

Amount of substance, sediments, soils, ores and particulates, United States, NIST (National Institute of Standards and Technology)

Note: In the case where an uncertainty range is given, the expanded uncertainty range spans from the smallest numerical value of the uncertainty to the largest numerical value of the uncertainty found within the quantity range.

Note: Unless otherwise stated, the expanded uncertainty for certified values in reference materials is given at a 95% level of confidence, but the coverage factor is not explicitly equal to 2.

| NMI Service Identifier | Measurement Service Sub-Category | Matrix | Measurand | | Dissemination Range of Measurement Capability | | | Range of Expanded Uncertainties as Disseminated | | | | | | Range of Certified Values in Reference Materials | | | Range of Expanded Uncertainties for Certified Value | | | | | | Mechanism(s) for Measurement Service Delivery |
|------------------------|----------------------------------|----------|----------------------|---------------|---|------|-------|---|------|------|-----------------|---------------------|---|--|-------|-------|---|-----|------|-----------------|---------------------|---|---|
| | | | Analyte or Component | Quantity | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | |
| 8392377 | Sediments | sediment | 2,4'-DDE | Mass fraction | 0.5 | 5 | µg/kg | 14 | 16 | % | 2 | 95% | Yes | 0.73 | 0.73 | µg/kg | 15 | 15 | % | | 95% | Yes | SRM 1941a |
| 8392378 | Sediments | sediment | 4,4'-DDD | Mass fraction | 4 | 10 | µg/kg | 10 | 12 | % | 2 | 95% | Yes | 5.06 | 5.06 | µg/kg | 11 | 11 | % | | 95% | Yes | SRM 1941a |
| 8392379 | Sediments | sediment | 4,4'-DDE | Mass fraction | 5 | 10 | µg/kg | 8 | 9 | % | 2 | 95% | Yes | 6.59 | 6.59 | µg/kg | 8.5 | 8.5 | % | | 95% | Yes | SRM 1941a |
| 8392380 | Sediments | sediment | 4,4'-DDT | Mass fraction | 100 | 140 | µg/kg | 9 | 10 | % | 2 | 95% | Yes | 119 | 119 | µg/kg | 9.2 | 9.2 | % | | 95% | Yes | SRM 1944 |
| 8392381 | Sediments | sediment | cis-chlordane | Mass fraction | 2 | 25 | µg/kg | 5 | 24 | % | 2 | 95% | Yes | 2.33 | 16.51 | µg/kg | 5.0 | 24 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392382 | Sediments | sediment | hexachlorobenzene | Mass fraction | 5 | 90 | µg/kg | 5.0 | 36.0 | % | 2 | 95% | Yes | 6.03 | 70 | µg/kg | 5.8 | 36 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392383 | Sediments | sediment | trans-nonachlor | Mass fraction | 1 | 10 | µg/kg | 6 | 11 | % | 2 | 95% | Yes | 1.26 | 8.2 | µg/kg | 6.2 | 10 | % | | 95% | Yes | SRM 1941a SRM 1944 |
| 8392384 | Sediments | sediment | anthracene | Mass fraction | 175 | 1770 | µg/kg | 7 | 19 | % | 2 | 95% | Yes | 184 | 1770 | µg/kg | 7.6 | 19 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392385 | Sediments | sediment | benz[a]anthracene | Mass fraction | 427 | 5000 | µg/kg | 2.3 | 6 | % | 2 | 95% | Yes | 427 | 4720 | µg/kg | 2.3 | 5.9 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392386 | Sediments | sediment | benzo[a]fluoranthene | Mass fraction | 100 | 1000 | µg/kg | 9 | 16 | % | 2 | 95% | Yes | 118 | 780 | µg/kg | 9.3 | 15 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392387 | Sediments | sediment | benzo[a]pyrene | Mass fraction | 500 | 5000 | µg/kg | 3 | 9 | % | 2 | 95% | Yes | 628 | 4300 | µg/kg | 3.0 | 8.3 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392388 | Sediments | sediment | benzo[b]chrysene | Mass fraction | 75 | 700 | µg/kg | 15 | 21 | % | 2 | 95% | Yes | 99 | 630 | µg/kg | 16 | 20 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392389 | Sediments | sediment | benzo[b]fluoranthene | Mass fraction | 700 | 4000 | µg/kg | 11 | 15 | % | 2 | 95% | Yes | 740 | 3870 | µg/kg | 11 | 15 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392390 | Sediments | sediment | benzo[c]phenanthrene | Mass fraction | 730 | 850 | µg/kg | 13 | 14 | % | 2 | 95% | Yes | 760 | 760 | µg/kg | 13 | 13 | % | | 95% | Yes | SRM 1944 |
| 8392391 | Sediments | sediment | benzo[e]pyrene | Mass fraction | 500 | 4000 | µg/kg | 3 | 11 | % | 2 | 95% | Yes | 553 | 3280 | µg/kg | 3.4 | 11 | % | | 95% | Yes | SRM 1944 SRM 1941a |

Calibration and Measurement Capabilities

| NMI Service Identifier | Measurement Service Sub-Category | Matrix | Measurand | | Dissemination Range of Measurement Capability | | | Range of Expanded Uncertainties as Disseminated | | | | | | Range of Certified Values in Reference Materials | | | Range of Expanded Uncertainties for Certified Value | | | | | | Mechanism(s) for Measurement Service Delivery |
|------------------------|----------------------------------|----------|------------------------|---------------|---|-------|-------|---|----|------|-----------------|---------------------|---|--|------|-------|---|-----|------|-----------------|---------------------|---|---|
| | | | Analyte or Component | Quantity | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | |
| 8392392 | Sediments | sediment | benzo[g,h,i]perylene | Mass fraction | 500 | 3000 | µg/kg | 4 | 13 | % | 2 | 95% | Yes | 525 | 2840 | µg/kg | 3.5 | 13 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392393 | Sediments | sediment | benzo[j]fluoranthene | Mass fraction | 2000 | 2500 | µg/kg | 21 | 22 | % | 2 | 95% | Yes | 2090 | 2090 | µg/kg | 21 | 21 | % | | 95% | Yes | SRM 1944 |
| 8392394 | Sediments | sediment | benzo[k]fluoranthene | Mass fraction | 300 | 2500 | µg/kg | 5 | 9 | % | 2 | 95% | Yes | 361 | 2300 | µg/kg | 5.0 | 8.7 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392395 | Sediments | sediment | chrysene | Mass fraction | 350 | 5000 | µg/kg | 2 | 7 | % | 2 | 95% | Yes | 380 | 4860 | µg/kg | 2.1 | 6.3 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392396 | Sediments | sediment | dibenz[a,c]anthracene | Mass fraction | 40 | 400 | µg/kg | 3.9 | 10 | % | 2 | 95% | Yes | 43.1 | 335 | µg/kg | 3.9 | 8.6 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392397 | Sediments | sediment | dibenz[a,h]anthracene | Mass fraction | 70 | 500 | µg/kg | 13 | 17 | % | 2 | 95% | Yes | 73.9 | 424 | µg/kg | 13 | 16 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392398 | Sediments | sediment | dibenz[a,j]anthracene | Mass fraction | 70 | 600 | µg/kg | 8 | 10 | % | 2 | 95% | Yes | 74.3 | 500 | µg/kg | 8.8 | 9.2 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392399 | Sediments | sediment | fluoranthene | Mass fraction | 800 | 10000 | µg/kg | 3.5 | 8 | % | 2 | 95% | Yes | 981 | 8920 | µg/kg | 3.6 | 8.0 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392400 | Sediments | sediment | fluorene | Mass fraction | 80 | 120 | µg/kg | 8 | 9 | % | 2 | 95% | Yes | 97.3 | 97.3 | µg/kg | 8.8 | 8.8 | % | | 95% | Yes | SRM 1941a |
| 8392401 | Sediments | sediment | indeno[1,2,3-cd]pyrene | Mass fraction | 475 | 3000 | µg/kg | 3.6 | 15 | % | 2 | 95% | Yes | 501 | 2780 | µg/kg | 3.6 | 14 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392402 | Sediments | sediment | naphthalene | Mass fraction | 1000 | 2000 | µg/kg | 13 | 19 | % | 2 | 95% | Yes | 1010 | 1650 | µg/kg | 14 | 19 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392403 | Sediments | sediment | pentaphene | Mass fraction | 30 | 320 | µg/kg | 9 | 29 | % | 2 | 95% | Yes | 42 | 288 | µg/kg | 9.0 | 29 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392404 | Sediments | sediment | perylene | Mass fraction | 400 | 1300 | µg/kg | 12 | 21 | % | 2 | 95% | Yes | 452 | 1170 | µg/kg | 13 | 21 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392405 | Sediments | sediment | phenanthrene | Mass fraction | 450 | 6000 | µg/kg | 4 | 5 | % | 2 | 95% | Yes | 489 | 5270 | µg/kg | 4.2 | 4.7 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392406 | Sediments | sediment | picene | Mass fraction | 70 | 600 | µg/kg | 11 | 18 | % | 2 | 95% | Yes | 80 | 518 | µg/kg | 11 | 18 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392407 | Sediments | sediment | pyrene | Mass fraction | 800 | 10000 | µg/kg | 3 | 5 | % | 2 | 95% | Yes | 811 | 9700 | µg/kg | 3.0 | 4.3 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392408 | Sediments | sediment | triphenylene | Mass fraction | 180 | 1300 | µg/kg | 2 | 26 | % | 2 | 95% | Yes | 197 | 1040 | µg/kg | 5.6 | 26 | % | | 95% | Yes | SRM 1944 SRM 1941a |

