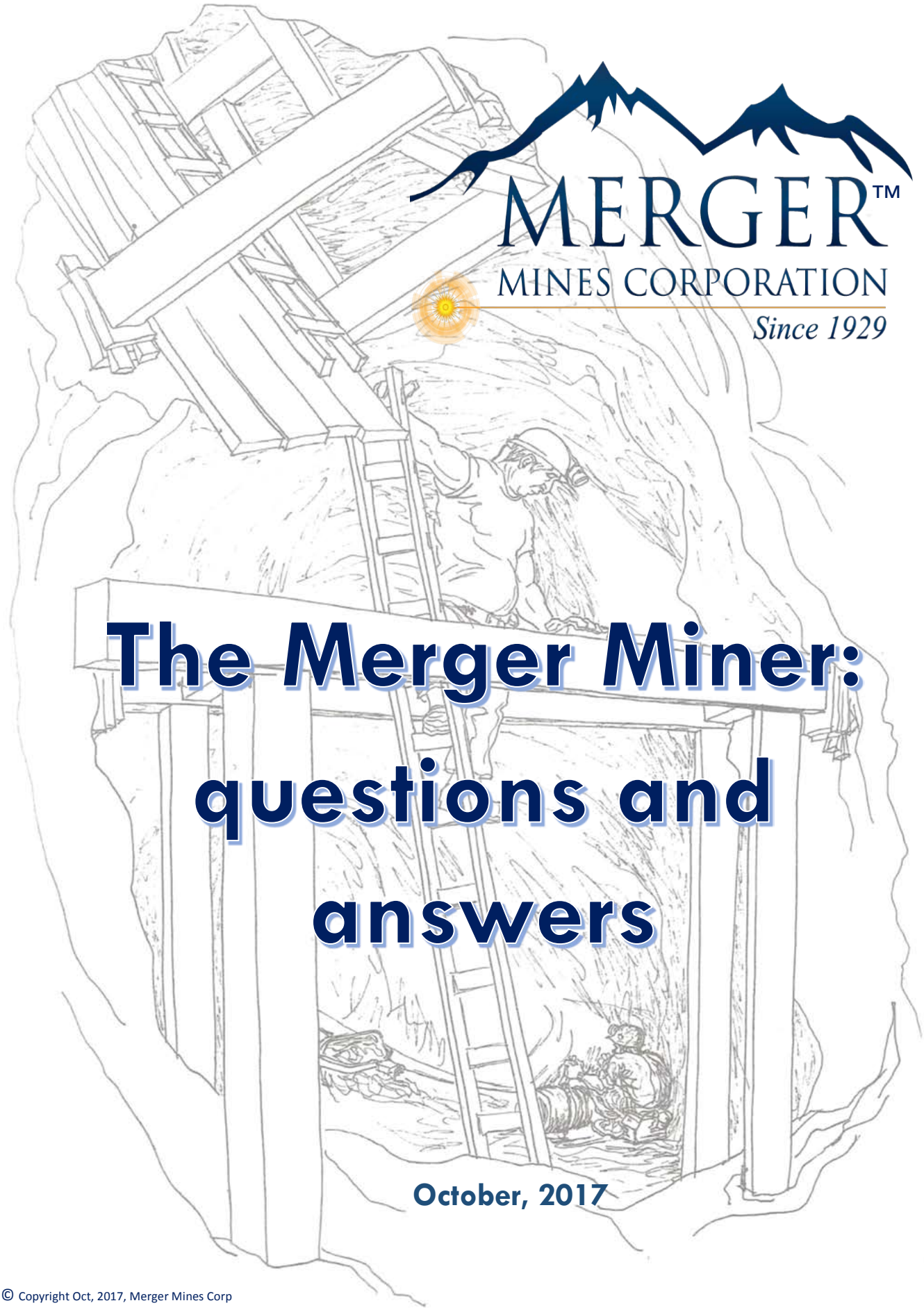


MERGER™
MINES CORPORATION
Since 1929

The Merger Miner: questions and answers

October, 2017

Questions and Answers

Oct 31, 2017

Over the past several months, Merger Mines Corporation has received a number of questions and concerns regarding the Merger Miner and our company's laser based mining tools. Merger has listed these questions and concerns and the response to them in no particular order except as they were received. At the bottom of these Q and A's is a listing of various papers and references published over a number of years explaining "Thermal Fracturing of Rock" and those papers are our basis for this project.

