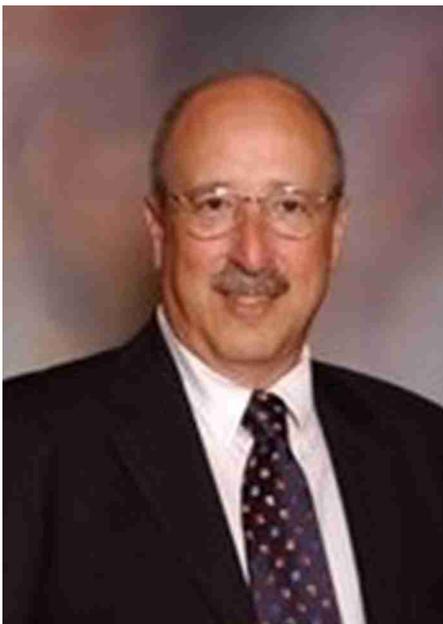


Developing a new 200,000 square foot Facility that Incorporates a Wide Use of Robotics in the Design, Activation Laboratories Ltd. is Building on their Reputation of Providing the Highest Quality Analysis for the Mining and Exploration Industry

**Business Services
Lab Testing
Mineral Industry**

**Activation Laboratories Ltd.
1336 Sandhill Drive
Ancaster, ON L9G 4V5
905-648-9611
www.actlabs.com**



**Eric Hoffman
CEO**

BIO:
Eric Hoffman is an economic geologist with over 30 years of experience in minerals exploration, analysis, and management. In 1974, he received his Bachelor of Science (Hons.) in Geology and his Masters of Science in Geology in 1975, both from McGill University. He received his PhD in Geology from the University of Toronto in 1978. He was a managing director of Nuclear Activation Ser-

vices Ltd. where he established the first commercial neutron activation laboratory as a partnership with McMaster University and a commercial laboratory. In 1987, Dr. Hoffman established Activation Laboratories Ltd. (Actlabs) Group of Companies with a focus on commercializing innovative technologies with the highest quality standards. Actlabs offers contract analytical services to many industries including; Minerals, Metallurgy, Petroleum, Life Sciences, Environmental, Forensics, Materials Testing, and Agriculture. As President and CEO of Actlabs, he has grown the company to 30 laboratories in 12 countries around the world. In 2002, Dr. Hoffman became a registered Professional Geoscientist (P.Geo) in Ontario.

Professional Associations: Member Prospectors & Developers Association, Member Canadian Mineral Analysts, Member Society of Economic Geologists, Member Association of Applied Geochemists, Fellow Geological Association of Canada, Member of the Professional Geologists of Ontario, and Member CCRMP Advisory Group to CANMET.

About

The Actlabs Group of Companies:
The Actlabs Group of Companies provides contract analytical services covering all aspects of analysis from academic research applications to routine quality control functions. We provide our services to many fields, including Geochemical, Petroleum, Industrial Minerals, Forensic, Pharmaceutical & Clinical, Environmental & Occupational Health, Agricultural and Materials Testing areas.

**Interview conducted by:
Lynn Fosse, Senior Editor
CEOCFO Magazine**

CEOCFO: Mr. Hoffman, what is the focus of Activation Laboratories?

Mr. Hoffman: We are a testing laboratory primarily for the mineral industry, but we also serve, life sciences and biotech, forensic, materials testing, geometallurgy, agricultural and the environmental areas. It is a multi-faceted laboratory.

CEOCFO: For what purpose are you testing the minerals?

Mr. Hoffman: This is usually for mining and exploration. We do a wide variety of testing right from grassroots to mine development and then to production concentrate. Basically it is the whole gamut of analytical requirements for the mineral industry.

CEOCFO: Is it typical for a lab to have such a wide range or is that something special?

Mr. Hoffman: Most laboratories will have very specific areas where they tend to concentrate. We tend to concentrate on a lot of high-end applications, using the highest technology and instrumentation available in the industry. Other labs may concentrate on only doing only a high volume of low tech techniques like gold analysis. We will also do the high volume work as well, but we have a more sophisticated lab than most mineral labs and can handle virtually any problem or commodity.