Calibration and Measurement Capabilities

| NMI Service Identifier | Measurement Service Sub-Category | Matrix | Measurand | | Dissemination Range of Measurement Capability | | | Range of Expanded Uncertainties as Disseminated | | | | | | Range of Certified Values in Reference Materials | | | Range of Expanded Uncertainties for Certified Value | | | | | | Mechanism(s) for Measurement Service Delivery |
|------------------------|----------------------------------|----------|----------------------|---------------|---|------|-------|---|----|------|-----------------|---------------------|---|--|-------|-------|---|-----|------|-----------------|---------------------|---|---|
| | | | Analyte or Component | Quantity | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | |
| 8392409 | Sediments | sediment | PCB 101 | Mass fraction | 8 | 20 | µg/kg | 14 | 15 | % | 2 | 95% | Yes | 11 | 11 | µg/kg | 15 | 15 | % | | 95% | Yes | SRM 1941a |
| 8392411 | Sediments | sediment | PCB 105 | Mass fraction | 3.4 | 240 | µg/kg | 4 | 14 | % | 2 | 95% | Yes | 3.65 | 201 | µg/kg | 4.5 | 14 | % | | 95% | Yes | SRM 1939a SRM 1941a SRM 1944 |
| 8392412 | Sediments | sediment | PCB 110 | Mass fraction | 8 | 1200 | µg/kg | 6 | 9 | % | 2 | 95% | Yes | 9.47 | 1068 | µg/kg | 6.6 | 9.0 | % | | 95% | Yes | SRM 1939a SRM 1941a SRM 1944 |
| 8392413 | Sediments | sediment | PCB 118 | Mass fraction | 8 | 500 | µg/kg | 7 | 21 | % | 2 | 95% | Yes | 10 | 423 | µg/kg | 7.4 | 21 | % | | 95% | Yes | SRM 1941a SRM 1939a SRM 1944 |
| 8392414 | Sediments | sediment | PCB 128 | Mass fraction | 1.6 | 100 | µg/kg | 3.3 | 18 | % | 2 | 95% | Yes | 1.87 | 91.2 | µg/kg | 3.3 | 17 | % | | 95% | Yes | SRM 1941a SRM 1939a SRM 1944 |
| 8392416 | Sediments | sediment | PCB 149 | Mass fraction | 8 | 500 | µg/kg | 2.4 | 12 | % | 2 | 95% | Yes | 9.2 | 427 | µg/kg | 2.4 | 12 | % | | 95% | Yes | SRM 1939a SRM 1941a SRM 1944 |
| 8392417 | Sediments | sediment | PCB 151 | Mass fraction | 15 | 200 | µg/kg | 1.4 | 3 | % | 2 | 95% | Yes | 16.93 | 192.1 | µg/kg | 1.4 | 2.1 | % | | 95% | Yes | SRM 1944 SRM 1939a |
| 8392418 | Sediments | sediment | PCB 153 | Mass fraction | 15 | 325 | µg/kg | 3.9 | 11 | % | 2 | 95% | Yes | 17.6 | 297 | µg/kg | 3.9 | 11 | % | | 95% | Yes | SRM 1941a SRM 1939a SRM 1944 |
| 8392419 | Sediments | sediment | PCB 156 | Mass fraction | 0.8 | 50 | µg/kg | 10 | 18 | % | 2 | 95% | Yes | 0.93 | 37 | µg/kg | 10 | 18 | % | | 95% | Yes | SRM 1941a SRM 1939a SRM 1944 |
| 8392420 | Sediments | sediment | PCB 170 | Mass fraction | 100 | 130 | µg/kg | 15 | 16 | % | 2 | 95% | Yes | 107 | 107 | µg/kg | 16 | 16 | % | | 95% | Yes | SRM 1939a |
| 8392422 | Sediments | sediment | PCB 18 | Mass fraction | 45 | 75 | µg/kg | 5 | 6 | % | 2 | 95% | Yes | 51 | 51 | µg/kg | 5.1 | 5.1 | % | | 95% | Yes | SRM 1944 |
| 8392423 | Sediments | sediment | PCB 180 | Mass fraction | 5 | 180 | µg/kg | 2.7 | 10 | % | 2 | 95% | Yes | 5.83 | 140.3 | µg/kg | 2.7 | 10 | % | | 95% | Yes | SRM 1939a SRM 1941a SRM 1944 |
| 8392424 | Sediments | sediment | PCB 183 | Mass fraction | 10 | 60 | µg/kg | 4.5 | 6 | % | 2 | 95% | Yes | 12.19 | 47.3 | µg/kg | 4.7 | 4.9 | % | | 95% | Yes | SRM 1944 SRM 1939a |
| 8392426 | Sediments | sediment | PCB 194 | Mass fraction | 1.5 | 50 | µg/kg | 11 | 13 | % | 2 | 95% | Yes | 1.78 | 35.5 | µg/kg | 12 | 13 | % | | 95% | Yes | SRM 1941a SRM 1939a SRM 1944 |

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|------------------------|----------------------------------|----------|----------------------|---------------|---|------|-------|---|----|------|-----------------|---------------------|---|--|------|-------|---|-----|------|-----------------|---------------------|---|---|
| | | | Analyte or Component | Quantity | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | |
| 8392427 | Sediments | sediment | PCB 195 | Mass fraction | 3 | 10 | µg/kg | 10 | 11 | % | 2 | 95% | Yes | 3.75 | 3.75 | µg/kg | 10 | 10 | % | | 95% | Yes | SRM 1944 |
| 8392428 | Sediments | sediment | PCB 206 | Mass fraction | 3 | 40 | µg/kg | 5 | 24 | % | 2 | 95% | Yes | 3.67 | 29.7 | µg/kg | 5.5 | 24 | % | | 95% | Yes | SRM 1939a SRM 1941a SRM 1944 |
| 8392429 | Sediments | sediment | PCB 209 | Mass fraction | 5 | 10 | µg/kg | 4 | 6 | % | 2 | 95% | Yes | 6.81 | 8.34 | µg/kg | 4.9 | 5.9 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392430 | Sediments | sediment | PCB 28 | Mass fraction | 75 | 100 | µg/kg | 3 | 4 | % | 2 | 95% | Yes | 80.8 | 80.8 | µg/kg | 3.3 | 3.3 | % | | 95% | Yes | SRM 1944 |
| 8392431 | Sediments | sediment | PCB 31 | Mass fraction | 70 | 100 | µg/kg | 2 | 3 | % | 2 | 95% | Yes | 78.7 | 78.7 | µg/kg | 2.0 | 2.0 | % | | 95% | Yes | SRM 1944 |
| 8392432 | Sediments | sediment | PCB 44 | Mass fraction | 4 | 1250 | µg/kg | 3.3 | 13 | % | 2 | 95% | Yes | 4.8 | 1131 | µg/kg | 3.3 | 13 | % | | 95% | Yes | SRM 1939a SRM 1941a SRM 1944 |
| 8392433 | Sediments | sediment | PCB 49 | Mass fraction | 8 | 4000 | µg/kg | 3.2 | 23 | % | 2 | 95% | Yes | 9.5 | 3740 | µg/kg | 3.2 | 22 | % | | 95% | Yes | SRM 1939a SRM 1941a SRM 1944 |
| 8392434 | Sediments | sediment | PCB 52 | Mass fraction | 5 | 4600 | µg/kg | 2.5 | 9 | % | 2 | 95% | Yes | 6.89 | 4320 | µg/kg | 2.5 | 8.1 | % | | 95% | Yes | SRM 1939a SRM 1941a SRM 1944 |
| 8392435 | Sediments | sediment | PCB 66 | Mass fraction | 60 | 100 | µg/kg | 6 | 21 | % | 2 | 95% | Yes | 6.8 | 840 | µg/kg | 6.0 | 21 | % | | 95% | Yes | SRM 1944 SRM 1941a SRM 1939a |
| 8392437 | Sediments | sediment | PCB 8 | Mass fraction | 20 | 40 | µg/kg | 10 | 11 | % | 2 | 95% | Yes | 22.3 | 22.3 | µg/kg | 10 | 10 | % | | 95% | Yes | SRM 1944 |
| 8392438 | Sediments | sediment | PCB 87 | Mass fraction | 5 | 40 | µg/kg | 5 | 15 | % | 2 | 95% | Yes | 6.7 | 29.9 | µg/kg | 5.5 | 14 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392439 | Sediments | sediment | PCB 95 | Mass fraction | 5 | 80 | µg/kg | 13 | 15 | % | 2 | 95% | Yes | 7.5 | 65 | µg/kg | 14 | 15 | % | | 95% | Yes | SRM 1944 SRM 1941a |
| 8392440 | Sediments | sediment | PCB 99 | Mass fraction | 3 | 450 | µg/kg | 6 | 26 | % | 2 | 95% | Yes | 4.17 | 380 | µg/kg | 6.4 | 25 | % | | 95% | Yes | SRM 1944 SRM 1939a SRM 1941a |
| 8395116 | Sediments | sediment | aluminum | Mass fraction | 1 | 10 | cg/g | 0.5 | 10 | % | 2 | 95% | Yes | 2.297 | 5.33 | cg/g | 0.80 | 9.2 | % | 2 | 95% | Yes | SRM 1646a SRM 1944 |
| 8395117 | Sediments | sediment | arsenic | Mass fraction | 3 | 500 | mg/kg | 2.5 | 15 | % | 2 | 95% | Yes | 6.23 | 166 | mg/kg | 3.4 | 15 | % | 2 | 95% | Yes | SRM 1646a SRM 1944 SRM 2781 SRM 2782 |

