Changes to Quality Assurance and Certification Test XML Schema
Version 1.2

The purpose of this document is to list the changes that have been made to the Quality Assurance and Certification Schema since the 2014 Q4 release of Version 1.2. This document is organized in the following order:

- Changes to complex elements listed in alphabetic order
- Changes to the validation types

I. Complex Data Elements

The following elements were added in support of reporting for the MATS Rule:

- Added the complex element HgInjectionData as a child of HgSummaryData. This new complex element includes the following elements:

<table>
<thead>
<tr>
<th>Element</th>
<th>Validation Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>InjectionDate</td>
<td>RequiredDateType</td>
</tr>
<tr>
<td>InjectionHour</td>
<td>RequiredHourType</td>
</tr>
<tr>
<td>InjectionMinute</td>
<td>RequiredMinuteType</td>
</tr>
<tr>
<td>MeasuredValue</td>
<td>LinearityValueType</td>
</tr>
<tr>
<td>ReferenceValue</td>
<td>LinearityValueType</td>
</tr>
</tbody>
</table>

- Added the complex element HgSummaryData as child of TestSummaryData. This new complex element includes the following elements:

<table>
<thead>
<tr>
<th>Element</th>
<th>Validation Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>GasLevelCode</td>
<td>GasLevelCodeType</td>
</tr>
<tr>
<td>MeanMeasuredValue</td>
<td>LinearityValueType</td>
</tr>
<tr>
<td>MeanReferenceValue</td>
<td>LinearityValueType</td>
</tr>
<tr>
<td>PercentError</td>
<td>PercentErrorType</td>
</tr>
<tr>
<td>APSIndicator</td>
<td>IndicatorType</td>
</tr>
</tbody>
</table>

- Added the element InjectionProtocolCode as a child of TestSummaryData. Validation type = “InjectionProtocolCodeType.”

II. Validation Types

The following simple types were added:

- Added InjectionProtocolCodeType used by TestSummaryData/InjectionProtocolCode. Enumeration values are HGE and HGO.
The following enumeration values were added:

- Added F2LEXP to validate ExtensionExemptionCodeType in TestExtensionExemptionData/ExtensionOrExemptionCode.

- Added the following values to validate RefMethodCodeType in RATASummaryData/ReferenceMethodCode:
  - 26
  - 26A
  - 320
  - D6348

- Added the following values to validate RequiredTestCodeType in QACertificationEventData/RequiredTestCode:
  - 30
  - 31
  - 32
  - 33
  - 34

- Added the following values to validate TestTypeCodeType in TestSummaryData/TestTypeCode:
  - BCAL
  - DGFMCAL
  - HGLINE
  - HGSI3
  - MFMCAL
  - QGA
  - TSCAL