A potential investor has sent a response asking for clarifications of some points addressed in a phone conversation with our company president, Lex Smith, in part reading:

"Our experiences with several companies in the industry were quite enlightening with respect to how lasers could be used to benefit the industry. As I described in our conversation, some of the problems we struggled with were:

> ***Off-gassing from vaporized rock***. Despite trying to control the laser frequency and duration I believe you will always be faced with an off-gassing issue. Although your advisors have suggested that the material you are testing doesn't present a problem, our work clearly showed that while some rocks may be fairly benign, rock characteristics change rapidly and frequently and trace minerals present in the rock matrix can indeed be problematic.
>
> ***Removal and disposal of slag.*** If slag is created from molten rock it is very difficult to quench and remove.
>
> ***Thermal fragmentation.*** Some rock responds favorably to sudden thermal expansion and some does not. The spalling effect relies on the differential expansion between mineral contacts or weakness planes. Getting consistent and predictable results (in tons/hr) may be elusive.
>
> Using a laser at the end of a drill string was the most promising application we identified. This application would significantly reduce the energy currently transmitted through the drill string to maintain the bit against the rock with sufficient force. The drill string would only need to remove drilling detritus that results from the laser weakening the rock in front of the "bit".
>
> ***Start small in a lab.*** Much more cost effective and practical to start at small scale to prove your theses. Much more controlled environment and much less costly than doing trials at site. Much easier to resolve issues in a lab than in front of a potential customer.
>
> MSHA approval to test or use the device in an underground environment. As a slow-moving government body we expect this will be a long and drawn out process.

This investor said at the end of the call that Merger Mines is too early for their portfolio at this time. They would, however, appreciate us keeping them abreast of our developments as conditions change."

We, here at Merger, have taken those comments under consideration and have the following responses to, possibly, explain our thinking and what we have learned over time.

Outgassing: While we are looking almost exclusively at precious metals mining, there are sometimes sulfides present in the quartz or other igneous rock formations generally found in this type of mining. Several factors, in our favor, seem to make this problem minor. With our unit, the face we are mining is sealed, by various means, from any outside exposure. Our system uses compressed air as a cooling mechanism as well as a spalled material removal aid within the enclosed area and as a potential dilutant for any noxious gasses. We also have a vacuum system in place to move material to a processing area, further pulling any noxious gasses away and with further dilution. Please recall that our "Characterization Unit" is set to "test" the specific rock formation for thermal fracturing properties and the resultant material is captured for further analysis. (Only small amounts of material are removed). Recall also that the "Merger Miner" is remotely operated and is also sealed against the side walls adjacent to the working face. Again compressed air and vacuum are in play here and the material will be conceivably moved over long distances to a processing point. As MSHA requires, there also needs to be adequate ventilation throughout the mine complex. Should, for any reason, an operator needs to be near the equipment when "working", and noxious gases are detected, respirators, already in use in the industry, could be used. Keep in mind that our sealed "working distance from the face" is very short, under 24 inches in most cases.

Slag removal: Slag is our enemy. Obviously, slag cannot easily be evacuated by our material removal system. If in case we are creating any melting or vaporization, our laser beam has too much optical power or our scan mechanism is not programmed for optimum spallation. Realizing that there is a small region between just "heated rock" and melting or vaporization, where the thermal fracturing takes place, our parameters will be under constant scrutiny. And of course, there is more to the process than simply directing a laser beam at a given area. Since we are working, primarily, in narrow vein structures, with a small face print area, tons per hour may not be a limiting factor in system operation. We believe that we can selectively cut waste or ore only to the extent that is necessary to move our transport vehicle forward. (Currently a 32" X 72" opening). Please see the attached pages for an explanation of how we go about this type of selective mining.