Calibration and Measurement Capabilities

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|------------------------|----------------------------------|----------|----------------------|---------------|---|-------|-------|---|----|------|-----------------|---------------------|---|--|-------|-------|---|-----|------|-----------------|---------------------|---|---|
| | | | Analyte or Component | Quantity | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | |
| 8395118 | Sediments | sediment | calcium | Mass fraction | 0.2 | 2 | cg/g | 3 | 5 | % | 2 | 95% | Yes | 0.519 | 0.519 | cg/g | 3.9 | 3.9 | % | 2 | 95% | Yes | SRM 1646a |
| 8395119 | Sediments | sediment | cadmium | Mass fraction | 0.07 | 100 | mg/kg | 1.5 | 16 | % | 2 | 95% | Yes | 0.148 | 12.78 | mg/kg | 2.2 | 16 | % | 2 | 95% | Yes | SRM 1646a SRM 1944 SRM 2781 SRM 2782 |
| 8395120 | Sediments | sediment | chromium | Mass fraction | 5 | 2500 | mg/kg | 3.5 | 10 | % | 2 | 95% | Yes | 40.9 | 266 | mg/kg | 4.6 | 9 | % | 2 | 95% | Yes | SRM 1646a SRM 1944 SRM 2782 |
| 8395121 | Sediments | sediment | copper | Mass fraction | 5 | 20000 | mg/kg | 1.5 | 4 | % | 2 | 95% | Yes | 10.01 | 2594 | mg/kg | 2 | 3.4 | % | 2 | 95% | Yes | SRM 1646a SRM 2781 SRM 2782 |
| 8395122 | Sediments | sediment | iron | Mass fraction | 1 | 35 | cg/g | 1.5 | 5 | % | 2 | 95% | Yes | 2.008 | 3.53 | cg/g | 1.9 | 4.5 | % | 2 | 95% | Yes | SRM 1646a SRM 1944 |
| 8395123 | Sediments | sediment | mercury | Mass fraction | 0.5 | 30 | mg/kg | 3 | 20 | % | 2 | 95% | Yes | 1.1 | 3.64 | mg/kg | 5.5 | 17 | % | 2 | 95% | Yes | SRM 2781 SRM 2782 |
| 8395124 | Sediments | sediment | potassium | Mass fraction | 0.4 | 8 | cg/g | 1.5 | 2 | % | 2 | 95% | Yes | 0.864 | 0.864 | cg/g | 1.9 | 1.9 | % | 2 | 95% | Yes | SRM 1646a |
| 8395125 | Sediments | sediment | magnesium | Mass fraction | 0.2 | 3 | cg/g | 1.5 | 3 | % | 2 | 95% | Yes | 0.388 | 0.388 | cg/g | 2.3 | 2.3 | % | 2 | 95% | Yes | SRM 1646a |
| 8395126 | Sediments | sediment | manganese | Mass fraction | 100 | 3500 | mg/kg | 0.8 | 5 | % | 2 | 95% | Yes | 234.5 | 505 | mg/kg | 1.2 | 5 | % | 2 | 95% | Yes | SRM 1646a SRM 1944 |
| 8395127 | Sediments | sediment | molybdenum | Mass fraction | 5 | 350 | mg/kg | 1.5 | 7 | % | 2 | 95% | Yes | 10.07 | 46.7 | mg/kg | 2 | 6.9 | % | 2 | 95% | Yes | SRM 2781 SRM 2782 |
| 8395128 | Sediments | sediment | nitrogen | Mass fraction | 2.5 | 20 | cg/g | 1.5 | 3 | % | 2 | 95% | Yes | 4.78 | 4.78 | cg/g | 2.3 | 2.3 | % | 2 | 95% | Yes | SRM 2781 |
| 8395129 | Sediments | sediment | sodium | Mass fraction | 0.35 | 6 | cg/g | 1.5 | 3 | % | 2 | 95% | Yes | 0.741 | 0.741 | cg/g | 2.3 | 2.3 | % | 2 | 95% | Yes | SRM 1646a |
| 8395130 | Sediments | sediment | nickel | Mass fraction | 35 | 1000 | mg/kg | 1.5 | 8 | % | 2 | 95% | Yes | 76.1 | 154.1 | mg/kg | 2 | 7.4 | % | 2 | 95% | Yes | SRM 1944 SRM 2781 SRM 2782 |
| 8395131 | Sediments | sediment | phosphorus | Mass fraction | 0.015 | 0.2 | cg/g | 2.5 | 4 | % | 2 | 95% | Yes | 0.027 | 0.027 | cg/g | 3.7 | 3.7 | % | 2 | 95% | Yes | SRM 1646a |
| 8395132 | Sediments | sediment | lead | Mass fraction | 6 | 4000 | mg/kg | 1.5 | 15 | % | 2 | 95% | Yes | 11.7 | 574 | mg/kg | 1.9 | 15 | % | 2 | 95% | Yes | SRM 1646a SRM 1944 SRM 2781 SRM 2782 |
| 8395133 | Sediments | sediment | sulfur | Mass fraction | 0.15 | 3 | cg/g | 0.8 | 2 | % | 2 | 95% | Yes | 0.352 | 0.352 | cg/g | 1.1 | 1.1 | % | 2 | 95% | Yes | SRM 1646a |