CEOCFO: Who is using your services; how do you reach potential customers?

Mr. Hoffman: We have customers in over ninety countries. Our clientele are the major mining companies, intermediate sized, junior mining companies, universities, and government agencies like geological surveys. We interact with our potential customers through our website, advertisements, trade shows, and principally get word of mouth recommendations from existing customers.

CEOCFO: Why are they coming to you as opposed to one of your competitors?

Mr. Hoffman: They come to us usually for the quality of the analysis. We have a reputation in the industry of being able to provide the highest quality analysis. Since we have such diverse instrumentation, we have virtually every analytical technology that is out there. We have a very highly skilled professional workforce to actually be able to run all of these very highly technical instruments. The customer knows that when they send samples to us, we do not have to force a particular analytical technique to try to get mediocre results out of it, as we would have the best analytical technique for the problem at hand.

CEOCFO: Would you give us an example of something you might be able to test that others typically would not?

Mr. Hoffman: A good example would be biogeochemistry where companies are using vegetation samples for exploration for minerals. You need to get down to extremely low levels of the required metals and we have a variety of approaches we can use. For example, we have a technology called neutron activation where we irradiate samples in a nuclear reactor and then measure the induced gamma rays that are emitted. It allows us to see elements like gold down to a tenth of a part per billion. We can also do the vegetation analysis by digestion and high resolution ICPMS. This technique is unique to our company in the mineral industry. It allows us to go probably two orders of magnitude lower in detection limits than our competitors would be able to do be-

cause they would only have conventional quadruple ICPMS's. We have technology that we have developed, for example, gold in water analysis where we can go down to fifty parts per quadrillion. We can tell you how much gold is in your drinking water and there is gold in your drinking water. We can detect gold in virtually any type of water sample. None of our competitors would have capabilities like that. In the Geometallurgy area, we have a Field Emission Gun MLA and Field Emission Gun QEMSCAN, which allow us to be able to do automated mineralogy but at high resolution. We are able to detect for example gold or platinum mineral grains that are as small as 0.3 microns in size. There are a couple of our competitors which would have some similar instrumentation, but they are not field emission gun based. Our competitors have tungsten filament instruments and they can only see down to about three microns in size. We can go an order of magnitude

"We have a reputation in the industry of being able to provide the highest quality analysis."

- Eric Hoffman

lower than our competitors for that type of technology. We have a robotic system we have developed for doing lithium borate fusions for rare earth element analysis, which is an ideal way to get very high quality analysis. If you try to do the fusions manually the quality of analysis is much poorer than if you are using robotic fusion. Again, that is the technology we have developed in house.

CEOCFO: Are you developing based on customers' requests or are you just realizing what might be good to know?

Mr. Hoffman: I am a geologist and have been working in the analytical industry for 35 years. As such, I have a pretty good understanding of what the geologists are after and the potential of new technologies as well as what is the best method for processing the samples for the geologists. Occasionally, customers will come to us and they will tell us that they are starting to explore for a new commodity like graphite for the emerging

power cell market. Researching how graphite analysis was being done and how we were historically doing it, we found that there were problems with that type of technology. We had our R&D staff develop some new methods for us to be able to do graphite analysis and do everything that somebody would need to know to evaluate the quality of their graphite deposits. Besides the chemical analysis, the flake size, the impurities, and how to clean up the impurities, this can all be done by our metallurgy department.

CEOCFO: You have locations worldwide; do the various locations operate on an independently and how do you ensure all locations adhere to the standards of Actlabs?

Mr. Hoffman: We have thirty labs in twelve countries. The way that we maintain the quality is by having all facilities follow the same procedures that we have developed at our main lab. We have the ability of evaluating the operations of any of our laboratories remotely through the internet. We can view the operational status and how the quality control

is being maintained. We have our own company trainers, which will travel from one lab to another and will train all the personnel in our methodologies. We perform management visits to ensure that the analytical and safety procedures are followed. We have a QA department, which also does site visits. Our QA people will visit our labs worldwide and make sure that when they do audits of the facilities that the procedures are all being done exactly the same as we designed. All the instrumentation is the same in all the laboratories worldwide so that we can transfer methodologies easily and bring new labs on line quickly. We have accreditation to ISO 17025, NELAP and certifications to ISO 9001:2008 at most labs which also subjects the facilities to external audits.