We have no "drill string" involved and anticipate that our fiber optic cable connecting the laser to our Scan Head will be less than 10M in length.

We have already planned to do experimentation with different rock types in the Lab and have started collecting specimens from mine sites here in the Northwest. We have determined that we have to have a nearly "ready for production" unit necessary for the lab testing. The exception being that we are using some "off-the-shelf" commercial parts for the testing and will replace them with better suited custom parts when going into the Characterization Unit and beyond. When we are in the Lab, we intend to have our engineers, both opto-mechanical and mining, software

developers and our underground training crew as well as the laser manufacturer's representatives.

Over the past year or more, Merger has written a draft Safety Manual incorporating requirements from the FDA, which controls lasers of any type, and OSHA. MSHA has set no requirements as yet that we have found. We have submitted our draft Manual to our local MSHA office for comment. That being said, members of our staff have experience in setting up the "OSHA approved controlled environment" necessary for the safe use of these higher powered lasers from previous undertakings. This safety concern is also part of why we have chosen to seal off the area where the laser beam is actually working.

We continue moving ahead with nearly 75% completion of the manufacturing and inspection drawings for the Scan Head and for all of the ancillary Assembly Tooling. Much of the detail ground work, such as selecting compressed air filters, servo controllers, power supplies etc., has been completed for the Lab Test Cart. The system wiring diagram is complete as is the selection of electrical connectors.

A licensed underground mining company (Groundhog Mining and Milling, LLC) has signed a partnership agreement with Merger as a System Operator and as the Underground Trainer for purchasers of our equipment. Our selected laser supplier has Technical Representatives available for field service as needed. A working partnership is in place with a local mechatronics company, metal casting foundries and machine shops for all of our mechanical parts. Working agreements have been established with the various commercial part suppliers needed. In the meantime our concepts, assumptions and their applications continue to be reviewed by various outside optics and laser consultants as well as engineering reviews of the system components. We have taken great effort in applying DFMA principles throughout (Design For Manufacturing and Assembly) with our reviewers and manufacturing suppliers.

Additional Topics for Discussion were presented during a meeting held in July of 2017 at the Merger Mines Corporation facility in Coeur d'Alene, Idaho. The topics are listed as presented by a potential investor and immediately below are the amplifications as written by Don Rolfe, Merger's V.P. of Mining Engineering and augmented by Gary Mladjan, our V.P. Engineering and Technology.

1. ***Productivity***: I dare not extrapolate tonnes per hour based on a limestone test with (I presume) a limited power laser. I'd like you to walk me through the theoretical models of spalling. There must be at least a concept that links energy, thermal expansion, brittleness, etc., to predict something. (I recognize it may only be theoretical or qualitative.)

   Don responds: Assumptions were made based on data from the now closed down, Argonne National Labs, Laser Applications Laboratory. They suggested using 1/1000 of a second or 1 millisecond for the dwell time and one Kw of laser power. We assumed about 1/500 of a second or 2 milliseconds to redirect the laser beam. Therefore, we could achieve some 300 pieces of spalled rock per second at about the size of a "pea" based on our specified laser beam diameter. Published papers define the spall as being the laser

beam diameter across and one half the beam diameter in thickness in granite. Using the specific gravity of a quartz vein material from a Warren, Idaho Mining District property, we came up with a figure of about 6 tons per hour before factoring in the redirect component. We were nervous about such a high figure, so we reduced that number in half to about 2.7 tons per hour, not knowing the chip volume exactly. Figuring it is better to be low than high. (See the list of papers presented below that are the back-up or are the foundation of our premise.)

2. ***Power requirements***: On an "industrial" scale you'll need quite a few laser heads. I'd like to see some estimate on input power required.