Calibration and Measurement Capabilities

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| | | | Analyte or Component | Quantity | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | |
| 8395134 | Sediments | sediment | selenium | Mass fraction | 0.1 | 100 | mg/kg | 8 | 25 | % | 2 | 95% | Yes | 0.193 | 16 | mg/kg | 10 | 25 | % | 2 | 95% | Yes | SRM 1646a SRM 2781 SRM 2782 |
| 8395135 | Sediments | sediment | titanium | Mass fraction | 0.2 | 4 | cg/g | 3.5 | 5 | % | 2 | 95% | Yes | 0.456 | 0.456 | cg/g | 4.6 | 4.6 | % | 2 | 95% | Yes | SRM 1646a |
| 8395136 | Sediments | sediment | vanadium | Mass fraction | 20 | 400 | mg/kg | 1 | 2 | % | 2 | 95% | Yes | 44.84 | 44.84 | mg/kg | 1.7 | 1.7 | % | 2 | 95% | Yes | SRM 1646a |
| 8395137 | Sediments | sediment | zinc | Mass fraction | 25 | 10000 | mg/kg | 2.8 | 16 | % | 2 | 95% | Yes | 48.9 | 1273 | mg/kg | 3.3 | 16 | % | 2 | 95% | Yes | SRM 1646a SRM 1944 SRM 2781 SRM 2782 |
| 8395138 | Soils | soil | silver | Mass fraction | 0.2 | 300 | mg/kg | 3 | 10 | % | 2 | 95% | Yes | 0.41 | 35.3 | mg/kg | 4.2 | 8.4 | % | 2 | 95% | Yes | SRM 2709 SRM 2710 SRM 2711 |
| 8395139 | Soils | soil | aluminum | Mass fraction | 30000 | 500000 | mg/kg | 0.6 | 2 | % | 2 | 95% | Yes | 64400 | 75000 | mg/kg | 0.8 | 1.4 | % | 2 | 95% | Yes | SRM 2709 SRM 2710 SRM 2711 |
| 8395140 | Soils | soil | arsenic | Mass fraction | 8 | 4000 | mg/kg | 4 | 7 | % | 2 | 95% | Yes | 17.7 | 626 | mg/kg | 4.5 | 6.1 | % | 2 | 95% | Yes | SRM 2709 SRM 2710 SRM 2711 |
| 8395141 | Soils | soil | barium | Mass fraction | 350 | 7000 | mg/kg | 3.5 | 8 | % | 2 | 95% | Yes | 707 | 968 | mg/kg | 4.1 | 7.2 | % | 2 | 95% | Yes | SRM 2709 SRM 2710 SRM 2711 |
| 8395142 | Soils | soil | calcium | Mass fraction | 0.9 | 20 | cg/g | 1.5 | 3 | % | 2 | 95% | Yes | 1.89 | 2.88 | cg/g | 2.6 | 2.8 | % | 2 | 95% | Yes | SRM 2709 SRM 2711 |
| 8395143 | Soils | soil | cadmium | Mass fraction | 0.2 | 300 | mg/kg | 0.4 | 3 | % | 2 | 95% | Yes | 0.38 | 41.7 | mg/kg | 0.6 | 2.6 | % | 2 | 95% | Yes | SRM 2709 SRM 2710 SRM 2711 |
| 8395144 | Soils | soil | cobalt | Mass fraction | 6 | 100 | mg/kg | 3.5 | 6 | % | 2 | 95% | Yes | 13.4 | 13.4 | mg/kg | 5.2 | 5.2 | % | 2 | 95% | Yes | SRM 2709 |
| 8395145 | Soils | soil | chromium | Mass fraction | 65 | 1000 | mg/kg | 2 | 4 | % | 2 | 95% | Yes | 130 | 130 | mg/kg | 3.1 | 3.1 | % | 2 | 95% | Yes | SRM 2709 |
| 8395146 | Soils | soil | copper | Mass fraction | 15 | 20000 | mg/kg | 1.2 | 5 | % | 2 | 95% | Yes | 34.6 | 2950 | mg/kg | 1.8 | 4.4 | % | 2 | 95% | Yes | SRM 2709 SRM 2710 SRM 2711 |
| 8395147 | Soils | soil | iron | Mass fraction | 15000 | 250000 | mg/kg | 1.5 | 4 | % | 2 | 95% | Yes | 28900 | 35000 | mg/kg | 2.1 | 3.1 | % | 2 | 95% | Yes | SRM 2709 SRM 2710 SRM 2711 |

Calibration and Measurement Capabilities

| NMI Service Identifier | Measurement Service Sub-Category | Matrix | Measurand | | Dissemination Range of Measurement Capability | | | Range of Expanded Uncertainties as Disseminated | | | | | | Range of Certified Values in Reference Materials | | | Range of Expanded Uncertainties for Certified Value | | | | | | Mechanism(s) for Measurement Service Delivery |
|------------------------|----------------------------------|--------|----------------------|---------------|---|-------|-------|---|----|------|-----------------|---------------------|---|--|-------|-------|---|-----|------|-----------------|---------------------|---|---|
| | | | Analyte or Component | Quantity | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | |
| 8395148 | Soils | soil | mercury | Mass fraction | 0.7 | 200 | mg/kg | 2 | 6 | % | 2 | 95% | Yes | 1.4 | 32.6 | mg/kg | 3.0 | 5.7 | % | 2 | 95% | Yes | SRM 2709 SRM 2710 SRM 2711 |
| 8395149 | Soils | soil | potassium | Mass fraction | 1 | 20 | cg/g | 2 | 6 | % | 2 | 95% | Yes | 2.03 | 2.45 | cg/g | 3.0 | 5.5 | % | 2 | 95% | Yes | SRM 2709 SRM 2710 SRM 2711 |
| 8395150 | Soils | soil | magnesium | Mass fraction | 0.4 | 12 | cg/g | 2 | 5 | % | 2 | 95% | Yes | 0.853 | 1.51 | cg/g | 2.9 | 4.9 | % | 2 | 95% | Yes | SRM 2709 SRM 2710 SRM 2711 |
| 8395151 | Soils | soil | manganese | Mass fraction | 250 | 70000 | mg/kg | 2 | 5 | % | 2 | 95% | Yes | 538 | 10100 | mg/kg | 3.2 | 4.4 | % | 2 | 95% | Yes | SRM 2709 SRM 2710 SRM 2711 |
| 8395152 | Soils | soil | sodium | Mass fraction | 5000 | 80000 | mg/kg | 1.8 | 6 | % | 2 | 95% | Yes | 11400 | 11600 | mg/kg | 2.6 | 5.3 | % | 2 | 95% | Yes | SRM 2709 SRM 2710 SRM 2711 |
| 8395153 | Soils | soil | nickel | Mass fraction | 7 | 600 | mg/kg | 4 | 7 | % | 2 | 95% | Yes | 14.3 | 88 | mg/kg | 5.3 | 7.0 | % | 2 | 95% | Yes | SRM 2709 SRM 2710 SRM 2711 |
| 8395154 | Soils | soil | phosphorus | Mass fraction | 0.03 | 0.7 | cg/g | 6 | 15 | % | 2 | 95% | Yes | 0.062 | 0.106 | cg/g | 8.1 | 14 | % | 2 | 95% | Yes | SRM 2709 SRM 2710 SRM 2711 |
| 8395155 | Soils | soil | lead | Mass fraction | 9 | 40000 | mg/kg | 1 | 3 | % | 2 | 95% | Yes | 18.9 | 5532 | mg/kg | 1.4 | 2.7 | % | 2 | 95% | Yes | SRM 2709 SRM 2710 SRM 2711 |
| 8395156 | Soils | soil | sulfur | Mass fraction | 0.02 | 2 | cg/g | 1.5 | 3 | % | 2 | 95% | Yes | 0.042 | 0.24 | cg/g | 2.2 | 2.5 | % | 2 | 95% | Yes | SRM 2709 SRM 2710 SRM 2711 |
| 8395157 | Soils | soil | antimony | Mass fraction | 4 | 300 | mg/kg | 5.5 | 10 | % | 2 | 95% | Yes | 7.9 | 38.4 | mg/kg | 7.6 | 9.3 | % | 2 | 95% | Yes | SRM 2709 SRM 2710 SRM 2711 |
| 8395158 | Soils | soil | selenium | Mass fraction | 0.75 | 14 | mg/kg | 3.5 | 10 | % | 2 | 95% | Yes | 1.52 | 1.57 | mg/kg | 5.1 | 9.2 | % | 2 | 95% | Yes | SRM 2709 SRM 2711 |
| 8395159 | Soils | soil | silicon | Mass fraction | 15 | 25 | cg/g | 0.4 | 1 | % | 2 | 95% | Yes | 28.97 | 30.44 | cg/g | 0.6 | 0.8 | % | 2 | 95% | Yes | SRM 2709 SRM 2710 SRM 2711 |

