

## Section 12 Solution Standard

Number	Name	Nomonal Composition( $\mu\text{g}/\text{mL}$ )	Medium	Unit Size (mL)
NCSAH 11401	Lithium	1000	HCl(10%)	50
NCSAH 11402	Beryllium	1000	HNO <sub>3</sub> (10%)	50
NCSAH 11403	Boron	1000	H <sub>2</sub> O	50
NCSAH 11404	Sodium	1000	H <sub>2</sub> O	50
NCSAH 11405	Magnesium	1000	HCl(5%)	50
NCSAH 11406	Aluminum	1000	HCl(10%)	50
NCSAH 11407	Silicon	1000	Na <sub>2</sub> CO <sub>3</sub>	50
NCSAH 11408	Phosphorus(NH <sub>4</sub> )	1000	H <sub>2</sub> O	50
NCSAH 11409	Phosphorus(K)	1000	H <sub>2</sub> O	50
NCSAH 11410	Sulfur	1000	H <sub>2</sub> O	50
NCSAH 11411	Potassium	1000	H <sub>2</sub> O	50
NCSAH 11412	Calcium	1000	HCl(5%)	50
NCSAH 11413	Scandium	1000	HNO <sub>3</sub> (20%)	50
NCSAH 11414	Titanium	1000	H <sub>2</sub> SO <sub>4</sub> (10%)	50
NCSAH 11415	Vanadium	1000	H <sub>2</sub> SO <sub>4</sub> (10%)	50
NCSAH 11416	Vanadium	1000	HCl(10%)	50
NCSAH 11417	Chromium	1000	HCl(10%)	50
NCSAH 11418	Manganese	1000	H <sub>2</sub> SO <sub>4</sub> (5%)	50
NCSAH 11419	Manganese	1000	HNO <sub>3</sub> (10%)	50
NCSAH 11420	Iron	1000	HCl(10%)	50
NCSAH 11421	Cobalt	1000	HNO <sub>3</sub> (5%)	50
NCSAH 11422	Nickel	1000	HNO <sub>3</sub> (5%)	50
NCSAH 11423	Copper	1000	H <sub>2</sub> SO <sub>4</sub> (5%)	50
NCSAH 11424	Copper	1000	HCl(10%)	50
NCSAH 11425	Zinc	1000	HCl(10%)	50
NCSAH 11426	Gallium	1000	HCl(10%)	50
NCSAH 11427	Arsenic	1000	H <sub>2</sub> SO <sub>4</sub> (5%)	50
NCSAH 11428	Arsenic	1000	HCl(10%)	50
NCSAH 11429	Selenium	1000	HCl(10%)	50
NCSAH 11430	Rubidium	1000	HNO <sub>3</sub> (5%)	50
NCSAH 11431	Strontium	1000	H <sub>2</sub> O	50
NCSAH 11432	Yttrium	1000	HCl(10%)	50
NCSAH 11433	Zirconium	1000	HCl(10%)	50
NCSAH 11434	Niobium	1000	HF(5%)	50
NCSAH 11435	Molybdenum	1000	H <sub>2</sub> SO <sub>4</sub> (5%)	50
NCSAH 11437	Rhodium	1000	HNO <sub>3</sub> (10%)	50
NCSAH 11438	Palladium	1000	HCl(10%)	50
NCSAH 11439	Silver	1000	HNO <sub>3</sub> (5%)	50
NCSAH 11440	Cadmium	1000	HCl(10%)	50
NCSAH 11441	Indium	1000	HCl(10%)	50
NCSAH 11442	Tin	1000	HCl(20%)	50
NCSAH 11443	Antimony	1000	H <sub>2</sub> SO <sub>4</sub> (25%)	50
NCSAH 11445	Cesium	1000	HNO <sub>3</sub> (5%)	50
NCSAH 11446	Beryllium	1000	HCl(10%)	50
NCSAH 11447	Lanthanum	1000	HCl(10%)	50
NCSAH 11448	Cerium	1000	HNO <sub>3</sub> (10%)	50
NCSAH 11449	Praseodymium	1000	HCl(10%)	50
NCSAH 11450	Neodymium	1000	HCl(10%)	50