Don responds: A 25Kw LPG fueled generator set would operate the laser mining unit, which we have named "The Merger Miner", as well as the appropriate air compressor, on paper anyway. It is possible that we could run two laser mining units from the same power supply. The second laser mining unit would operate as the first was being redirected, through the use of optical switching.

3. ***Safety***: What safety assessments have you done? I am particularly concerned about vaporized metals in a confined space.

Don responds: We will not be vaporizing or melting any rock. This would be detrimental to our purpose. Our intention is to spall the rock by differential temperature application, i.e. thermal fracturing. Thermal Fracturing takes place just before the rock begins to melt and is a function of rapid heating followed by rapid cooling causing a stress compression in the rock. We are using two streams of compressed air on the face, the first proceeds the laser beam to "precool" the face while the second acts as an after-cooler and for material removal. There is a third stream of air that moves across the face of the Scan Head laser aperture window. This stream acts as an air curtain protecting the window from dust and chips and also provides additional air for after cooling.

4. ***Intellectual Property***: What is protected and by whom. You are not the only people working on this, but no doubt you have reviewed the IP landscape. (What is unique with your value proposition?)

Don responds: Merger Mines has filed patents, both US and International, titled "Method of Mining Using a Laser" It was filed in the US in November of 2015 with the International filing in November of 2016. Both were officially printed on July 1st of 2017. Comments from the International examiner have been received and we are expecting comments from the US examiner shortly. Additional filings are anticipated as we progress through the engineering and test phases. To date, we have found no filing or printings that are using our particular technology.

5. ***Financial model.*** The model on page 38 of your presentation leaves more questions than answers. I'd like you to walk me through what assumptions you are actually making and how to arrive at these costs. Fundamentally, why do you compare a cut-and-fill operation with an open stope operation? (And why cut 8-ft drifts in a 2-ft vein?)

   Don responds: Please see our Indentured Parts List and our slide with Project cost breakdown. Our mining costs were detailed very early on, to find out if a unit could be economically feasible. The Golden Anchor Mine, in the Warren District, mined their narrow vein structures in the manner described in the analysis. Open stopes were not an option for them. The mine did not have a sand fill plant at their disposal. Their mining method was labor intensive, but it worked. We wanted to see if we could laser mine their vein and be competitive. We wanted to compare "apples to apples", so we mined the same volume of rock that they did so costs per ton would be the same. Yes, normally you would not mine a two foot wide vein eight feet wide. We were making ton per ton cost comparative analysis and not making any mine plans.

   Another part of our Financial Model has been the creation of an Indentured Parts List. This list has all that we know about parts in the system, including manufactured parts, commercial parts down to the fasteners and assembly times. Cost of commercial parts were ascertained through contact with suppliers and manufactured parts cost were estimated using long proven methods adjusted for current shop rates in our local area. Out of shop testing cost are based on daily travel costs per individual. Other costs are for operating staff and outside contractors as needed. (Attorneys, accountants, stock transfer agent etc.)

   Note: Page 38 is only available for viewing by creditable investors.

6. ***Market potential.*** I get it this is targeted at small, high grade deposits (narrow vein), that may not be viable in a conventional sense. I like this thinking, but I'd like to understand how you define the market and it's potential. (E.g., what minerals, what depths, what total tonnages?) I can see the concept in page 36 is intended for highly stable geologies with vertical veins; how does this restrict your market potential?

   Don responds: The West is full of many developed and undeveloped narrow high-grade Au/Ag mines. This is probably true worldwide. We can/will develop only one type of unit to begin with, so we chose narrow veins as our target market. Mining journals are full of "new" equipment to mine narrow veins. All of the new ideas are still the old ideas, making drill jumbos' narrower and LHD's narrower, but it is still the same concept, drill and blast. We have options to mine larger veins by using multiple mining heads. The laser based units are not limited by depth, temperature or other working conditions. Obviously you would not mine coal, because of the presence of methane or other flammable materials, with our unit and studies need to be done to see

if some ore deposits would develop unwanted gases. With the laser based mining units being remotely operated, the presence of noxious gasses my not be a limiting factor.

