

Instructions for: **Soil Metals (Cat # PT-MET-SOIL)**

SCOPE AND APPLICATION

Wibby Environmental's Soil Metals Proficiency Testing Standard is designed to be used for all USEPA ICP and atomic absorption methods as well as USEPA Method 7471 (mercury). The standard requires digestion by USPEA Method 3050 (hot plate digestion) or 3051 (microwave digestion) or an equivalent procedure prior to analysis. You should be familiar with the method(s) before analyzing the standard. If you have any questions about the use of these standards, please contact Wibby Environmental Customer Service at 1-866-WibbyPT (866-942-2978).

SAMPLE PREPARATION AND ANALYSIS

1. For best results, the PT standard should be stored near room temperature (~ 20°C).
2. Thoroughly mix the Metals standard prior to removing an aliquot for digestion and analysis.
3. The Metals standard requires digestion prior to analysis. Follow your routine procedures for the determination of metals in a soil sample.

REPORTING RESULTS

1. Report all results on line at www.wibby.com. Click on the "Online data entry link" and follow the instructions to enter your results.
2. Report results to three significant figures.
3. For the purposes of reporting results, the percent moisture of the PT standard is 0%. Report all results in mg/kg on a dry weight basis.
4. You may also report your results using the Data Reporting Sheets enclosed with your standards. FAX your results to Wibby Environmental at 866-283-0269 or mail the results to Wibby Environmental, 6390 Joyce Drive, #100, Golden, CO, 80403.

5. All results must be received by Wibby Environmental prior to the study closing date shown on the Data Reporting Sheets.

SAFETY

These standards are designed for use by laboratory professionals who are familiar with handling environmental reference materials as well as hazardous materials. If you have any questions about the safe handling of these standards or require a Material Safety Data Sheet (MSDS,) please contact Wibby Environmental at 303-940-0033.

QUESTIONS?

If you have any questions regarding these standards or reporting requirements, please call Wibby Environmental at 303-940-0033.

Soil / Hazardous Waste PT Concentration Ranges and PTRLs

Definitions:

PTRL

NELAC Proficiency Testing Reporting Limits (PTRLs) are provided as guidance to laboratories analyzing NELAC PT samples. At a minimum, the laboratory should use a method that is sensitive enough to generate quantitative results at the PTRLs shown. (REF: NELAC PT FOT Tables)

NA

Not Applicable (NA) has been applied to analytes where a PTRL is not applicable and to state specific analytes that have not had a PTRL determined by the applicable accrediting agency.

Metals (PT-MET-SOIL)

NELAC Code	Analyte	Units	Concentration Range	PTRL
1000	Aluminum	mg/kg	1000 - 25000	100
1005	Antimony	mg/kg	80.0 - 300	8.00
1010	Arsenic	mg/kg	40.0 - 400	4.00
1015	Barium	mg/kg	100 - 1000	10.0
1020	Beryllium	mg/kg	40.0 - 400	4.00
1025	Boron	mg/kg	80.0 - 800	48.0
1030	Cadmium	mg/kg	40.0 - 400	4.00
1035	Calcium	mg/kg	1500 - 25000	150
1040	Chromium	mg/kg	40.0 - 400	4.00
1050	Cobalt	mg/kg	40.0 - 400	4.00
1055	Copper	mg/kg	40.0 - 400	4.00
1070	Iron	mg/kg	1000 - 50000	100
1075	Lead	mg/kg	40.0 - 400	4.00
1085	Magnesium	mg/kg	1200 - 25000	120
1090	Manganese	mg/kg	100 - 2000	10.0
1095	Mercury	mg/kg	1.00 - 35.0	0.100
1100	Molybdenum	mg/kg	30.0 - 300	3.00
1105	Nickel	mg/kg	40.0 - 500	4.00
1125	Potassium	mg/kg	1400 - 25000	140
1140	Selenium	mg/kg	40.0 - 400	4.00
1150	Silver	mg/kg	20.0 - 100	2.00
1155	Sodium	mg/kg	150 - 15000	15.0
1160	Strontium	mg/kg	40.0 - 400	4.00
1165	Thallium	mg/kg	40.0 - 400	4.00
1175	Tin	mg/kg	75.0 - 250	7.50
1185	Vanadium	mg/kg	40.0 - 400	4.00
1190	Zinc	mg/kg	100 - 1000	10.0
Additional State Specific Analytes				
1080	Lithium	mg/kg	1.00 - 250	NA
1180	Titanium	mg/kg	1.00 - 250	NA
3035	Uranium	mg/kg	1.00 - 250	NA