## Section 12 Solution Standard

Number	Name	Nominal Consistence( $\mu\text{g}/\text{mL}$ )			Medium	Unit Size (mL)			
NCSAH 11451	Samarium	1000			HCl(10%)	50			
NCSAH 11452	Europium	1000			HCl(10%)	50			
NCSAH 11453	Gadolinium	1000			HCl(10%)	50			
NCSAH 11454	Terbium	1000			HCl(10%)	50			
NCSAH 11455	Dysprosium	1000			HCl(10%)	50			
NCSAH 11456	Holmium	1000			HCl(10%)	50			
NCSAH 11457	Erbium	1000			HCl(10%)	50			
NCSAH 11458	Thulium	1000			HCl(10%)	50			
NCSAH 11459	Ytterbium	1000			HCl(10%)	50			
NCSAH 11460	Lawrencium	1000			HCl(10%)	50			
NCSAH 11461	Hafnium	1000			H <sub>2</sub> SO <sub>4</sub> (10%)	50			
NCSAH 11462	Tantalum	1000			HF(20%)	50			
NCSAH 11463	Tungsten	1000			NaOH(2%)	50			
NCSAH 11464	Rhenium	1000			HCl(10%)	50			
NCSAH 11466	Iridium	1000			HCl(10%)	50			
NCSAH 11467	Platinum	1000			HCl(10%)	50			
NCSAH 11468	Gold	1000			HCl(10%)	50			
NCSAH 11469	Mercury	1000			HNO <sub>3</sub> (5%)	50			
NCSAH 11470	Thallium	1000			HNO <sub>3</sub> (20%)	50			
NCSAH 11471	Lead	1000			HNO <sub>3</sub> (10%)	50			
NCSAH 11472	Bismuth	1000			HNO <sub>3</sub> (10%)	50			
NCSAH 11473	Germanium	1000			H <sub>2</sub> O	50			
Number	Name	Nominal Consistence( $\mu\text{g}/\text{g}$ )			Unit Size (in mL)				
NCSAH 76401	Lead in Water	1.00			20or100				
NCSAH 76402	Cadmium in Water	0.100			20or100				
NCSAH 76403	Mercury in Water	0.010			20or50				
NCSAH 76404	Fluoride in Water	1.00			100				
NCSAH 76404	Arsenic in Water	0.50			20or100				
Number	Name	Cl <sup>-</sup>	NO <sub>3</sub> <sup>-</sup>	SO <sub>4</sub> <sup>2-</sup>	Nominal Consistence( $\mu\text{g}/\text{g}$ )	Unit Size (in mL)			
NCSAH 76406	Anions in Water	22.0	4.50	38.0	1000	20or100			
Number	Name	Cd	Pb	Cu	Cr	Zn	Ni	Nominal Consistence( $\mu\text{g}/\text{g}$ )	Unit Size (in mL)
NCSAH 76407	Metal in Water	0.100	1.00	1.00	0.500	5.00	0.500	1000	20or100
NCSAH 76408	Metal in Water	10.0*	50*	30*	50*	90*	60*	1000	20or100
* Unit Certified Value of the element is ng/g.									
Number	Name	Concentration( $\mu\text{g}/\text{g}$ )					Unit Size (in mL)		
NCSAH 76409	Silver in Water	1000					20		
NCSAH 76410	Arsenic in Water	1000					20		
NCSAH 76411	Cadmium in Water	1000					20		
NCSAH 76412	Cobalt in Water	1000					20		
NCSAH 76413	Chromium in Water	1000					20		
NCSAH 76414	Copper in Water	1000					20		
NCSAH 76415	Iron in Water	1000					20		
NCSAH 76416	Mercury in Water	1000					20		
NCSAH 76417	Nickel in Water	1000					20		
NCSAH 76418	Lead in Water	1000					20		
NCSAH 76419	Zinc in Water	1000					20		