CEOCFO: Would you like to see growth in the other areas and how do you facilitate that?

Mr. Hoffman: We are seeing some very high growth areas in our metal-

lurgy/geometallurgy areas, and right now, we are building up a very highly qualified staff to be able to deal with that work. Our new high tech agriculture division is an area we see growing quite quickly. Geographically we see Africa and South America as high growth rate areas and we plan on expanding our lab network there. We go to many tradeshows and we obtain customers leads there. Customer surveys that we have performed indicate that our best route to getting new customers is word of mouth recommendations from existing customers. Clients tell us they can trust us to find solutions to their problems seamlessly and they have found that we have very knowledgeable technical staff working for us. As a result, problems can quickly get solved. This creates a tendency for clients to gravitate to Actlabs.

CEOCFO: Would you tell us about your agricultural testing?

Mr. Hoffman: In agriculture, we service a wide variety of areas. We go right from the soils on farmers fields and tell them what crops they can grow in that type of soil and what type of fertilization they should perform to improve crop yield. We are working with some of the pesticide manufacturers. When the manufacturers develop new pesticides they have to go through a very long process proving what happens to the pesticides in the environment overtime. We have started to do some GLP studies for them. We are working on crop diseases. For example, soybeans have the soybean cis-nematode, which is a major pest which destroys the soybean crop yields. We are working at ways to essentially help the farmer identify the problem and be able to treat the problem. With the world's burgeoning population improving crop

yields will become of growing importance.

CEOCFO: Do you see the need for additional labs and are there areas geographically where you do not have as big a presence as you would like?

Mr. Hoffman: Yes, we see a very high growth rate area in West Africa. We are looking at putting in two to three more labs into West Africa, so they would be countries like Cote D'Ivoire or Ghana. We have a lab that we started the past year in Burkina Faso and that one has worked out exceptionally well. We have good coverage in Canada already. In eastern Canada, we are now probably the largest laboratory group serving the mineral industry.

CEOCFO: How is business these days?

Mr. Hoffman: For us it is has been very good. We saw a little bit of a slowdown in the months of June and July because many of our customers were finding problems raising funds for exploration. We are now seeing many of the major mining companies starting to have cutbacks as a reaction to downward pressure on many commodity prices. I personally think that we have seen the bottom unless some politically induced economic downturn puts the world into a double dip recession. I think we are in a very long-term growth cycle for the mineral industry. You will see the occasional dips, but the long-term trend is excellent for metal demand because of the industrialization of China, India, Africa, and Brazil. You are going to see more people want many more things, and those things all take metal.

CEOCFO: Why should the business and investment community pay attention to Activation Laboratories?

Mr. Hoffman: For our customers and potential customers it is knowledge and quality of service that we bring to the table to help them with their problems. Typically, many companies will come to us when they have a problem that other labs cannot solve. Many times our competition refers customers to us as they don't have the desire or capability to deal with certain problems. Our prices are reasonable and our turnaround time is reasonably fast, probably faster than many of our competitors. As a private family owned company we can be very agile at making business decisions. We are currently completing a very high growth phase in our history. We are developing a new 200,000 square foot facility for our global headquarters in Ancaster, Ontario. We are developing the lean manufacturing strategy and wide use of robotics in the design. This will streamline our processes quite considerably allowing us to become faster and more profitable.

CEOCFO: Is it easy to attract the right people?

Mr. Hoffman: For the highly skilled technical people, we have not had many problems attracting and retaining personnel. We seem to be an employer of choice for many skilled people because of our diversity and chance of advancement as we are in a high growth phase. For some of the less skilled labor positions we are finding, it is a harder to fill jobs locally because the employment rate is not that high out where many of our labs are located. We are looking at automating many of those labour intensive processes to eliminate more of the lower paying jobs where we have problems filling the positions.



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