Calibration and Measurement Capabilities

| NMI Service Identifier | Measurement Service Sub-Category | Matrix | Measurand | | Dissemination Range of Measurement Capability | | | Range of Expanded Uncertainties as Disseminated | | | | | | Range of Certified Values in Reference Materials | | | Range of Expanded Uncertainties for Certified Value | | | | | | Mechanism(s) for Measurement Service Delivery |
|------------------------|----------------------------------|--------------------|----------------------|---------------|---|-------|-------|---|----|------|-----------------|---------------------|---|--|-------|-------|---|-----|------|-----------------|---------------------|---|---|
| | | | Analyte or Component | Quantity | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | |
| 8395160 | Soils | soil | strontium | Mass fraction | 120 | 2000 | mg/kg | 0.25 | 1 | % | 2 | 95% | Yes | 231 | 245.3 | mg/kg | 0.3 | 0.9 | % | 2 | 95% | Yes | SRM 2709 SRM 2711 |
| 8395161 | Soils | soil | titanium | Mass fraction | 0.15 | 2 | cg/g | 2.8 | 8 | % | 2 | 95% | Yes | 0.283 | 0.342 | cg/g | 3.5 | 7.5 | % | 2 | 95% | Yes | SRM 2709 SRM 2710 SRM 2711 |
| 8395162 | Soils | soil | thallium | Mass fraction | 0.4 | 15 | mg/kg | 5 | 7 | % | 2 | 95% | Yes | 0.74 | 2.47 | mg/kg | 6.1 | 6.8 | % | 2 | 95% | Yes | SRM 2709 SRM 2711 |
| 8395163 | Soils | soil | vanadium | Mass fraction | 35 | 700 | mg/kg | 2 | 5 | % | 2 | 95% | Yes | 76.6 | 112 | mg/kg | 3.0 | 4.5 | % | 2 | 95% | Yes | SRM 2709 SRM 2710 SRM 2711 |
| 8395164 | Soils | soil | zinc | Mass fraction | 50 | 50000 | mg/kg | 1 | 3 | % | 2 | 95% | Yes | 106 | 6952 | mg/kg | 1.3 | 2.8 | % | 2 | 95% | Yes | SRM 2709 SRM 2710 SRM 2711 |
| 8392441 | Particulates | particulate matter | 2,4'-DDE | Mass fraction | 5 | 10 | µg/kg | 14 | 15 | % | 2 | 95% | Yes | 5.79 | 5.79 | µg/kg | 15 | 15 | % | | 95% | Yes | SRM 1649a |
| 8392442 | Particulates | particulate matter | 4,4'-DDD | Mass fraction | 30 | 50 | µg/kg | 1 | 2 | % | 2 | 95% | Yes | 34.01 | 34.01 | µg/kg | 1.4 | 1.4 | % | | 95% | Yes | SRM 1649a |
| 8392443 | Particulates | particulate matter | 4,4'-DDE | Mass fraction | 35 | 50 | µg/kg | 4 | 5 | % | 2 | 95% | Yes | 40.4 | 40.4 | µg/kg | 4.2 | 4.2 | % | | 95% | Yes | SRM 1649a |
| 8392444 | Particulates | particulate matter | 4,4'-DDT | Mass fraction | 200 | 250 | µg/kg | 7 | 8 | % | 2 | 95% | Yes | 212 | 212 | µg/kg | 7.1 | 7.1 | % | | 95% | Yes | SRM 1649a |
| 8392445 | Particulates | particulate matter | cis-chlordane | Mass fraction | 30 | 50 | µg/kg | 1 | 2 | % | 2 | 95% | Yes | 34.88 | 34.88 | µg/kg | 1.2 | 1.2 | % | | 95% | Yes | SRM 1649a |
| 8392446 | Particulates | particulate matter | hexachlorobenzene | Mass fraction | 12 | 25 | µg/kg | 10 | 12 | % | 2 | 95% | Yes | 16.3 | 16.3 | µg/kg | 11 | 11 | % | | 95% | Yes | SRM 1649a |
| 8392447 | Particulates | particulate matter | trans-chlordane | Mass fraction | 35 | 50 | µg/kg | 6 | 7 | % | 2 | 95% | Yes | 40.3 | 40.3 | µg/kg | 7.0 | 7.0 | % | | 95% | Yes | SRM 1649a |
| 8392448 | Particulates | particulate matter | trans-nonachlor | Mass fraction | 20 | 50 | µg/kg | 5 | 6 | % | 2 | 95% | Yes | 27.6 | 27.6 | µg/kg | 5.8 | 5.8 | % | | 95% | Yes | SRM 1649a |
| 8392449 | Particulates | particulate matter | 1-nitropyrene | Mass fraction | 15000 | 30000 | µg/kg | 10 | 11 | % | 2 | 95% | Yes | 19000 | 19000 | µg/kg | 11 | 11 | % | | 95% | Yes | SRM 1650a |
| 8392450 | Particulates | particulate matter | anthanthrene | Mass fraction | 400 | 600 | µg/kg | 14 | 15 | % | 2 | 95% | Yes | 450 | 450 | µg/kg | 15 | 15 | % | | 95% | Yes | SRM 1649a |
| 8392451 | Particulates | particulate matter | anthracene | Mass fraction | 400 | 600 | µg/kg | 18 | 20 | % | 2 | 95% | Yes | 432 | 432 | µg/kg | 19 | 19 | % | | 95% | Yes | SRM 1649a |
| 8392452 | Particulates | particulate matter | benz[a]anthracene | Mass fraction | 300 | 7000 | µg/kg | 3 | 21 | % | 2 | 95% | Yes | 317 | 6330 | µg/kg | 3.3 | 21 | % | | 95% | Yes | SRM 1649a SRM 1650a SRM 2975 |
| 8392453 | Particulates | particulate matter | benzo[a]fluoranthene | Mass fraction | 380 | 500 | µg/kg | 8 | 18 | % | 2 | 95% | Yes | 409 | 437 | µg/kg | 8.6 | 17 | % | | 95% | Yes | SRM 1649a SRM 1650a |

Calibration and Measurement Capabilities

| NMI Service Identifier | Measurement Service Sub-Category | Matrix | Measurand | | Dissemination Range of Measurement Capability | | | Range of Expanded Uncertainties as Disseminated | | | | | | Range of Certified Values in Reference Materials | | | Range of Expanded Uncertainties for Certified Value | | | | | | Mechanism(s) for Measurement Service Delivery |
|------------------------|----------------------------------|--------------------|------------------------|---------------|---|-------|-------|---|----|------|-----------------|---------------------|---|--|-------|-------|---|-----|------|-----------------|---------------------|---|---|
| | | | Analyte or Component | Quantity | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | |
| 8392454 | Particulates | particulate matter | benzo[a]pyrene | Mass fraction | 40 | 3000 | µg/kg | 3 | 27 | % | 2 | 95% | Yes | 52.2 | 2509 | µg/kg | 3.5 | 26 | % | | 95% | Yes | SRM 1649a SRM 1650a SRM 2975 |
| 8392455 | Particulates | particulate matter | benzo[b]chrysene | Mass fraction | 300 | 400 | µg/kg | 4 | 12 | % | 2 | 95% | Yes | 315 | 316 | µg/kg | 4.1 | 12 | % | | 95% | Yes | SRM 1649a SRM 1650a |
| 8392456 | Particulates | particulate matter | benzo[b]fluoranthene | Mass fraction | 6000 | 10000 | µg/kg | 6 | 10 | % | 2 | 95% | Yes | 6450 | 8810 | µg/kg | 6.8 | 9.9 | % | | 95% | Yes | SRM 1649a SRM 1650a |
| 8392457 | Particulates | particulate matter | benzo[e]pyrene | Mass fraction | 1000 | 9000 | µg/kg | 6 | 9 | % | 2 | 95% | Yes | 1110 | 7440 | µg/kg | 6.2 | 9.0 | % | | 95% | Yes | SRM 2975 SRM 1649a SRM 1650a |
| 8392458 | Particulates | particulate matter | benzo[g,h,i]perylene | Mass fraction | 450 | 8000 | µg/kg | 8 | 23 | % | 2 | 95% | Yes | 498 | 6500 | µg/kg | 8.8 | 23 | % | | 95% | Yes | SRM 1649a SRM 1650a SRM 2975 |
| 8392459 | Particulates | particulate matter | benzo[j]fluoranthene | Mass fraction | 750 | 5000 | µg/kg | 11 | 14 | % | 2 | 95% | Yes | 820 | 3520 | µg/kg | 11 | 13 | % | | 95% | Yes | SRM 2975 SRM 1650a |
| 8392460 | Particulates | particulate matter | benzo[k]fluoranthene | Mass fraction | 640 | 3000 | µg/kg | 1.6 | 12 | % | 2 | 95% | Yes | 678 | 2640 | µg/kg | 1.6 | 12 | % | | 95% | Yes | SRM 1649a SRM 1650a SRM 2975 |
| 8392461 | Particulates | particulate matter | chrysene | Mass fraction | 3000 | 16000 | µg/kg | 2 | 6 | % | 2 | 95% | Yes | 3049 | 14500 | µg/kg | 2.0 | 5.5 | % | | 95% | Yes | SRM 1649a SRM 1650a SRM 2975 |
| 8392462 | Particulates | particulate matter | dibenz[a,c]anthracene | Mass fraction | 175 | 250 | µg/kg | 12 | 13 | % | 2 | 95% | Yes | 200 | 200 | µg/kg | 13 | 13 | % | | 95% | Yes | SRM 1649a |
| 8392463 | Particulates | particulate matter | dibenz[a,h]anthracene | Mass fraction | 250 | 350 | µg/kg | 7 | 9 | % | 2 | 95% | Yes | 288 | 288 | µg/kg | 8.0 | 8.0 | % | | 95% | Yes | SRM 1649a |
| 8392464 | Particulates | particulate matter | dibenz[a,j]anthracene | Mass fraction | 280 | 350 | µg/kg | 10 | 12 | % | 2 | 95% | Yes | 310 | 310 | µg/kg | 11 | 11 | % | | 95% | Yes | SRM 1649a |
| 8392465 | Particulates | particulate matter | fluoranthene | Mass fraction | 6000 | 60000 | µg/kg | 3 | 20 | % | 2 | 95% | Yes | 6450 | 49900 | µg/kg | 2.8 | 19 | % | | 95% | Yes | SRM 2975 SRM 1649a SRM 1650a |
| 8392466 | Particulates | particulate matter | indeno[1,2,3-cd]pyrene | Mass fraction | 3000 | 7000 | µg/kg | 9 | 23 | % | 2 | 95% | Yes | 3180 | 5620 | µg/kg | 9.4 | 23 | % | | 95% | Yes | SRM 1649a SRM 1650a |
| 8392467 | Particulates | particulate matter | pentaphene | Mass fraction | 130 | 200 | µg/kg | 23 | 24 | % | 2 | 95% | Yes | 151 | 151 | µg/kg | 23 | 23 | % | | 95% | Yes | SRM 1649a |
| 8392468 | Particulates | particulate matter | perylene | Mass fraction | 600 | 800 | µg/kg | 11 | 12 | % | 2 | 95% | Yes | 646 | 646 | µg/kg | 12 | 12 | % | | 95% | Yes | SRM 1649a |

