QUALIFICATIONS

YOUR ENVIRONMENTAL MONITORING PARTNER

www.intermountainlabs.com
Corporate Office, Air Science, Field Services, Chinook Engineering:
555 Absaraka Street
Sheridan, Wyoming 82801
(307) 674-7506
Contact: Kevin Chartier

Main Lab Campus:
1673 & 1633 Terra Ave.
Sheridan, Wyoming 82801
(307) 672-8945
Contact: Tom Patten

Gillette Lab & Field Services:
1701 Phillips Circle
Gillette, Wyoming 82718
(307) 682-8945
Contact: Dan Power

Casper Drop Off Location:
WAMCO Labs
864 South Spruce
Casper, Wyoming 82601
(307) 266-3252
Contact: Elaine Gold
Inter-Mountain Labs, Inc. (IML) is a multi-disciplinary company offering services and products related to environmental measurement.

IML has been providing comprehensive environmental measurement services to public and private sector clients throughout the United States and the world since 1979.

Our principal services and products include:
- Comprehensive chemical analyses of environmental samples: Soil, Water, Air, Waste
- Groundwater and surface water sampling
- Soil core sampling and characterization
- Radiochemistry for mining & drinking water
- Kinetic testing of soil/rock/ore
- Ambient air pollutant monitoring and speciation
- Design and installation of continuous air monitoring networks
- Meteorological monitoring and micro/mesoscale forecasting
- Database development, standard and custom products for data tracking and retrieval
- Custom software (application-based or executable)
- GIS/database integrated software packages
- Environmental permitting and engineering services
- Innovative research and measurement systems development

IML offers a combination of full-scale laboratory analysis services with a broad range of field and engineering capabilities. This unique combination enables us to develop and implement cost-effective solutions that provide a high degree of utility and value to our customers.

IML’s projects extend from Alaska to the Gulf of Mexico, Kenya to Australia, with matrices ranging from alpine lake surface water and drinking water to waste samples analyzed to support closure of an industrial hazardous waste facility. Clients include the hardrock and coal mining companies; petrochemical and energy companies; universities; a broad range of environmental engineering firms; National Park Service; US Environmental Protection Agency; US Fish and Wildlife Service; and other federal, state, and county agencies located throughout the US.
Water Quality Analysis

IML has been providing high quality, comprehensive water quality analytical services since 1979. From our earliest projects in the Rocky Mountain corridor at our initial laboratory in Sheridan, Wyoming, we have applied progressive analytical technologies to projects across the nation and internationally.

Applications
- Drinking Water (SDWA)
- Waste Water (NPDES)
- Groundwater
- Surface Water (CWA)
- Discharge (NPDES/WYPDDES)
- Runoff

Water Analyses
- Inorganic
- Organic
- Trace Metals
- Bacteriological
- Radiochemistry

Flexible Reporting
Lab reports available in hardcopy, Excel, pdf and database formats.
Custom reporting available
Electronic DMR’s

Certifications
- EPA Region VIII
- Montana
- Oklahoma
- Idaho
- Nevada
- A2LA Accreditation for LAUST program

YOUR ENVIRONMENTAL MONITORING PARTNER

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Soil Analysis

IML has been proving high quality, comprehensive soil quality analytical services since 1979. Traditionally, IML’s core soil business has been overburden, backfill and topsoil analysis for coal mines in the Powder River Basin, however; IML also receives soil samples from across the western US and is licensed by USDA/ARS to accept and analyze foreign and local quarantined soils.

**Soil Analysis**
- Overburden, Backfill/Spoil, Topsoil
- Heavy Metals
- Salinity
- Meteoric Water Mobility Procedure
- Abandoned Mine Lands
- Petroleum Contaminated Soil
- Humidity Cell Tests

**Mine Soils and Overburden**
- Acid-Base Accounting -
  - Acid-Base Balance
- Acidity
- Neutralization Potential
- Potential Acidity
- Exchangeable Acidity
- Nutrient Analysis
- Meteoric Water Mobility Procedure
- Humidity Cell Tests

**Agriculture Analysis**
- Soil fertility (N, P, K)
- Salinity
- Organic Matter
- Crop and forage analysis
- Carbon analysis
- Lawn/garden and professional turf

**Flexible Reporting**
- Lab reports available in hardcopy, Excel, pdf and database formats.
- Custom reporting available
- Electronic DMR’s
Organic Analysis

IML utilizes state of the art instrumentation applying EPA approved methodologies to provide organic laboratory services to meet the needs of drinking water compliance, regulatory remediation programs, refineries, oil and natural gas/coal bed methane industry, and other applications. IML scientists have extensive experience with a variety of difficult matrices and producing high quality data in a timely manner for sensitive projects. This highly qualified staff is available to produce reliable results to meet the most stringent regulatory review.