a. Drilling and blasting for gem stones, such as emeralds, fractures many of the valuable stones. Laser mining eliminates this factor.
b. Deep mines in So. Africa have horrible working conditions at depth. Using laser based units will eliminate this. The laser based unit is not affected by the heat and humidity.
c. Laser mining has the potential to reduce rock bursts at mines that have this problem. Hecla Mining is very interested in this idea for the Lucky Friday Mine in Mullen, Idaho. The Sunshine Mine in Kellogg, Idaho has numerous narrow high grade silver veins and they have offered several areas where we should be able to test our unit.
d. It is possible that one or two operators could operate multiple mining faces from one central control room.

The laser miner is not, and never was, planned to be a total solution to mining. It is obvious they will never be used for large production mines. They are intended to be a valuable tool in mines with medium to low production goals. It is entirely possible however, for large tonnage mines to use a laser unit where special conditions exist, such as when narrow vein offshoots occur. Once the laser based unit is built and tested, many unanswered questions can be answered. As the laser based unit is used, improvements will be made and new ideas and ways to mine will be thought out and possibly incorporated.

7. ***Process design****:* Cost of extraction is only one step. What is your vision for the overall process (and cost profile)? Drift development with laser (or D&B with jumbo and rock bolting)? LHD for hauling? Ball mill/flotation circuit? (I understand we eliminate crushing & screening, but I don't see that in your equation).

Don responds: Our vision is to find ways to reopen, or develop new properties that cannot be mined by conventional mining methods profitably. These properties initially, would be narrow high grade veins. Companies like Merger cannot finance 1,000/TPD mines. We can finance 25 to 100/TPD mines. A mine producing 50/TPD of 1oz. Au/ton means 50 ounces of gold per day using a very small crew. The laser mining method minimizes ore dilution and the need for crushing. The pea sized pellets would be ideal for ball mills or for leaching. Every mine is different so that we would customize our laser unit to that mines equipment and mining method in use. I can easily see drifts being driven with laser units, maybe even raises and someday, even shaft sinking. I doubt if we will ever see a laser unit doing any rock bolting, but possibly vitrification of the surfaces in passing. Again, the laser based mining unit is not a complete mining machine, but a new tool to be used where applicable,

to improve the ability to mine. A far out possibility is shaft sinking. If we can drive raises and drifts, we do not rule out this possibility as well.

8. ***Commercial goal****:* Where would you like to see this go? What type of sponsorship/ownership/co-development/etc. is in your crystal ball? (Where would an Investor enter the equation?)

   Don responds**:** Mining equipment manufacturing companies should be looking for innovative ideas for future mining equipment. Merger believes the "Merger Miner" is one of those ideas. However, until the first unit is built and tested, we will never know for sure if all of this rhetoric is valid or not. Merger is seeking someone to advance the funds to build and test the first laser based mining unit. Merger would like to be the entity that builds and tests this unit. A possible easy way would be to purchase Merger stock and perhaps install an investor representative on our Board of Directors. For proper financing of this Project, Merger is open to any and all proposals.

9. ***Timeline****:* What is the timeline to verify the spalling capabilities in various rocks?

   Don responds: We are constrained by current limited funding to complete the engineering phase and by lead times for delivery for some of the "commercial off-the-shelf" component parts after engineering is complete. No components can or will be ordered before major funding is in place. Suppliers for all manufactured or purchased components have been identified and we have either written or verbal commitments from all. We have developed a parts list and have done a costing analysis for all components and including assembly times. Given that level of completeness of detail engineering on the Lab Test Unit, we are predicting a minimum of ten months and possibly as many as twelve months before laboratory testing can begin. "In Mine" tests can begin as soon as six months after lab testing is completed.

   CAE modeling is nearly complete for the "in mine" or Characterization Unit. Detail engineering will commence as soon as the lab test unit parts are in fabrication. Two components in the Scan Head need to be changed to internalize all electrical connections. One of those units is already designed and the other has a relatively short design cycle. A major supplier is already working on that design iteration.