Calibration and Measurement Capabilities

| NMI Service Identifier | Measurement Service Sub-Category | Matrix | Measurand | | Dissemination Range of Measurement Capability | | | Range of Expanded Uncertainties as Disseminated | | | | | | Range of Certified Values in Reference Materials | | | Range of Expanded Uncertainties for Certified Value | | | | | | Mechanism(s) for Measurement Service Delivery |
|------------------------|----------------------------------|--------------------|----------------------|---------------|---|-------|-------|---|----|------|-----------------|---------------------|---|--|-------|-------|---|-----|------|-----------------|---------------------|---|---|
| | | | Analyte or Component | Quantity | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | |
| 8392469 | Particulates | particulate matter | phenanthrene | Mass fraction | 4000 | 75000 | µg/kg | 8 | 17 | % | 2 | 95% | Yes | 4140 | 68400 | µg/kg | 8.9 | 16 | % | | 95% | Yes | SRM 2975 SRM 1649a SRM 1650a |
| 8392470 | Particulates | particulate matter | picene | Mass fraction | 400 | 700 | µg/kg | 5 | 14 | % | 2 | 95% | Yes | 426 | 620 | µg/kg | 5.2 | 13 | % | | 95% | Yes | SRM 1649a SRM 1650a |
| 8392471 | Particulates | particulate matter | pyrene | Mass fraction | 700 | 50000 | µg/kg | 4 | 27 | % | 2 | 95% | Yes | 900 | 47500 | µg/kg | 4.7 | 27 | % | | 95% | Yes | SRM 1649a SRM 1650a SRM 2975 |
| 8392472 | Particulates | particulate matter | triphenylene | Mass fraction | 1300 | 14000 | µg/kg | 3 | 14 | % | 2 | 95% | Yes | 1357 | 11500 | µg/kg | 3.8 | 14 | % | | 95% | Yes | SRM 1649a SRM 1650a SRM 2975 |
| 8392473 | Particulates | particulate matter | PCB 101 | Mass fraction | 45 | 75 | µg/kg | 1.9 | 3 | % | 2 | 95% | Yes | 52.9 | 52.9 | µg/kg | 1.9 | 1.9 | % | | 95% | Yes | SRM 1649a |
| 8392474 | Particulates | particulate matter | PCB 105 | Mass fraction | 8 | 15 | µg/kg | 9 | 10 | % | 2 | 95% | Yes | 8.63 | 8.63 | µg/kg | 9.3 | 9.3 | % | | 95% | Yes | SRM 1649a |
| 8392475 | Particulates | particulate matter | PCB 110 | Mass fraction | 25 | 50 | µg/kg | 6 | 7 | % | 2 | 95% | Yes | 26.6 | 26.6 | µg/kg | 6.0 | 6.0 | % | | 95% | Yes | SRM 1649a |
| 8392476 | Particulates | particulate matter | PCB 118 | Mass fraction | 20 | 50 | µg/kg | 5 | 6 | % | 2 | 95% | Yes | 25.7 | 25.7 | µg/kg | 5.8 | 5.8 | % | | 95% | Yes | SRM 1649a |
| 8392477 | Particulates | particulate matter | PCB 128 | Mass fraction | 5 | 12 | µg/kg | 10 | 11 | % | 2 | 95% | Yes | 6.35 | 6.35 | µg/kg | 11 | 11 | % | | 95% | Yes | SRM 1649a |
| 8392479 | Particulates | particulate matter | PCB 149 | Mass fraction | 65 | 100 | µg/kg | 2 | 2 | % | 2 | 95% | Yes | 75.7 | 75.7 | µg/kg | 1.7 | 1.7 | % | | 95% | Yes | SRM 1649a |
| 8392480 | Particulates | particulate matter | PCB 151 | Mass fraction | 30 | 50 | µg/kg | 11 | 12 | % | 2 | 95% | Yes | 34.3 | 34.3 | µg/kg | 11 | 11 | % | | 95% | Yes | SRM 1649a |
| 8392481 | Particulates | particulate matter | PCB 153 | Mass fraction | 75 | 100 | µg/kg | 9 | 10 | % | 2 | 95% | Yes | 82.5 | 82.5 | µg/kg | 9.7 | 9.7 | % | | 95% | Yes | SRM 1649a |
| 8392482 | Particulates | particulate matter | PCB 156 | Mass fraction | 14 | 25 | µg/kg | 4 | 5 | % | 2 | 95% | Yes | 16.25 | 16.25 | µg/kg | 4.7 | 4.7 | % | | 95% | Yes | SRM 1649a |
| 8392484 | Particulates | particulate matter | PCB 18 | Mass fraction | 15 | 30 | µg/kg | 4 | 5 | % | 2 | 95% | Yes | 20.44 | 20.44 | µg/kg | 4.1 | 4.1 | % | | 95% | Yes | SRM 1649a |
| 8392485 | Particulates | particulate matter | PCB 180 | Mass fraction | 70 | 100 | µg/kg | 10 | 11 | % | 2 | 95% | Yes | 78.7 | 78.7 | µg/kg | 10 | 10 | % | | 95% | Yes | SRM 1649a |
| 8392486 | Particulates | particulate matter | PCB 183 | Mass fraction | 15 | 40 | µg/kg | 4 | 5 | % | 2 | 95% | Yes | 20.34 | 20.34 | µg/kg | 4.7 | 4.7 | % | | 95% | Yes | SRM 1649a |
| 8392488 | Particulates | particulate matter | PCB 194 | Mass fraction | 20 | 50 | µg/kg | 12 | 13 | % | 2 | 95% | Yes | 28.9 | 28.9 | µg/kg | 12 | 12 | % | | 95% | Yes | SRM 1649a |
| 8392489 | Particulates | particulate matter | PCB 195 | Mass fraction | 5 | 15 | µg/kg | 3 | 4 | % | 2 | 95% | Yes | 9.63 | 9.63 | µg/kg | 3.8 | 3.8 | % | | 95% | Yes | SRM 1649a |
| 8392490 | Particulates | particulate matter | PCB 206 | Mass fraction | 15 | 40 | µg/kg | 22 | 23 | % | 2 | 95% | Yes | 20.6 | 20.6 | µg/kg | 22 | 22 | % | | 95% | Yes | SRM 1649a |
| 8392491 | Particulates | particulate matter | PCB 209 | Mass fraction | 5 | 25 | µg/kg | 9 | 10 | % | 2 | 95% | Yes | 8.04 | 8.04 | µg/kg | 9.6 | 9.6 | % | | 95% | Yes | SRM 1649a |