**Laboratory Analyses**

- Volatile compounds
- Semi-volatile compounds
- PCB in oil and soil
- Drinking water
- Groundwater
- Hazardous Waste
- EP Toxicity characterization

**Instrumentation**

- GC (variety of detectors)
- GC/MS
- Autosamplers
- TOX
- Automated extraction

**Applications**

- Subsurface investigations
- LAUST remediation projects
- Stormwater runoff monitoring
- Oil field pit closures
- Refinery perimeter monitoring
- Landfarm closure/evaluation
- Spill monitoring
- Waste characterization
- Landfill monitoring

**Certifications**

- EPA Region VIII
- Montana
- Oklahoma
- Idaho
- Nevada
- A2LA Accreditation for LAUST program
With the renewed interest in uranium in Wyoming, IML has taken this opportunity to expand laboratory and field sampling methods to help our clients obtain mining permits and conduct compliance monitoring. Inter-Mountain Labs (IML) has been providing soil, water, and air analytical, sampling, and technical services to multiple industries and regulatory agencies since 1979. We take pride in providing state-of-the-art accredited analytical chemistry and monitoring services that consistently satisfy critical regulatory review. IML scientists are trained in methods and quality assurance protocol approved by EPA, A2LA, OSHA, NIOSH, and multiple state agencies. IML is a US NRC licensed facility.

**Baseline Data Collection for Permit & NRC License Applications**

**Water Sampling**
- Surface/Groundwater

**Soil Sampling**
- WDEQ Guideline 1 & NRC 4.14
- Surface /Topsoil
- Subsurface/Profile
- Sediment
- Petroleum Contaminated Soils (PCS)

**Air Sampling**
- Passive
- Continuous
- Particulate
- Meteorological

**Analytical**
- Gross Alpha
- Gross Beta
- Radium 226
- Radium 228
- U Natural
- Lead 210
- Polonium 210
- Thorium 230

**Leaching Studies**
- Bottle Roll—Isotherm
- Column Studies

**Compliance Monitoring**
- Groundwater & Surface Water Sampling & Analysis
- Soil Sampling & Analysis
- QC Sample Analysis
- Bioassay Analysis
**Air Analysis**

**Micro-Gravimetric Laboratory**
- Designed for PM$_{2.5}$ Reference Method
- Sartorius micro-balance
- Backup ATI/Cahn micro-balance
- Custom, paperless data system with PM$_{2.5}$ QC built in
- Separate sample handling room
- Pressurized lab w/ HEPA filtration
- Custom environmental control system
- Integral anti-static system

**PM10 Gravimetric Laboratory**
- Designed for PM$_{10}$ Reference Method
- ATI/Cahn micro-balance for low volume samples, Sartorius 4-place balance for high volume samples
- Custom, paperless data system with PM$_{10}$ QC built in
- Custom environmental control system

**NIST Traceable Transfer Standards**
- High flow rate (1 – 1.5 m$^3$/min)
- Low flow rate (1 – 20 L/min)
- Temperature
- Barometric pressure
- Pressure difference
- Relative humidity
- Mass (50 µg – 5 g)
- Standard gas dilution system

**Other Resources**
- 800 ft$^2$ shop w/ test gear & extensive parts supply
- Multiple meteorological monitoring audit sets
- Specialized tools for air and meteorological systems repair
- Spare instruments to reduce down time

An IML Air Science – specific Statement of Qualifications is available. Contact IML Air Science for a copy; (307) 674-7506.
Kinetic Testing

Inter-Mountain Labs has been performing many forms of Kinetic testing since it started operations in 1979. Inter-Mountain Labs routinely performs the following kinetic testing procedures: humidity cells, column tests, bottle leach tests, Nevada’s Meteonic Water Mobility Procedure and biological procedures. Inter-Mountain Labs has a unique advantage of having an engineering group to help set-up equipment and environmental controls for many testing requirements.