Merger has listed 3 papers on Laser Thermal Fracturing, with some data on quartz spallation. While all of these papers were written for the Oil and Gas Industry, Merger believes the data and illustrations apply to the Mining Industry as well.

Don Rolfe, our Mining Engineer, and our Mining Metalurgist Consultant have calculated our mining rate based on the following parameters:

1. Density of granite 0.096 lbs./in^3

2. Volume of spall; .025 cu^3 (0.400 inch diameter with a depth of 0.200 inch as suggest in the studies.)
3. Pulse duration 1ms, with 100% contact

Thus giving a theoretical mining rate of 2.7 tons/hr.

When looking through these listed papers, all are based on bore holes associated with well drilling, but the basics are there. Merger Engineers have extrapolated necessary data and with consultation with Laser Physicists, Metallurgists, Optical Engineers and Mining Engineers and have converted that data into an apparatus suitable for the mining industry. True, Merger has not proven the concept with a working model for this purpose, but have laid all of the groundwork for such a demonstration.

Relevant portions from the following papers are the basis and serve as augmentation to our presentation "Lasers, the Future of Mining" of which a copy is available on our website, www.mergerminescorp.com. Merger Mines Corporation is soliciting your participation in bringing this concept to fruition.

References:

Proceedings of the 23rd International Congress on Applications of Lasers and Electro-Optics 2004
Laser Spallation of Rocks for Oil Well Drilling
Zhiyue Xu 1 Claude B. Reed 1, Richard Parker 2, Ramona Graves 3
1 Argonne National Laboratory, Argonne, IL 60439, USA
2 Parker Geosciences, LLC
3 Department of Petroleum Engineering, Colorado School of Mines

Abstract:

Laser rock spallation is a rock removal process that utilizes laser-induced thermal stress to fracture the rock into small fragments before melting of the rock occurs. High intensity laser energy, applied on a rock that normally has very low thermal conductivity, concentrates locally on the rock surface area and causes the local temperature to increase instantaneously. The maximum temperature just below the melting temperature can be obtained by carefully controlling the laser parameters. This results in a local thermal stress in subsurface that is enough to spall the rock. This process continues on a new rock surface with the aid of the high pressure gas purging blowing away the cracked fragments. Laser parameters that affect the laser spallation efficiency will be discussed in the paper. Also reported in the paper is the multi laser beam spot spallation technique that has been developed for potentially drilling large diameter and deep gas and oil wells.

PROCEEDINGS, Thirty-Ninth Workshop on Geothermal Reservoir Engineering
Stanford University, Stanford, California, February 24-26, 2014
SGP-TR-2021

The Geo-materials Fracture by Thermal Process
Muhammad YASEEN 1, Jaouad ZEMMOURI 2 and Isam SHAHROUR 1

1) Laboratoire de Génie Civil et géo-Environnement (LGCgE), 59655 Villeneuve D'Ascq, France
2) Laboratoire de Physique des Lasers, Atomes et Molécules (PhLAM), 59655 Villeneuve D'Ascq, France E-mail: muhammad.yaseen@polytech-lille.fr

Keywords:
rock fracture, innovative thermal spallation process, heating, cooling, tensile strength

Abstract:

Thermal spallation of the rock is a promising alternative technique for rock drilling in civil engineering works and petrol industry as tunneling and wells drilling... Over the last century, many works were conducted to test and examine the functionality and the feasibility of thermal spallation to remove the rocky materials. Recently the radiation is the most examined fashion to deliver heat at the rock surface where we need high heat flux to spall the rock. However, the thermal spallation is firstly described by Preston et al. (1943). The Laboratory studies demonstrate that the required energy to produce fracture is huge due to high compression strength of the rocky materials. This energy varies between 0.5 and 14 MW/m^2 according to rock type. In addition, the energy loss in the fibers (to deliver the laser energy) is almost 60% for a kilometer away, which poses a problem of energy delivery to the rock surface this deep according to this high energy level.