Calibration and Measurement Capabilities

| NMI Service Identifier | Measurement Service Sub-Category | Matrix | Measurand | | Dissemination Range of Measurement Capability | | | Range of Expanded Uncertainties as Disseminated | | | | | | Range of Certified Values in Reference Materials | | | Range of Expanded Uncertainties for Certified Value | | | | | | Mechanism(s) for Measurement Service Delivery |
|------------------------|----------------------------------|----------------------------|------------------------|---------------|---|------|-------|---|----|------|-----------------|---------------------|---|--|-------|-------|---|-----|------|-----------------|---------------------|---|---|
| | | | Analyte or Component | Quantity | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | |
| 8392492 | Particulates | particulate matter | PCB 28 | Mass fraction | 15 | 40 | µg/kg | 6 | 7 | % | 2 | 95% | Yes | 18.5 | 18.5 | µg/kg | 6.5 | 6.5 | % | | 95% | Yes | SRM 1649a |
| 8392493 | Particulates | particulate matter | PCB 31 | Mass fraction | 15 | 40 | µg/kg | 8 | 9 | % | 2 | 95% | Yes | 17.3 | 17.3 | µg/kg | 8.1 | 8.1 | % | | 95% | Yes | SRM 1649a |
| 8392494 | Particulates | particulate matter | PCB 44 | Mass fraction | 10 | 30 | µg/kg | 10 | 11 | % | 2 | 95% | Yes | 15.4 | 15.4 | µg/kg | 10 | 10 | % | | 95% | Yes | SRM 1649a |
| 8392495 | Particulates | particulate matter | PCB 49 | Mass fraction | 10 | 20 | µg/kg | 12 | 13 | % | 2 | 95% | Yes | 12.2 | 12.2 | µg/kg | 12 | 12 | % | | 95% | Yes | SRM 1649a |
| 8392496 | Particulates | particulate matter | PCB 52 | Mass fraction | 20 | 40 | µg/kg | 4 | 5 | % | 2 | 95% | Yes | 24.65 | 24.65 | µg/kg | 3.9 | 3.9 | % | | 95% | Yes | SRM 1649a |
| 8392498 | Particulates | particulate matter | PCB 8 | Mass fraction | 10 | 25 | µg/kg | 2 | 3 | % | 2 | 95% | Yes | 12.28 | 12.28 | µg/kg | 2.4 | 2.4 | % | | 95% | Yes | SRM 1649a |
| 8392499 | Particulates | particulate matter | PCB 87 | Mass fraction | 8 | 20 | µg/kg | 5 | 6 | % | 2 | 95% | Yes | 10.65 | 10.65 | µg/kg | 5.8 | 5.8 | % | | 95% | Yes | SRM 1649a |
| 8392500 | Particulates | particulate matter | PCB 95 | Mass fraction | 40 | 75 | µg/kg | 8 | 9 | % | 2 | 95% | Yes | 51.6 | 51.6 | µg/kg | 8.1 | 8.1 | % | | 95% | Yes | SRM 1649a |
| 8392501 | Particulates | particulate matter | PCB 99 | Mass fraction | 8 | 15 | µg/kg | 7 | 8 | % | 2 | 95% | Yes | 9.58 | 9.58 | µg/kg | 7.2 | 7.2 | % | | 95% | Yes | SRM 1649a |
| 8392502 | Particulates | particulate matter extract | anthracene | Mass fraction | 101 | 101 | mg/kg | 2 | 2 | % | 2 | 95% | Yes | 101 | 101 | mg/kg | 2.0 | 2.0 | % | | 95% | Yes | SRM 1597 |
| 8392503 | Particulates | particulate matter extract | benzo[a]anthracene | Mass fraction | 0.07 | 130 | mg/kg | 3 | 17 | % | 2 | 95% | Yes | 0.092 | 98.6 | mg/kg | 3.7 | 16 | % | | 95% | Yes | SRM 1975 SRM 1597 |
| 8392504 | Particulates | particulate matter extract | benzo[a]pyrene | Mass fraction | 90 | 120 | mg/kg | 6 | 7 | % | 2 | 95% | Yes | 95.8 | 95.8 | mg/kg | 6.1 | 6.1 | % | | 95% | Yes | SRM 1597 |
| 8392505 | Particulates | particulate matter extract | benzo[b]fluoranthene | Mass fraction | 2.8 | 5 | mg/kg | 3 | 4 | % | 2 | 95% | Yes | 3.2 | 3.2 | mg/kg | 3.1 | 3.1 | % | | 95% | Yes | SRM 1975 |
| 8392506 | Particulates | particulate matter extract | benzo[e]pyrene | Mass fraction | 0.24 | 1 | mg/kg | 8 | 9 | % | 2 | 95% | Yes | 0.268 | 0.268 | mg/kg | 8.6 | 8.6 | % | | 95% | Yes | SRM 1975 |
| 8392507 | Particulates | particulate matter extract | benzo[g,h,i]perylene | Mass fraction | 50 | 70 | mg/kg | 14 | 15 | % | 2 | 95% | Yes | 53.7 | 53.7 | mg/kg | 14 | 14 | % | | 95% | Yes | SRM 1597 |
| 8392508 | Particulates | particulate matter extract | benzo[k]fluoranthene | Mass fraction | 0.15 | 2 | mg/kg | 28 | 29 | % | 2 | 95% | Yes | 0.174 | 0.174 | mg/kg | 29 | 29 | % | | 95% | Yes | SRM 1975 |
| 8392509 | Particulates | particulate matter extract | chrysene | Mass fraction | 1.8 | 100 | mg/kg | 1.4 | 4 | % | 2 | 95% | Yes | 1.95 | 71.7 | mg/kg | 1.4 | 3.6 | % | | 95% | Yes | SRM 1975 SRM 1597 |
| 8392510 | Particulates | particulate matter extract | fluoranthene | Mass fraction | 10 | 350 | mg/kg | 1.2 | 5 | % | 2 | 95% | Yes | 13.5 | 322 | mg/kg | 1.2 | 4.4 | % | | 95% | Yes | SRM 1975 SRM 1597 |
| 8392511 | Particulates | particulate matter extract | indeno[1,2,3-cd]pyrene | Mass fraction | 50 | 80 | mg/kg | 7 | 8 | % | 2 | 95% | Yes | 60.2 | 60.2 | mg/kg | 7.3 | 7.3 | % | | 95% | Yes | SRM 1597 |
| 8392512 | Particulates | particulate matter extract | naphthalene | Mass fraction | 1000 | 1500 | mg/kg | 4 | 5 | % | 2 | 95% | Yes | 1160 | 1160 | mg/kg | 4.3 | 4.3 | % | | 95% | Yes | SRM 1597 |
| 8392513 | Particulates | particulate matter extract | perylene | Mass fraction | 24 | 50 | mg/kg | 3 | 4 | % | 2 | 95% | Yes | 26.1 | 26.1 | mg/kg | 3.8 | 3.8 | % | | 95% | Yes | SRM 1597 |