**IML has Unique Staffing Advantages**
- Over 30 years in business providing analytical services
- Experienced engineers employed in a laboratory setting
- Decades of experience controlling environmental conditions
- Staff of degreed scientist: 10 Chemists, 3 Meteorologists, 2 electrical engineers, 2 civil engineers, 2 geologists, 2 microbiologist, 2 biologist, 2 range scientist, a chemical engineer, and a soil scientist

**Infrastructure Advantages**
- Nevada Certified Lab, audited by Don LaFara from NDEP in the 2nd Quarter of 2010
- New facility built in 2004, a new state of the art facility in Sheridan, WY
- Dedicated humidity cell chambers capable of a current capacity of 65 concurrent tests
- IML provides Nevada certified “in-house” analysis of extracts, reducing holding and turn-around times
- IML has duplicate or multiple instruments for each techniques such as: ICP-MS, ICP-OES, IC, RFA, Auto-titrators, pH/EC/Eh meters, Hg Analyzers, sample prep blocks, GC-MS, GC-PID, and GC-FID

**Some Example Projects**
- Humidity Cells Tests for African and Peruvian gold mines to assess environmental weathering impacts
- Powder River Basin Coal overburden, spoil, and backfill column tests for groundwater impact studies
- Wyoming Soil column tests for land application of Coal Bed Methane produced water impact studies
- Uranium ore column tests as a heap leach pilots for uranium extraction and trace metals impact studies
- Biological Acid Production Potentials, a Kinetic test for State of Nevada for Acid Generating Material
- Nevada Meteoric Water Mobility Test, a Kinetic test for rain water impacts to Ground and surface waters

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Humidity Cell Testing

IML offers ASTM Method D5744-07, Option A and Option B: Standard Test method for Laboratory Weathering of Solid Materials Using a Humidity Cell. This kinetic test method covers a laboratory weathering procedure that (1) enhances reaction-product transport in the aqueous leach of a solid material sample of specific mass, and (2) measures rates of weathering-product mass release. Soluble weathering products are mobilized by a fixed-volume aqueous leach that is performed and collected weekly. This test is intended for use to meet kinetic testing regulatory requirements for mining waste rock and ore.

Analytical Requirements and Capabilities
- Type II reagent grade deionized water used as the extraction fluid
- Ultra-Purified Chemical Reagents
- IML provides “in-house” analytics of extract, thereby reducing holding and turn-around times
- Certified by NDEP for extract analysis
- Leachate samples are analyzed for pH, alkalinity/acidity, specific conductance, sulfate, and other selected analytes
- Run time: 20 weeks or longer if required
- Isolated temperature and humidity controlled chamber

Analytical Expertise
- IML is celebrating its 30th year of providing high quality regulatory compliance data to the mining industry
- Knowledgeable Project Managers Assigned to Every Client

Flexible Reporting
- Lab Reports Available in Excel, pdf, and Database Formats
- Customized Reporting Available

Sample Requirements: Humidity Cell test require approximately 1 kg of 1/4 inch minus mine rock
Meteoric Water Mobility Procedure

IML assesses the potential for dissolution and mobility of mine rock constituents using the Meteoric Water Mobility Procedure (MWMP), as developed by the Nevada Department of Environmental Protection and outlined in ASTM E2242. The result of this procedure is an extract that can be evaluated for a fully-customizable array of analytes. Upon request, IML can also provide a variety of additional metal leaching and acid-base procedures on your mine rock material. This test is intended for use to meet kinetic testing regulatory requirements for mining waste rock and ore.

Analytical Requirements and Capabilities
- Type II reagent grade deionized water used as the extraction fluid
- Ultra-Purified Chemical Reagents
- IML provides “in-house” analytics of extract, thereby reducing holding and turn-around times
- Certified by NDEP for extract analysis
- Leachate samples are analyzed for pH, alkalinity/acidity, specific conductance, sulfate, and other selected analytes.

