Thallium

Compound Name	Units	Reference Comment
Antimony	mcg/L	Normally: Less than 1 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 0.5 mcg/L

### 2693U Metals/Metalloids Acute Poisoning Panel, Urine

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

Specimen Requirements: 7 mL Urine  
 Transport Temperature: Refrigerated  
 Specimen Container: Plastic container (Acid washed or Trace metal-free)  
 Light Protection: Not Required  
 Special Handling: Unpreserved urine should be refrigerated immediately and analyzed within 1 week of collection. Acceptable preservatives include: Trace Metal Free Hydrochloric Acid or Nitric Acid (0.1 mL of 12M acid/10 mL urine). Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection. Avoid seafood consumption for 48 hours prior to sample collection.  
 Rejection Criteria: Glass container.





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# New Tests and Test Updates

## Test Changes

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  
 ICP/MS (83018): Barium

Compound Name	Units	Reference Comment
Antimony	mcg/L	Normally: less than 1 mcg/L
Arsenic	mcg/L	Total Arsenic is generally less than 100 mcg/L in urine. Concentrations are highly variable based on diet, environment and time since exposure. Seafood consumption within 2 to 3 days before specimen collection can markedly increase total Arsenic levels.  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.
Barium	mcg/L	Normally: less than 10 mcg/L
Bismuth	mcg/L	Normally: Less than 3 mcg/L
Lead	mcg/L	Normally: less than 5 mcg/L.  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.

### 2244U Metals/Metalloids Panel (11), Urine (CSA)

Summary of Changes: Reference Comment was changed.



# New Tests and Test Updates

## Test Changes

Scope of Analysis: Colorimetry (82570): Creatinine  
 Method (CPT Code) ICP/MS (82108): Aluminum  
 ICP/MS (83018): Antimony, Antimony (Creatinine corrected)  
 ICP/MS (82175): Arsenic, Total Inorganic, Arsenic, Total Inorganic (Creatinine corrected)  
 ICP/MS (83018): Beryllium, Beryllium (Creatinine corrected)  
 ICP/MS (83018): Bismuth  
 ICP/MS (82300): Cadmium, Cadmium (Creatinine corrected)  
 ICP/MS (82495): Chromium, Chromium (Creatinine corrected)  
 ICP/MS (82525): Copper  
 ICP/MS (83825): Mercury, Mercury (Creatinine corrected)  
 ICP/MS (83885): Nickel, Nickel (Creatinine corrected)  
 ICP/OES (84630): Zinc, Zinc (Creatinine corrected)

Compound Name	Units	Reference Comment
Antimony	mcg/L	Normally: Less than 1 mcg/L
Arsenic, Total Inorganic	mcg/L	Total Inorganic Arsenic is generally less than 20 mcg/L in urine.  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.
Bismuth	mcg/L	Normally: Less than 3 mcg/L

### 2661U Metals/Metalloids Panel 1, Urine

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

Specimen Requirements: 4 mL Urine  
 Transport Temperature: Refrigerated  
 Specimen Container: Plastic container (Acid washed or Trace metal-free), Plastic container (preservative-free)  
 Light Protection: Not Required  
 Special Handling: Unpreserved urine should be refrigerated immediately and analyzed within 1 week of collection. Acceptable preservatives include: Trace Metal Free Hydrochloric Acid or Nitric Acid (0.1 mL of 12M acid/10 mL urine). Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection. Avoid seafood consumption for 48 hours prior to sample collection.  
 Rejection Criteria: Received Room Temperature.  
 Scope of Analysis: Colorimetry (82570): Creatinine  
 Method (CPT Code) ICP/MS (82175): Arsenic, Arsenic (Creatinine corrected)  
 ICP/MS (83655): Lead, Lead (Creatinine corrected)  
 ICP/MS (83825): Mercury, Mercury (Creatinine corrected)



# New Tests and Test Updates

## Test Changes

Compound Name	Units	Reference Comment
Arsenic	mcg/L	Total Arsenic is generally less than 100 mcg/L in urine. Concentrations are highly variable based on diet, environment and time since exposure. Seafood consumption within 2 to 3 days before specimen collection can markedly increase total Arsenic levels.  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/L	Normally less than 5 mcg/L.  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.

### 2663U Metals/Metalloids Panel 3, Urine

Summary of Changes: Reference Comment was changed.

