

Mining laboratory partnership



Labtium can provide dedicated mining laboratory services either on-site or through our existing laboratory network. Mining laboratory partnership range from supporting and complementing the in-house laboratory's services to fully outsourced analytical laboratories.

Labtium's laboratory professionals will work together with clients to develop the best and efficient solution for a particular project and commodity.

In mining operations there are normally many non-core operations which can be outsourced, so that the mining company can focus more of its resources and capital on its real core business. Laboratory services are among the most challenging technical support services and many mining companies have realized that outsourcing laboratory services to an independent specialist provides a competitive advantage coupled with increased credibility and transparency of their operations and in their products.

Non-core operations in mining

- › Drilling, sampling, surveying
- › Removing overburden, excavation
- › Blasting, loading, hauling
- › Service and maintenance
- › IT- and accounting services
- › Cleaning and catering
- › Laboratory and testing services

The role of laboratory and testing services in the mining industry

Requirements for laboratory services in different branches in mining operations are indeed diversified and include analysis of exploration, grade control, process control and end product samples i.e. party/umpire assays as well as monitoring of environment and side products.

High-quality and efficient testing is one of the most sensitive technical support services in mining operations. Accurate, confident and timely analyses are critical for optimization of mining and metallurgical processes as well as environmental monitoring.

Assaying and testing processes are complicated and necessitate active maintenance and continuous development with highly professional staff.

However laboratory and testing services are not considered as core processes in the mining industry and consequently the development of resources and competence i.e. equipment, methods, staff have low priority and are often neglected. In addition, the role of the laboratory staff is not always transparent as providers of in-house services.

A well planned partnership in mine laboratory services with professional, experienced laboratory company helps the mining company to concentrate to maintain and develop its core processes.

Laboratory outsourcing in mining

The benefits of outsourcing are well established. The mining company can allocate more human and other resources in its core processes as

there is no need to invest on expensive laboratory premises, equipment and personnel. Thus the mining company can reduce bound capital and operational costs. Also there are no hidden costs involved when the service is based on comprehensive exact fees – the allocation and budgeting of expenses is easier.

The operator is responsible for the quality, safety, health and liability issues of the services.

Depending on the competence and experience of the operator, all laboratory services can be attained from the same operator. The deeper competence of the dedicated laboratory company in understanding the whole laboratory service chain in exploration and mining gives added value to the client. This will lead in the long term to a win-win situation for both parties.

The global development of the services i.e. technical, quality, legislation, is followed by the operator's laboratory specialists. These improvements can be directly implemented in the mining laboratory. The mining company does not have to re-invest in frequent upgrades of the premises and equipment. The motivation of laboratory staff is higher when they are working in a team of laboratory professionals.

Labtium's mining laboratory partnership

Through Labtium's impartial accreditation status the client can utilize services which are produced with methods fully complying with the industrial best practices and reporting requirements for exploration and resource evaluation. As an impartial laboratory, Labtium is a transparent provider of services for environmental monitoring.

An important factor is that Labtium can provide back-up and support of methods, equipment and staff of the mining laboratory through Labtium's local laboratory network.

A laboratory with diverse services can provide versatile on-the-job training to upgrade competence and continuous improvement of knowledge and expertise of the staff.



Labtium can provide various types of solutions for the mining laboratory partnership such as:

- › Designing of laboratory facilities and equipment including evaluation of the needs of automation.
- › Choice and implementation of best available client dedicated methods and processes.
- › Training of employees. Supervising and supporting during the ramp-up of the laboratory.
- › Outsourcing or secondment of laboratory management.
- › Auditing and up-grading existing in-house laboratories i.e. training, method development, equipment.
- › Implementing QA/QC- and laboratory information management system.
- › Back-up and check assays and complementing of the services of the in-house laboratory.
- › Starting the outsourced services at client's premises. The client can then take over the operations for in-house use after 3–5 years operations depending on life of mine.
- › Total outsourcing of the laboratory services during the whole lifetime of the mine either on-site or through Labtium's near-site premises.
- › Joint research and development projects.

Client dedicated service modules



Contact

Heikki Niskavaara · heikki.niskavaara@labtium.fi · +358 400 807 935
 Lea Hämäläinen · lea.hamalainen@labtium.fi · +358 40 720 2231

www.labtium.fi