The present work offers an alternative method for generating thermal fracture of the rock. It is based on the introduction of the thermal contraction deformation. Accordingly tensile stresses potentially superior to tensile strength of the rock will be created. The tensile strength is much lower than that of compression as well known. So this is a hypothesis that supposedly reduces the required energy to fracture the rock. The proposed mechanism is a coupling of a local rapid heating followed by rapid local cooling of the treated surface. The rapid variation of the heat flow on the treated surface will suddenly reverse compressive stresses induced during the heating phase to tensile stresses during the cooling phase. Once induced tensile stresses exceed the tensile strength of the rock fracture should take place. A model of 2D axisymmetric finite element is used to demonstrate the procedure. The stone used is granite. The proposed mechanism is evaluated in several ways: (1) the thermal efficiency, (2) the possibility of fracturing the rock, (3) reducing the energy required to fracture the rock and (4) depth penetration.

Thermal Fracturing of Hard Rock

P. J. Lauriello and Y. Chen
[+] Author and Article Information
J. Appl. Mech 40(4), 909-914 (Dec 01, 1973) (6 pages) doi:10.1115/1.3423186
History: Received August 01, 1972; Revised January 01, 1973; Online July 12, 2010
Article

Abstract:

Thermal fracturing of hard crystalline in situ rock has been studied by solving the quasistatic uncoupled thermoelastic equations for a semi-infinite medium subjected to transient surface heating over a circular area by a constant flux or constant temperature convective heat source. The thermoelastic stress state is related to brittle fracture in rock according to an appropriate form of the Griffith and the modified Griffith theories. The predicted zone of weakening has been experimentally investigated by lasing samples of Barre granite. Measurements of the size of the in-depth fractures correlated well with the predicted results.

Topics: Fracture (Process) , Rocks , Heating , Brittle fracture , Equations , Heat , Temperature , Measurement , Stress

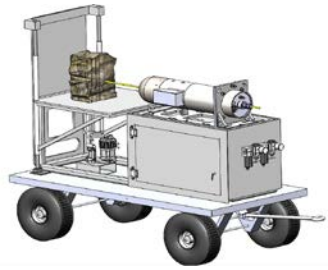
The Merger Miner
Designed specifically for narrow vein mining.

The Merger Mines corporate engineering staff has nearly completed CAE Modeling of the Scan Head, Test Unit, Characterization Unit and the Merger Miner Unit itself, with engineering documentation well underway. Component suppliers and our manufacturing base are eagerly awaiting release of documentation to move ahead.

Modern technology, creative thinking and long-time experience have been combined to harness the power of the fiber laser to augment and make profitable the mining of narrow veins of precious metals as well as gem stones in remote areas of the planet and possibly elsewhere as well. Merger engineers, based on studies conducted at Argonne National Laboratory in their Laser Application Laboratory in the early 2000's, and on later presentations by various organizations have expanded and extrapolated additional data that given the "right parameter" a laser beam could be configured to work within that narrow regime between just heating a rock and melting or vaporizing the rock. That regime is "thermal fracturing" or "spallation".

Merger believes that it has determined the ideal irradiation zone size and is near to determining the irradiation duration and laser power to fracture the chemical bonds between molecules found typically in the quartz and granite geologic structures where the sought after materials have been formed over the millennium. Our definition of an ideal spall is about half a cubic centimeter or about the size of a "pea". (The diameter of the "spot" size and about half the diameter in depth.)

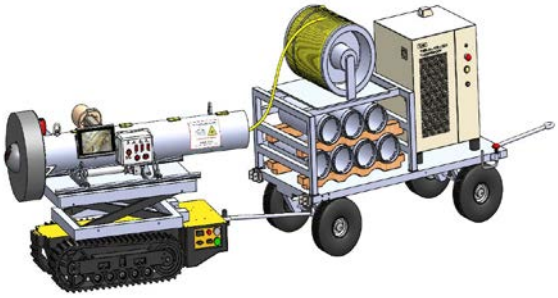
To make that determination, Merger engineers, along with mechatronics partner, Frencken-America, have designed a universal Test Unit which will be initially used in the IPG Photonics laser test laboratory. In the lab, IPG will be able to empirically thermally fracture or spall a