## Section 12 Solution Standard

Number	Name	Mass Fraction of Substance( $10^{-6}$ )	Unit Size (in mL)
NCS AH 76423	Gold Solution	100.0	20
NCS AH 76424	Lanthanum Solution	982.3	20
NCS AH 76425	Cerium Solution	951.5	20
NCS AH 76426	Samarium Solution	982.3	20
NCS AH 76427	Europium Solution	982.3	20
NCS AH 76428	Ytterbium Solution	982.3	20
NCS AH 76429	Lutetium Solution	982.3	20
NCS AH 76430	Yttrium Solution	982.3	20
Number	Name	Range Concentration(mg/L)	Unit Size (mL)
NCS AH 85401	Arsenic	0.1~0.8	20
NCS AH 85402	Ammonia Nitrogen	0.5~5	20
NCS AH 85403	Nitrite Nitrogen	0.05~0.2	20
NCS AH 85404	Nitrite Nitrogen	0.5~5	20
NCS AH 85405	Cu,Pb,Zn,Cd,Ni,Cr	Cu0.5~2,Pb0.5~2,Zn0.1~1,Cd0.1~1,Ni0.1~2,Cr0.1~2	20
NCS AH 85406	F <sup>-</sup> ,Cl <sup>-</sup> ,SO <sub>4</sub> <sup>2-</sup>	F0.2~5,Cl <sup>-</sup> 0.5~100,SO <sub>4</sub> <sup>2-</sup> 5~100	20
NCS AH 85407	Copper	0.01~2	20
NCS AH 85408	Lead	0.01~2	20
NCS AH 85409	Zinc	0.01~2	20
NCS AH 85140	Cadmium	0.01~2	20
NCS AH 85141	Nickel	0.1~2	20
NCS AH 85412	Chromium	0.1~2	20
NCS AH 85413	Fluorine	0.2~5	20
NCS AH 85414	Chlorine	0.01~100	20
NCS AH 85415	Sulfate	0.1~100	20
NCS AH 85416	Mercury	6~20( $\mu$ g/L)	20
NCS AH 85417	Total Cyanide	0.05~1	20
NCS AH 85418	Fe,Mn	0.01~2	20
NCS AH 85419	K,Na,Ca,Mg	K0.1~0.5,Na0.1~5,Ca0.1~10,Mg0.1~5	20
NCS AH 85420	Potassium	0.1~5	20
NCS AH 85421	Sodium	0.1~5	20
NCS AH 85422	Calcium	0.1~10	20
NCS AH 85423	Magneium	0.2~5	20
NCS AH 85424	Iron	0.1~5	20
NCS AH 85425	Manganese	0.1~5	20
NCS AH 85426	Total Nitrogen	1~8	20
NCS AH 85427	Vanadium	0.1~1	20
NCS AH 85428	Cobalt	0.05~1	20
NCS AH 85429	Selenium	0.01~1	20
NCS AH 85430	Molybdenum	0.05~1	20
NCS AH 85431	Cr <sup>6+</sup>	0.01~5	20
NCS AH 85432	Phosphrate	0.05~5	20
NCS AH 85433	Total Phosphrous	0.05~5	20
NCS AH 85434	Barium	0.2~2	20
NCS AH 85435	Silver	0.2~1	20
NCS AH 85436	Antimony	0.5~2	20
NCS AH 85437	Aluminum	0.05~2	20
NCS AH 85438	Beryllium	5~20( $\mu$ g/L)	20
NCS AH 85439	Lithium	0.2~2.0	20
NCS AH 85440	Strontium	0.3~10	20
NCS AH 85441	Bromine	0.5~3	20