Analytical Expertise
- IML is celebrating its 30th year of providing high quality regulatory compliance data to the mining industry
- Knowledgeable Project Managers Assigned to Every Client

Flexible Reporting
- Lab Reports Available in Excel, pdf, and Database Formats
- Customized Reporting Available

Sample Requirements: MWMP and associated tests require approximately 7 kg of minus 2-inch mine rock
Biological Acid Producing Potential

Inter-Mountain Labs can further refine the results of a static acid-base prediction technique using the kinetic prediction technique known as the Biological Acid Producing Potential (BAPP) test (also referred to as the BC Research Confirmation Test). The BAPP test assists in determining whether the acid generated through biologically-mediated oxidation of sulfides is sufficient to surmount the neutralizing capacity of the sample, thereby increasing the potential for acid mine drainage. Predicted acid-base reactions are generally not fully realized under field conditions, whereas the BAPP test results are more indicative of field conditions. In addition, IML can also provide a variety of additional metal leaching and acid-base procedures on your mine rock material.

Analytical Requirements and Capabilities
Samples are incubated under constant temperature (±0.1°C) using a gyratory shaker.
IML provides “in-house” analytics of solution, thereby reducing holding and turn-around times.

Analytical Expertise
Ultra-Purified Chemical Reagents
28 Years of Experience in Environmental Testing
Project Managers Assigned to Every Client

Flexible Reporting
Lab Reports Available in Excel, pdf, and Database Formats
Customized Reporting Available

Sample Requirements: BAPP and associated tests require approximately 500 grams of minus 400-mesh
Mining Related Services

IML provides field and laboratory services designed specifically for the mining industry. A Project Manager is assigned to each mining client to assure timely and complete delivery of services.

**Soil Analysis**
- Overburden, Backfill/Spoil, Topsoil
- Heavy Metals
- Salinity
- Meteoric Water Mobility Procedure
- Abandoned Mine Lands
- Petroleum Contaminated Soil
- Humidity Cell Tests

**Water Analyses**
- Inorganic
- Organic
- Trace Metals
- Bacteriological
- Radiochemistry

**Air Quality**
- Ambient air monitoring, particulate and gaseous
- Automated measurement systems
- Air quality permitting

**Field Sampling**
- Surface and ground water
- Soils and spoils
- Air quality monitoring

**Strategic Locations**
- Gillette, Wyoming
- Sheridan, Wyoming

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www.intermountainlabs.com
Inter-Mountain Labs (IML) provides a variety of soil sampling services from its Sheridan and Gillette, WY locations. Inter-Mountain Labs (IML) utilizes several submersible pump configurations to purge and sample monitoring wells. Each pump is unique for the depths in which it will operate and the volume of water it will pump. IML’s soil scientists and field technicians are MSHA certified and use modern sampling equipment and rigorous procedures to assure accurate and efficient sampling. IML’s truck mounted Giddings is an affordable option for your year around sampling needs.

**Groundwater Sampling**

Purging and Sampling Capabilities:
- 2”-3” Wells to a depth of 240’
- 4” Wells to a Depth of 325’
- 5”-6” Wells to a Depth of 450’
- 3 Truck Mounted Units
- Power Bailers
- Bladder Pumps
  - Dedicated
  - Non-dedicated

**Surface Water and Outfall Sampling**

Operation and Maintenance of Monitoring Sites
- Automated Samplers
- WYPDES Discharge Monitoring Report (DMR)

**Sampling Services Include:**
- Spoil/backfill sampling
- Topsoil sampling/field verification
- Continuous core samples
- Auger cutting samples
- Plastic lined cores
- Subsurface soil investigations
- Order 1 soil surveys
- Appendix H surveys

**YOUR ENVIRONMENTAL MONITORING PARTNER**

www.intermountainlabs.com
Air Science Services

IML Air Science has been providing air quality consulting services since 1979. Our staff consists of engineers, atmospheric scientists, meteorologists, computer scientists and trained technicians. IML Air Science specializes in ambient air and meteorological measurements, systems and support.

Professional Services
- Emissions Inventories (EI)
- Air Quality Permitting
- Air Quality Dispersion Modeling
- Training
- Litigation Support

Ambient Air Monitoring
- Particulate Matter (PM2.5, PM10, PMc) Concentration and Speciation
- Meteorological Measurements
- Gaseous Air Pollutants (NOx, SO2, CO, O3, etc.)

Measurement Systems and Instrumentation
- Particulate Matter (continuous and filter-based)
- Gaseous Pollutant Monitoring
- Meteorological Systems
- Network and Systems Automation
- Telecommunications
- Software

An IML Air Science – specific Statement of Qualifications is available. Contact IML Air Science for a copy; (307) 674-7506.