Scope of Analysis: Colorimetry (82570): Creatinine  
 Method (CPT Code) ICP/MS (82175): Arsenic, Arsenic (Creatinine corrected)  
 ICP/MS (83655): Lead, Lead (Creatinine corrected)  
 ICP/MS (82300): Cadmium, Cadmium (Creatinine corrected)  
 ICP/MS (83825): Mercury, Mercury (Creatinine corrected)  
 ICP/MS (82495): Chromium, Chromium (Creatinine corrected)

Compound Name	Units	Reference Comment
Arsenic	mcg/L	Total Arsenic is generally less than 100 mcg/L in urine. Concentrations are highly variable based on diet, environment and time since exposure. Seafood consumption within 2 to 3 days before specimen collection can markedly increase total Arsenic levels.  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.



# New Tests and Test Updates

## Test Changes

Compound Name	Units	Reference Comment
Lead	mcg/L	Normally: less than 5 mcg/L.  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.

### 2240U Metals/Metalloids Panel, Urine (CSA)

Summary of Changes: Reference Comment was changed.

Scope of Analysis: Colorimetry (82570): Creatinine  
 Method (CPT Code) ICP/MS (83018): Bismuth  
 ICP/MS (82175): Arsenic, Total Inorganic, Arsenic, Total Inorganic (Creatinine corrected)  
 ICP/MS (82300): Cadmium, Cadmium (Creatinine corrected)  
 ICP/MS (83018): Beryllium, Beryllium (Creatinine corrected)  
 ICP/MS (83825): Mercury, Mercury (Creatinine corrected)  
 ICP/MS (82495): Chromium, Chromium (Creatinine corrected)

Compound Name	Units	Reference Comment
Arsenic, Total Inorganic	mcg/L	Total Inorganic Arsenic is generally less than 20 mcg/L in urine.  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.
Bismuth	mcg/L	Normally: Less than 3 mcg/L

### 6317U Semi Conductor Panel, Urine

Summary of Changes: Reference Comment was changed.

Scope of Analysis: Colorimetry (82570): Creatinine  
 Method (CPT Code) ICP/MS (82175): Arsenic, Arsenic (Creatinine corrected)  
 ICP/MS (84255): Selenium, Selenium (Creatinine corrected)  
 ICP/MS (82300): Cadmium, Cadmium (Creatinine corrected)  
 ICP/MS (83018): Tellurium  
 ICP/MS (83825): Mercury, Mercury (Creatinine corrected)



# New Tests and Test Updates

## Test Changes

Compound Name	Units	Reference Comment
Arsenic	mcg/L	Total Arsenic is generally less than 100 mcg/L in urine. Concentrations are highly variable based on diet, environment and time since exposure. Seafood consumption within 2 to 3 days before specimen collection can markedly increase total Arsenic levels.  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.

### 4212SP Strontium, Serum/Plasma

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): Strontium  
Method (CPT Code)

Compound Name	Units	Reference Comment
Strontium	mcg/L	Generally: Less than 50 mcg/L.  NMS Labs has demonstrated that certain collection tubes can artifactually increase measured strontium concentrations rendering reported concentrations difficult to interpret.

### 4212U Strontium, Urine

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

Specimen Requirements: 1 mL Urine

Transport Temperature: Room Temperature

Specimen Container: Plastic container (Acid washed or Trace metal-free)

Light Protection: Not Required

Special Handling: Avoid exposure to gadolinium-based contrast media for 48 hours prior to sample collection.

Rejection Criteria: None



# New Tests and Test Updates

## Test Changes

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 500 mcg/L

### 4370SP      **Thallium, Serum/Plasma**

Summary of Changes: Stability was changed.

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

### 4370U      **Thallium, Urine**

Summary of Changes: Stability was changed.

Stability: Room Temperature: 5 day(s)  
Refrigerated: 30 day(s)  
Frozen (-20 °C): 30 day(s)

### 4485SP      **Tin - Total, Serum/Plasma**

Summary of Changes: Specimen Requirements (Specimen Container) were changed.

Specimen Requirements: 1 mL Serum or Plasma  
Transport Temperature: Refrigerated  
Specimen Container: Plasma: Royal Blue top tube (Trace metal-free; EDTA), Serum: Royal Blue top tube (Trace metal-free; No additive)  
Light Protection: Not Required  
Special Handling: Promptly centrifuge and separate Serum or Plasma into an acid washed plastic screw capped vial using approved guidelines.  
Rejection Criteria: Polymer gel separation tube (SST or PST).

### 4485U      **Tin - Total, Urine**

Summary of Changes: Stability was changed.

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

### 4730SP      **Tungsten, Serum/Plasma**



Effective Date:  
Monday, June 17, 2013

## New Tests and Test Updates

### Test Changes

Summary of Changes: Stability was changed.

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

#### 4730U Tungsten, Urine

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

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

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

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Compound Name	Units	Reference Comment
Tungsten	mcg/L	Normally less than 1 mcg/L