Lab Test Unit

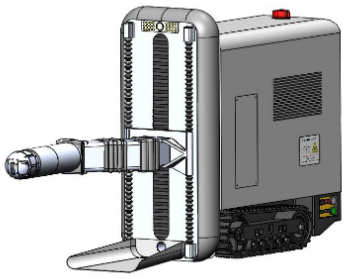
number of geologic samples furnished by Merger and our underground mining and system training partner, Groundhog Mining and Milling, LLC. This series of tests will define the range of laser power needed and will allow tuning of the software for both the laser and the scan head. The Test Unit will be subsequently used, with a much lower power Helium Neon (HeNe) laser to verify scan patterns in production Scan Heads.

Recognizing that the geologic structure varies from mine site to mine site, Merger has developed a Characterization Unit. This unit, mounted on Movex Innovation's heavy duty "Track-O" electrically driven, low profile vehicle will be transported to a customer's site and be used to determine the exact power density and scan dwell time necessary for optimum spallation at the site. That data will then be pre-programmed into the Merger Miner or any derivative thereof. The Characterization Unit, with its companion laser and material collection system can be augmented with an appropriate power generation system as well as an air compressor should these items not be available on site.



Characterization Unit

The Merger Miner is also built on the Track-O vehicle with the Scan Head carried on a Robotic Arm. The Robotic Arm's movement is software controlled allowing the arm to move the Scan Head to carve out any pattern selected. (See the Pattern Selection Sequence illustration below) Since most narrow veins are anywhere between 3" and 18" wide and varying and generally on a decline, the movement of the Scan Head may be easily programed to remove waste rock from below the vein material, then the vein material itself and finally the remainder of the waste. This over a surface area of some 16 square feet (32" wide X 72" height) and extending about 12" inches deep. A single Scan Head is predicted to spall a minimum of 2.7 tons of material per hour. To guide the Miner along a drift, it is equipped with a video camera and illumination system allowing an operator to maneuver the Miner remotely. With inclusion of some additional monitoring equipment, it is not difficult to imagine a completely autonomous mining system.



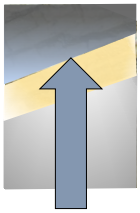
The Merger Miner

Pattern Selection Sequence

TYPICAL FACE

SELECTED PATTERN 1 (WASTE)

SELECTED PATTERN 2 (ORE)



SELECTED PATTERN 3 (WASTE)

The Arm allows the Scan Head to present the smallest aperture necessary for performing the thermal fracturing or spallation task. The aperture window must be protected from flying debris as well as any accumulation of dust to preclude damage from the laser beam itself. The waste may be directed in one direction for use as backfill and the vein material another for further processing. Merger believes that the vein material could go directly to a ball mill and then to a flotation pond or to a leach pad.

While a single Scan Head unit is built for the smallest aperture allowing a man passage, 32” x 72”, larger openings may be produced by adding additional Scan Heads on the Track-O vehicle. Merger believes that a single laser may serve two Scan Heads.

Because of the degree of automation, multiple faces, with additional Merger Miners, may be worked simultaneously. An operator who wishes to operate in a raise between two known drifts may consider a fully self-contained unit that mines from the lower drift upward, following a vein, using gravity for material collection and possibly using forms attached to the mining unit for placement of waste as backfill as the unit moves ever upward.

Keep in mind that the Merger Miner is an augmentation to today’s mining practices but has the potential to be used for driving drift or even for mine development uses.

Gary Mladjan

Vice President, Engineering and Technology,
Merger Mines Corporation

MERGER™
MINES CORPORATION
Since 1929

3714 W. Industrial Loop
Coeur d'Alene, ID
83815
(208) 664-8801

Contact us at: info@mergerminescorp.com.

Visit our website at:
www.mergerminescorp.com.

On the Exchange:

OTC:MERG