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<th>Certified Reference Material</th>
<th>Sample description</th>
<th>Extraction method</th>
<th>Analytical method</th>
<th>µg g⁻¹ (Certified value)</th>
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**GBW07405: GSS-5**
- Pyrohydrolysis
- Fusion pretreatment Na₂O₂
- Pressurized acid-digestion
- Pyrohydrolytic extraction
- Catalytic reaction during the oxidation of Pyrocatechol Violet by hydrogen peroxide in strongly acid solution
- Sintering extraction

**GBW07406: GSS-6**
- Subtropical climate
- TMAH extraction
- Microwave digestion
- Pressurized acid-digestion
- Pyrohydrolytic extraction
- Catalytic reaction during the oxidation of Pyrocatechol Violet by hydrogen peroxide in strongly acid solution
- Sintering extraction

**GBW07407: GSS-7**
- Tropical climate
- N.R
- TMAH extraction
- Pyrohydrolytic extraction
- Catalytic reaction during the oxidation of Pyrocatechol Violet by hydrogen peroxide in strongly acid solution
- Sintering extraction

**GBW07408: GSS-8**
- Loess
- Pyrohydrolytic extraction
- TMAH extraction
- Catalytic reaction during the oxidation of Pyrocatechol Violet by hydrogen peroxide in strongly acid solution
- Sintering extraction

**GBW07409: ESSM-1**
- No description provided
- Pressurized acid-digestion
- ICP-MS

**GBW07410: ESSM-2**
- Black soil
- Pressurized acid-digestion
- ICP-MS

**GBW07411: ESSM-3**
- Dark brown soil
- Pressurized acid-digestion
- ICP-MS

**GBW07412: ESSM-4**
- Brown soil
- Pressurized acid-digestion
- ICP-MS

**GBW07413: GSS-9**
- A dark brown podzolitic soil prepared as a composite sample from the cold-temperate and moderate rainfall region in the Songhuajiang-Nenjiang Plain, Heilongjiang Province. This sample is rich in organic matter.
- Fusion pretreatment Na₂O₂
- ICP-AES, ICP-MS, XRF, NAA, AAS, atomic fluorescence spectrometry, volumetric, colourimetric

**GBW07414: GSS-10**
- A dark brown podzolitic soil prepared as a composite sample from the cold-temperate and moderate rainfall region in the Songhuajiang-Nenjiang Plain, Heilongjiang Province. This sample is rich in organic matter.
- Aqua regia

**GBW07415: GSS-11**
- A moist-brown soil prepared as a composite sample from the temperate and moist region in the Liaoh River Plain, Liaoning Province
- Fusion pretreatment Na₂O₂
- ICP-AES
GBW07425: GSS-11  
Aqua regia  
ICP-AES, ICP-MS, XRF, NAA, AAS, atomic fluorescence spectrometry, volumetric, colourimetric  
1.60

GBW07425: GSS-11  
Catalytic reaction during the oxidation of Pyrocatechol Violet by hydrogen peroxide in strongly acid solution  
Flow injection analysis  
2.46

GBW07425: GSS-11  
A brown calcareous soil prepared as a composite sample from the dry and cold agricultural district on the southern fringe of the Zhunagaer Basin, Xinjiang. This sample contains obvious calcareous deposits.  
Fusion pretreatment Na$_2$O$_2$  
ICP-AES  
0.74

GBW07426: GSS-12  
Aqua regia  
ICP-AES, ICP-MS, XRF, NAA, AAS, atomic fluorescence spectrometry, volumetric, colourimetric  
1.40

GBW07426: GSS-12  
Catalytic reaction during the oxidation of Pyrocatechol Violet by hydrogen peroxide in strongly acid solution  
Flow injection analysis  
2.22

GBW07426: GSS-12  
A powdery sandy yellow-moist soil prepared as a composite sample from the south temperate and sub-moist alluvial region in the North China Plain derived from the Yellow and Haihe River.  
Aqua regia  
ICP-AES, ICP-MS, XRF, NAA, AAS, atomic fluorescence spectrometry, volumetric, colourimetric  
2.40

GBW07428: GSS-13  
A purple soil prepared as a composite sample from the subtropical and high rainfall hilly country region in the Sichuan Basin. The underlying bedrock was Mesozoic sandy shale.  
Aqua regia  
ICP-AES, ICP-MS, XRF, NAA, AAS, atomic fluorescence spectrometry, volumetric, colourimetric  
0.90

GBW07429: GSS-15  
Red soil, rich in selenium  
Aqua regia  
ICP-AES, ICP-MS, XRF, NAA, AAS, atomic fluorescence spectrometry, volumetric, colourimetric  
2.30

GBW07429: GSS-15  
Kuroboku soils (Andosol) originated from volcanic ash and rich in organic materials  
Pressurized acid-digestion  
Pyrohydrolytic extraction  
ICP-MS  
0.44

GBW07429: GSS-15  
31 elements artificially added  
Pyrohydrolytic extraction  
ICP-MS  
54.00

GBW07429: GSS-15  
Maybe contaminated with hot particles resulting from the Chernobyl accident  
Pyrohydrolytic extraction  
ICP-MS  
1.60

GBW07429: GSS-15  
San Joaquin Soil  
Microwave digestion  
ICP-MS  
1.75

GBW07429: GSS-15  
Internal Atomic Energy Agency IAEA-375  
International Atomic Energy Agency IAEA-375  
International Atomic Energy Agency IAEA-375  
JSSSPN NDG-1  
NCS NCS DC 73312  
NCS NCS DC 73312  
NIST NIST SRM 2709  
Andosol, plow layer  
Thermal extraction  
ICP-MS  
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GBW07429: GSS-15  
San Joaquin Soil  
Pressurized acid-digestion  
Pyrohydrolytic extraction  
ICP-MS  
3.22

GBW07429: GSS-15  
San Joaquin Soil  
Pyrohydrolytic extraction  
Photometry  
3.09

GBW07429: GSS-15  
San Joaquin Soil  
Microbial digestion  
ICP-MS  
3.22

GBW07429: GSS-15  
San Joaquin Soil  
N.R  
N.R  
35.00

GBW07429: GSS-15  
San Joaquin Soil  
N.R  
N.R  
35.00

GBW07429: GSS-15  
San Joaquin Soil  
N.R  
N.R  
35.00
References

1. K. Govindaraju, Geostandards and Geoanalytical Research, 1994, 18, 1-158.