YOUR ENVIRONMENTAL MONITORING PARTNER
Chinook Engineering

Chinook Engineering is IML’s research and development division, located in Sheridan, Wyoming. Chinook Engineering focuses on applied research and the development of innovative measurement technologies, especially related to environmental measurements. Chinook collaborates with universities, national labs, and experts in their respective fields to complement the in-house staff.

The Mission of Chinook Engineering is to develop innovative technologies. Such innovations will be developed through a partnering model, bringing talented people and their ideas together, to create new and useful products and opportunities.

Traceable Calibration Systems
Chinook manufactures the patented Streamline™ Flow Transfer Standard and Streamline Pro™ MultiCal™ System. These high performance fluid flow meters are used extensively in air quality measurements. Due to its superior and consistent performance, the Streamline™ FTS has become the "standard" flow meter in the ambient air quality measurements industry. The Streamline Pro™ MultiCal™ System simplifies measurements while also providing traceable temperature and barometric pressure measurements.

Streamline™ and Streamline Pro™ systems are sold exclusively by Rupprecht & Patashnick Co., Inc. Chinook Engineering provides all service and technical support for the Streamline™ and Streamline Pro™ systems.

Infrasonic Measurement Systems
Chinook Engineering is in the phase 1 of development of an avalanche detection system based on infrasonic acoustic energy emanating from snow slides. The system offers the ability to detect avalanches in situations where observations are not possible. Research and testing has been performed in Montana, Wyoming, Colorado, Utah, and Alaska. This project is funded by a Small Business Innovative Research (SBIR) grants from the US Department of Commerce, National Science Foundation, and the Wyoming Dept. of Transporation.
Chinook Engineering, cont’d

Software Development
Chinook Engineering is developing a software system designed to simplify interpretation of water quality data. This software is being developed originally for \textit{imLink™} Access-based, data analysis system provides an easy method to analyze environmental data such as water quality data through pre-established queries.

The \textit{imLink™} system provides reporting, statistical analysis, and simple graphing features; it also creates an automated link to Excel for more elaborate graphing requirements. To this basic structure, user-specific analysis and graphing features can be added.

Metrology -NIST Traceable Calibrations
Chinook operates an NIST – traceable calibration/certification facility to provide quality assurance (QA) support for the fundamental measurements related to obtaining air quality concentrations. Parameters which can be certified are:

- Air flow rate: 50 cc/min – 22 lpm, and 8 – 85 cfm (appx. 250 –2500 lpm)
- Manometry: 0.01 – 25 “ H2O, other by special setup
- Barometry: fractions – 1.2 atmospheres
- Thermometry: -40 – +80 °C

www.chinookengineering.net
## Lab Capabilities

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<th>Sheridan, WY (Terra Ave.)</th>
<th>Sheridan, WY (Absaraka, St.)</th>
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## Instrumentation

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Select Client List

**Mining Industry**
- Barrick Gold of North America
- Newmont Mining Corporation
- Fairbanks Gold Mining, Inc.
- Phelps-Dodge/Freeport McMoRan
- Kinross Mining
- Allied Nevada Gold Corporation
- Coeur Alaska
- Cloud Peak Energy
- Powder River Coal Company
- Peabody Western
- Alpha Natural Resources
- Kiewit Mining Group
- Rio Tinto Energy America
- Arch Coal
- Chevron Mining
- Arch of Wyoming
- Bridger Coal
- Black Hills Power
- Western Energy
- Big Sky Coal Company
- Uranium One
- Strathmore Minerals
- Cogema Resources
- Titan Uranium
- Strata Energy
- American Uranium Corporation
- FMC Corporation
- Natural Soda
- Tetra Tech

**Coalbed Natural Gas Industry**
- Beneterra, LLC
- Devon Energy Production
- EMIT Water Discharge Technologies
- Fidelity E & P Company
- J.M. Huber Corporation
- Marathon Oil Company
- Pearl Exploration & Production
- Pinnacle Gas Resources, Inc.
- Redstone Resources, Inc.
- St. Mary Land and Exploration
- Western Land Services
- WWC Engineering
- Windsor Energy
- XTO Energy

**Federal, State, County Agencies**
- Bureau of Land Management
- Montana DEQ
- Wyoming DEQ
- USDA/ARS
- State of New Mexico

**YOUR ENVIRONMENTAL MONITORING PARTNER**
In 1979, Mr. Madsen incorporated his experience as an analytical chemist into a joint effort to begin a new environmental laboratory, and thus Inter-Mountain Laboratories, Inc. was born. Duane filled many roles in the early years of the company. As a chemist, he developed, managed, and marketed the water analysis section of the business. As the company treasurer, he wrote payroll and payables, and tracked receivables, while summarizing and projecting the fiscal performance of the various segments within the company.