Calibration and Measurement Capabilities

| NMI Service Identifier | Measurement Service Sub-Category | Matrix | Measurand | | Dissemination Range of Measurement Capability | | | Range of Expanded Uncertainties as Disseminated | | | | | | Range of Certified Values in Reference Materials | | | Range of Expanded Uncertainties for Certified Value | | | | | | Mechanism(s) for Measurement Service Delivery |
|------------------------|----------------------------------|----------------------------|----------------------|---------------|---|------|-------|---|-----|------|-----------------|---------------------|---|--|-------|-------|---|------|------|-----------------|---------------------|---|---|
| | | | Analyte or Component | Quantity | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | |
| 8392514 | Particulates | particulate matter extract | phenanthrene | Mass fraction | 6 | 500 | mg/kg | 0.7 | 3 | % | 2 | 95% | Yes | 8 | 462 | mg/kg | 0.65 | 2.5 | % | | 95% | Yes | SRM 1597 SRM 1975 |
| 8392515 | Particulates | particulate matter extract | pyrene | Mass fraction | 200 | 300 | mg/kg | 0.9 | 1.3 | % | 2 | 95% | Yes | 235 | 235 | mg/kg | 0.85 | 0.85 | % | | 95% | Yes | SRM 1597 |
| 8392516 | Particulates | particulate matter extract | triphenylene | Mass fraction | 2 | 20 | mg/kg | 3.0 | 5.0 | % | 2 | 95% | Yes | 2.38 | 12.1 | mg/kg | 3.3 | 4.2 | % | | 95% | Yes | SRM 1597 SRM 1975 |
| 8395165 | Particulates | fly ash, Particulate | aluminum | Mass fraction | 1.5 | 50 | cg/g | 1 | 4 | % | 2 | 95% | Yes | 3.42 | 15.05 | cg/g | 1.6 | 4.0 | % | 2 | 95% | Yes | SRM 1633b SRM 1648 SRM 2689 SRM 2690 SRM 2691 |
| 8395166 | Particulates | fly ash, particulate | arsenic | Mass fraction | 70 | 800 | mg/kg | 1 | 9 | % | 2 | 95% | Yes | 115 | 136.2 | mg/kg | 1.9 | 8.7 | % | 2 | 95% | Yes | SRM 1633b SRM 1648 |
| 8395167 | Particulates | fly ash | barium | Mass fraction | 350 | 8000 | mg/kg | 2 | 4 | % | 2 | 95% | Yes | 709 | 709 | mg/kg | 3.8 | 3.8 | % | 2 | 95% | Yes | SRM 1633b |
| 8395168 | Particulates | fly ash | calcium | Mass fraction | 0.75 | 20 | cg/g | 1 | 4 | % | 2 | 95% | Yes | 1.51 | 18.45 | cg/g | 1.7 | 4.0 | % | 2 | 95% | Yes | SRM 1633b SRM 2789 SRM 2790 SRM 2791 |
| 8395169 | Particulates | fly ash, particulate | cadmium | Mass fraction | 0.35 | 700 | mg/kg | 0.4 | 10 | % | 2 | 95% | Yes | 0.784 | 75 | mg/kg | 0.8 | 9.3 | % | 2 | 95% | Yes | SRM 1633b SRM 1648 |
| 8395170 | Particulates | fly ash, particulate | chromium | Mass fraction | 100 | 3000 | mg/kg | 1 | 3 | % | 2 | 95% | Yes | 198.2 | 403 | mg/kg | 2.4 | 3.0 | % | 2 | 95% | Yes | SRM 1633b SRM 1648 |
| 8395171 | Particulates | fly ash, particulate | copper | Mass fraction | 50 | 4000 | mg/kg | 1 | 5 | % | 2 | 95% | Yes | 112.8 | 609 | mg/kg | 2.3 | 4.4 | % | 2 | 95% | Yes | SRM 1633b SRM 1648 |
| 8395172 | Particulates | fly ash | iron | Mass fraction | 1.8 | 35 | cg/g | 0.3 | 3 | % | 2 | 95% | Yes | 3.57 | 9.32 | cg/g | 0.6 | 3.0 | % | 2 | 95% | Yes | SRM 1633b SRM 1648 SRM 2689 SRM 2690 SRM 2691 |
| 8395173 | Particulates | fly ash | mercury | Mass fraction | 0.07 | 1.5 | mg/kg | 6 | 14 | % | 2 | 95% | Yes | 0.141 | 0.141 | mg/kg | 14 | 14 | % | 2 | 95% | Yes | SRM 1633b |
| 8395174 | Particulates | fly ash, particulate | potassium | Mass fraction | 0.15 | 15 | cg/g | 0.5 | 4 | % | 2 | 95% | Yes | 0.34 | 2.2 | cg/g | 1 | 3.8 | % | 2 | 95% | Yes | SRM 1633b SRM 1648 SRM 2689 SRM 2690 SRM 2691 |

Calibration and Measurement Capabilities

| NMI Service Identifier | Measurement Service Sub-Category | Matrix | Measurand | | Dissemination Range of Measurement Capability | | | Range of Expanded Uncertainties as Disseminated | | | | | | Range of Certified Values in Reference Materials | | | Range of Expanded Uncertainties for Certified Value | | | | | | Mechanism(s) for Measurement Service Delivery |
|------------------------|----------------------------------|----------------------|----------------------|---------------|---|------|-------|---|----|------|-----------------|---------------------|---|--|-------|-------|---|-----|------|-----------------|---------------------|---|---|
| | | | Analyte or Component | Quantity | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | |
| 8395175 | Particulates | fly ash | magnesium | Mass fraction | 0.25 | 20 | cg/g | 1 | 9 | % | 2 | 95% | Yes | 0.482 | 3.12 | cg/g | 1.7 | 8.2 | % | 2 | 95% | Yes | SRM 1633b SRM 2689 SRM 2690 SRM 2691 |
| 8395176 | Particulates | fly ash, particulate | manganese | Mass fraction | 60 | 5000 | mg/kg | 0.6 | 3 | % | 2 | 95% | Yes | 131.8 | 786 | mg/kg | 1.3 | 2.2 | % | 2 | 95% | Yes | SRM 1633b SRM 1648 |
| 8395177 | Particulates | fly ash, particulate | sodium | Mass fraction | 0.1 | 7 | cg/g | 0.35 | 12 | % | 2 | 95% | Yes | 0.201 | 1.09 | cg/g | 0.5 | 12 | % | 2 | 95% | Yes | SRM 1633b SRM 1648 SRM 2689 SRM 2690 SRM 2691 |
| 8395178 | Particulates | fly ash, particulate | nickel | Mass fraction | 40 | 1000 | mg/kg | 1 | 4 | % | 2 | 95% | Yes | 82 | 120.6 | mg/kg | 1.5 | 3.7 | % | 2 | 95% | Yes | SRM 1633b SRM 1648 |
| 8395179 | Particulates | fly ash | phosphorus | Mass fraction | 0.05 | 4 | cg/g | 1.5 | 10 | % | 2 | 95% | Yes | 0.1 | 0.52 | cg/g | 1.9 | 10 | % | 2 | 95% | Yes | SRM 2689 SRM 2690 SRM 2691 |
| 8395180 | Particulates | fly ash, particulate | lead | Mass fraction | 35 | 8000 | mg/kg | 0.9 | 2 | % | 2 | 95% | Yes | 68.2 | 6550 | mg/kg | 1.2 | 1.6 | % | 2 | 95% | Yes | SRM 1633b SRM 1648 |
| 8395181 | Particulates | fly ash | sulfur | Mass fraction | 0.07 | 6 | cg/g | 0.4 | 7 | % | 2 | 95% | Yes | 0.15 | 0.83 | cg/g | 0.5 | 6.7 | % | 2 | 95% | Yes | SRM 1633b SRM 2690 SRM 2691 |
| 8395182 | Particulates | fly ash, particulate | selenium | Mass fraction | 5 | 200 | mg/kg | 1.2 | 4 | % | 2 | 95% | Yes | 10.26 | 27 | mg/kg | 1.7 | 3.7 | % | 2 | 95% | Yes | SRM 1633b SRM 1648 |
| 8395183 | Particulates | fly ash | silicon | Mass fraction | 8 | 35 | cg/g | 0.2 | 1 | % | 2 | 95% | Yes | 16.83 | 25.85 | cg/g | 0.3 | 0.7 | % | 2 | 95% | Yes | SRM 1633b SRM 2689 SRM 2690 SRM 2691 |
| 8395184 | Particulates | fly ash | strontium | Mass fraction | 500 | 6000 | mg/kg | 0.8 | 2 | % | 2 | 95% | Yes | 1041 | 1041 | mg/kg | 1.3 | 1.3 | % | 2 | 95% | Yes | SRM 1633b |
| 8395185 | Particulates | fly ash | thorium | Mass fraction | 12 | 120 | mg/kg | 4 | 6 | % | 2 | 95% | Yes | 25.7 | 25.7 | mg/kg | 5.1 | 5.1 | % | 2 | 95% | Yes | SRM 1633b |
| 8395186 | Particulates | fly ash | titanium | Mass fraction | 0.25 | 6 | cg/g | 1.4 | 3 | % | 2 | 95% | Yes | 0.52 | 0.9 | cg/g | 1.8 | 2.2 | % | 2 | 95% | Yes | SRM 1633b SRM 2690 SRM 2691 |
| 8395187 | Particulates | fly ash, particulate | uranium | Mass fraction | 2.5 | 60 | mg/kg | 1.4 | 5 | % | 2 | 95% | Yes | 5.5 | 8.79 | mg/kg | 1.8 | 4.1 | % | 2 | 95% | Yes | SRM 1633b SRM 1648 |

Calibration and Measurement Capabilities

| NMI Service Identifier | Measurement Service Sub-Category | Matrix | Measurand | | Dissemination Range of Measurement Capability | | | Range of Expanded Uncertainties as Disseminated | | | | | | Range of Certified Values in Reference Materials | | | Range of Expanded Uncertainties for Certified Value | | | | | | Mechanism(s) for Measurement Service Delivery |
|------------------------|----------------------------------|----------------------|----------------------|---------------|---|------|-------|---|----|------|-----------------|---------------------|---|--|-------|-------|---|-----|------|-----------------|---------------------|---|---|
| | | | Analyte or Component | Quantity | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | From | To | Unit | From | To | Unit | Coverage factor | Level of confidence | Is the expanded uncertainty a relative one? | |
| 8395188 | Particulates | fly ash, particulate | vanadium | Mass fraction | 60 | 2000 | mg/kg | 0.8 | 6 | % | 2 | 95% | Yes | 127 | 295.7 | mg/kg | 1.2 | 5.5 | % | 2 | 95% | Yes | SRM 1633b SRM 1648 |
| 8395189 | Particulates | particulate | zinc | Mass fraction | 0.25 | 3 | cg/g | 1.5 | 3 | % | 2 | 95% | Yes | 0.476 | 0.476 | cg/g | 2.9 | 2.9 | % | 2 | 95% | Yes | SRM 1648 |