

## Certification

The MSE Lab is certified by the State of Montana's Environmental Laboratory to analyze samples from public drinking water systems in Montana. The certification applies to the analysis of a variety of metal contaminants and other parameters. The most recent certification will be available on our web site this year.

In March 2005, The lab received a Soil Import Permit by the United States Department of Agriculture (USDA), allowing soil samples to be imported to our lab through any U.S. port of entry.

Permits and soil import instructions and forms will be available on our web site soon.

## Testing Packages

The MSE Lab offers testing for individual parameters or, based upon particular project requirements, you may opt for one of our comprehensive testing packages. Contact the laboratory for a quote. A discount is available for sample volume.

Prices contingent on prior consultation with MSE Laboratory regarding the source of samples, sample collection techniques, shipping procedures, sample bottles to be used, etc. For further information and pricing approval, contact **Helen Joyce, 406-494-7232.**



Technology Applications, Inc.

**200 Technology Way  
Butte, MT 59701**

MSE is a certified small business with employees in six states including office locations in Montana, Washington, Idaho, North Carolina, South Carolina, West Virginia, and Tennessee. We have performed projects or sold products across 45 states and several foreign countries.



## Analytical Services



### Comprehensive Water and Soil Analyses

- Superfund
- Waste Characterization
- Drinking Water
- Wastewater
- Storm Run-Off
- Sampling Services
- Attic Dust
- Landfill
- Organics
- Technical Writing

# Capabilities



## INSTRUMENTATION

### Inductively Coupled Plasma-Atomic Emission Spectrometer (ICP-AES)

ARL 3560E Simultaneous Inductively Coupled Plasma – Atomic Emission Spectrometer with auto-sampler.

### Graphite Furnace Atomic Absorption Spectrophotometer (GFAAS)

2 – Varian SpectraAA 400 Graphite Furnace Atomic Absorption Spectrophotometers with auto samplers.

### Inductively Coupled Plasma-Mass Spectrometer (ICP-MS)

Perkin Elmer ELAN 6000 Inductively Coupled Plasma – Mass Spectrometer with AS-90 auto sampler.

### Cold Vapor Atomic Absorption (CVAA) Mercury Analysis

2 – CETAC M6000A Cold Vapor Atomic Absorption Mercury Analyzer with auto samplers.

### Gas Chromatograph – Mass Spectrometer (GC-MS)

2 – Varian Star 3400C GC-Saturn 2000-MS Gas Chromatograph-Mass Spectrometers.

### Ion Chromatography (IC)

DIONEX ICS2500 Ion Chromatograph (IC) with auto sampler.

### Trace Metal Analyses

Trace metal analyses are performed using a variety of state-of-the-art instrumentation, depending upon the clients' required detection limits. With ICP-AES, GFAAS and ICP-MS capabilities, low detection limits and fast turnaround in metals analysis can be dependably achieved.



### Non-Metallic Inorganic Analyses (Wet-Chem)

The MSE Lab uses a state-of-the-art Dionex ICS2500 ion chromatograph for the low-level detection of anions, including chloride, bromide, fluoride, nitrate, nitrite and sulfates. We also use a Perstorp Model 501 Auto-Analyzer for samples requiring a faster throughput with slightly elevated detection limits.

### Organic Analyses

Volatile organic chemicals are determined by purge and trap combined with GC/MS.



### Biological Analyses

Routine testing currently includes total coliform, fecal coliform, BOD and standard plate counts.



### Waste Characterization

- TCLP (EPA Method 1311)
- SPLP (EPA Method 1312)
- MEP (EPA Method 131?)
- CAL WET (California Waste Extraction Testing)

MSE Laboratory can develop and implement specialized leach testing procedures specific to your project or site. Contact the lab for a quote via the website or by phone.

### Soil Analyses

- ABA (Acid-Base Accounting)
- Neutralization Potential
- Acidity/Alkalinity
- Sulfur (Total and Pyritic)
- Physical Parameters
- Soil Characterization
- Extractable Constituents

### Other Services

- Sampling services are available for most sampling protocols.
- Sample coolers, containers, blue ice and packaging materials can be shipped to project sites.
- Courier service within a limited radius of the MSE Lab is available for sample pickup.
- Consulting chemists are available to answer technical questions.

*Contact the laboratory for a comprehensive list of services.*