IML has experienced steady and sometimes explosive growth in the intervening years, with Duane serving in a variety of leadership roles. He trained managers as IML expanded into Gillette, Wyoming; Farmington, New Mexico; College Station, Texas; and Bozeman, Montana. His analytical background, fiscal sense, and business acumen have guided IML through initiation and expansion of market-driven sections such as air science, organics, and Chinook Engineering (IML’s products and innovations venture).

As the principal executive officer of the corporation, Duane supervises and controls the daily business and affairs of Inter-Mountain Laboratories, Inc. Together with officers of the company, he plans and coordinates the direction and business strategies of the various divisions and laboratories. Working with the accounting staff, he is responsible for the financial planning and fiscal condition of the company.

Duane has served as President since 1994, providing the vision that guides IML into and through the 21st century. He is committed to providing an innovative work environment that allows creative people to be productive and to excel.
Key Personnel

Kevin Chartier
Vice President, Engineering Services
chartier@imlinc.com, (307) 674-7506
M.S., Atmospheric Science, University of Wyoming, 1989
B.S., Electrical Engineering, Wichita State University, 1984

As Vice President of Engineering Services, Kevin is responsible for day-to-day operations of Air Science, Field Services, and Chinook Engineering. His duties include operations oversight, implementation of corporate goals, corporate strategy, staff development, section management, support team performance evaluation, and operations reviews.

As former Manager, Kevin assists the Air Science division. He is the lead for air quality permitting/dispersion modeling and litigation support, as well as many ambient monitoring projects. He has been closely involved with the development of the fine particulate standards through his participation in the National Mining Association’s Air Quality Committee. He has provided technical support and professional witness services for litigation involving air pollution. Kevin has extensive air permitting and modeling experience, both with IML and from previous employment with the Wyoming Department of Environmental Quality (DEQ). At the DEQ, he served as Wyoming’s Air Toxics Coordinator. He is a co-inventor of the Streamline™ Flow Transfer Standard and Streamline Pro™ MultiCal™ System.

Kevin is a registered Professional Engineer in Wyoming. He also participates in the Wyoming Mining Association’s Regulatory Affairs Committee

Michael Boint
Secretary Treasurer
mboint@imlinc.com, (307) 674-7506
B.S., Accounting, University of Wyoming, 1989

Mike is a respected IML employee and an officer of the company. Over the past ten years, he has participated in decisions regarding the direction of the company as markets change. He has provided sound input and advice to achieve short- and long-term goals.

Mike provides financial guidance for IML through fiscal planning, insurance selection, bank relations, financing options, and exploring tax issues. He explores options for all financial tools to optimize IML’s opportunities to provide new strategies to improve or expand services to clients. He also supervises the accounting, administrative, purchasing, and employee benefits functions of the company.
Key Personnel

Tom Patten
Laboratory Manager- Sheridan
tpatten@imlinc.com, (307) 673-8945
B.S., Chemistry, University of Utah, 1991

Tom oversees operations in the organic, water, metals, radiochemistry, and soils laboratories in Sheridan, Wyoming. He is responsible for coordination of operations, data production, personnel management, budgeting, and communications between the labs.

With ten years at Newmont Mining and five years with US Silica, Tom understands many of the challenges of the resource industry. Tom has been working in analytical labs for more than 20 years, and has been with IML since 2002. Tom set up and developed the analytical methods for the radionuclide lab at IML. He has worked in Quality Assurance, serving as lead assessor for a variety of compliance audits. Tom understands the requirements of the regulated community.

Wade Nieuwsma
Assistant Lab Manager-Sheridan
Radiochemistry Lab Supervisor-Sheridan
wnieuwsma@imlinc.com, (307) 672-8945
B.S., Education (Chemistry minor), Valley State University, North Dakoka, 1990

Wade brings a mentoring and educational aspect to his leadership role in the Water Lab in Sheridan. He has organized the section into a highly-skilled, highly-productive group of talented individuals. Under his leadership, sample processing and analyses are handled efficiently and rapidly with a high level of precision and accuracy.

He is also responsible for data review. Wade has assumed a significant role as a project manager. He interacts with clients from project planning through the pricing stage to analyses. Further, he offers assistance with data interpretation and submission of data to regulatory agencies. His broad exposure to a wide variety of applications of environmental chemistry has resulted in a level of expertise that is valuable to every client.
Key Personnel

Michelle LaGory  
Quality Assurance Manager- Sheridan  
mlagory@imlinc.com, (307) 672-8945  

Michelle has been with Inter-Mountain Labs since 2000. She began her job as Quality Assurance Manager in December 2006. Michelle is responsible for coordinating Quality Assurance activities in the laboratories, and directs corporate certification and compliance efforts. Michelle has received ISO 17025 training offered by A2LA.

Glenn Dorsch  
Programmer/IT Support  
gdorsch@imlinc.com, (307) 674-7506  
B.S., Atmospheric Science, Oregon State University, 1981

Glenn has overseen the advent and development of computing systems at IML. He has extensive experience with both computer hardware and software, and is proficient in a number of computer languages. He is responsible for systems coordination and programming development for the company. He specializes in data processing, formatting, and providing custom electronic data deliverables for clients.

One of Glenn’s greatest accomplishments at IML has been to develop a complete Laboratory Information Management System (LIMS) from scratch. Since its completion, he has provided support and modifications to the system to meet changing technology and requirements.

Dan Power  
Lab Manager-Gillette  
dpower@imlinc.com (307) 682-8945

Dan began working with Inter-Mountain Labs in 2003 as an Environmental Field Technician. Dan is responsible for coordinating water and soil sampling activities in the Gillette area. In addition, he coordinates with IML-Sheridan Field Services personnel to assist with sampling efforts as needed. Dan serves as manager of the IML-Gillette lab.
Key Personnel

Karen Secor
Soil Lab Supervisor – Sheridan
ksecor@imlinc.com, (307) 672-8945
B.S., Microbiology, Colorado State University, Fort Collins Colorado, 1988

Karen is responsible for soil sample log-in, sample tracking, and turn-around times. As Soil Lab Supervisor she is also responsible for data quality, analytical scheduling, delegation of support personnel, and training of soil laboratory staff. She performs bench chemistry including TCLP analyses, data reporting and review.

Karen brings over 20 years of laboratory experience to IML. She has extensive experience in bacteriology, environmental toxicology, and analytical chemistry. Karen has been intimately involved with the many facets of the laboratory, including sample log-in, sample analysis, reporting, project management, and Section Supervisor. She has been involved with bench chemistry, operating a rapid flow analyzer, ion chromatography, and microbiological analyses.

Mary Slipp
Trace Metals Supervisor – Sheridan
mslipp@imlinc.com, (307) 672-8945
B.A. Biology, Minor Chemistry, Carroll College, Helena Montana, 1983

Mary supervises operations in the Trace Metals laboratory. In addition, she is responsible for analyses by Inductively Coupled Plasma Mass Spectrometry (ICP-MS). She confirms that ICP-MS data meets quality objectives and is accurately transferred to the LIMS system. Mary provides training, evaluates methodology for appropriate application, and provides a resource for solutions to technical questions related to metals analyses.

Mary has worked with IML in the Metals section since 1998, performing analyses by ICP/MS, ICP, cold vapor atomic absorption, hydride generation atomic absorption, and various digestion procedures. Before coming to IML, Mary worked as a Medical Technologist (MT) and a MT supervisor. Mary has more than 22 years of experience in the chemistry field.
Key Personnel

Stephanie Haase
Radiochemistry Supervisor
shaase@imlinc.com, (307) 672-8945
B.S., Molecular Biology, University of Wyoming 1997
B.S. Zoology, University of Wyoming 1994

Stephanie is the Technical Supervisor of all aspects in the Radiochemistry laboratory. She ensures compliance of a variety of measurement systems. Stephanie performs analyses of radionuclides.

Stephanie has been with IML since 2000. She began working in the Organics Department in the extractions lab and worked her way up to become an organics analyst. While in the department, she wrote the standard operating procedures for the extraction lab and was key in implementing the use of Omega Laboratory Information Management System software (LIMS). After four and a half years, she transferred to the lab facility on Terra Avenue and began working in the RadChem Department. In the spring of 2006, she took over as department supervisor. Since joining the department, she has developed, or assisted with development of methods used in analysis of samples for Radium 228, Thorium 230, Lead 210, and Polonium 210.

Edward Scruton
Organics Laboratory Supervisor – Sheridan
escruton@imlinc.com, (307) 674-7506
B.S., Chemistry, Montana State University, 1986

Ed brings over 20 years of experience to IML’s Organics laboratory, to provide an unparalleled depth of technical understanding. He serves as GC and GC/MS Technical Supervisor for the organics laboratory, assisting the staff in technical applications of instrumentation analyses.

Ed’s responsibilities include providing guidance on instrumentation operation and maintenance, optimizing the data handling process, and the interaction between the analytical group and the extraction department. He reviews data and interacts with other IML departments and laboratories.
Key Personnel

Ernest Scott
Electrical Engineer

scotte@imlinc.com, (307) 674-7506
M.S., Electrical Engineering, University of Wyoming, 1996
B.S., Electrical Engineering, University of Wyoming, 1993

Ernie is the Principal Investigator on all of Chinook Engineering's avalanche detection projects. These projects, funded in part by the U.S. Department of Commerce and the U.S. Department of Agriculture, utilize his extensive experience in signal processing and recognition.

Ernie also contributes engineering expertise to a wide variety of air science projects including quality assurance and reporting support for continuous ambient air monitoring, ambient particulate monitoring, and meteorological monitoring projects. He provides custom data acquisition, datalogger programming, telecommunications and remote systems expertise. He is available for customer service calls and troubleshooting assistance. Ernie directs the development and maintenance of IML Air Science's PM$_{2.5}$ data management system. He has participated in numerous ambient air monitoring projects, including PM$_{2.5}$ projects.

Ronn Smith, Project Engineer

lrsmith@fiberpipe.net, (307) 674-7506
B.S., Engineering Physics, Colorado School of Mines, 1973

Ronn brings nearly 30 years of extensive and diverse engineering experience to IML Air Science. Ronn has served as Mining Engineer and Computer Services Manager for a major mining company, a private engineering consultant, and a college instructor. He has extensive experience in process engineering, air quality permitting, emissions inventories, data management systems development, air pollution control, GIS, software development, PLC control systems, and telecommunications.

At IML, Ronn leads the development of data management/analysis systems for both in-house use and custom applications for customers. He also provides technical support for air quality permitting, emissions inventory development, measurement and control systems.

Ronn's understanding of air quality issues is well known and respected throughout the region, as demonstrated by his selection to the Wyoming Air Quality Advisory Board. Ronn also is a member of the Western Governors' Association Clean and Diversified Energy Working Group, Wind Energy Task Force.
At IML, Tim is integral to nearly all projects that rely on the application of sophisticated instrumentation in the field. His background, knowledge of instruments, and ability to troubleshoot problems make Tim a key member of the team.

Tim develops and supports IML Air Science's custom software tools used to provide efficient data communication, transformation, processing, and reporting. He assists networks with the design and implementation of real-time display for continuous particulate data results and meteorological data via wireless retrieval systems. He also is responsible for the development and maintenance of IML Air Science’s PM$_{10}$ data management system. Additionally, Tim has participated in research activities surrounding development of remote avalanche monitoring systems lead by IML. Tim is skilled in the set-up, daily operation and maintenance of ambient particulate sampling systems. He provides quality assurance and reporting support for ambient particulate monitoring and meteorological monitoring projects. Tim has participated in numerous ambient air and meteorology monitoring projects. He is available for customer service calls and troubleshooting assistance.

Jon brings experience in mine-related re-vegetation projects for the Keiwit Mining Group. He was involved in vegetation studies and riparian research for Keiwit, especially related to native rangeland animal habitats. His findings led to the development of functional guidance documents.

Jon acquired management skills with an exploration drill crew, which enhances his ability to manage the staff responsible for collecting samples in the field. He efficiently supervises and coordinates IML’s ground water, surface water, and soil sampling activities in Sheridan, Gillette, and Rock Springs, Wyoming to meet project requirements for clients throughout the state.

Jon takes advantage of time in the field to evaluate sampling procedures while he manages field-sampling projects.