

# **PUT YOUR MONEY ON YOUR PAPERWORK**

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## **ABSTRACT**

We all hate the paper work in keeping accurate blasting records. Nevertheless, have you ever thought what those records could show you? Think about it. Those records could show you vibrations, noise, and safety problems. They could show you the ratio of powder used and tons produced, the cost per foot, even help negotiations for pricing.

These records could help in making the decision as to use bulk shipments or shot service; which products give the best tonnage results; the least noise and vibrations. Why, even aid in equipment purchases needed in the future - very valuable budgetary information. You ask, how could these records help in predicting equipment purchases. Simple, they will point how much stone was shot using a particular product versus the drilling, loading, and plant production time. Therefore, pointing out which products did best in your particular mineral deposit and even in the different areas of the deposit.

How could accurate records help in legal problems? Besides the obvious reason that Federal, State, and Local Regulations must be met. By having all records correspond with delivery, usage, and shot reports, the drill log, and seismograph readings you can prove that sometimes noise and vibrations can be hard to, if not impossible too controlled. That sometimes Mother Nature is in control that you are not doing anything different or under handed. That sometimes a mineral deposit will cause more vibrations because of the way it is orientated in the deposit or because of a clay pocket. Nevertheless, when you are out of it, it will straighten its self up again. With this information at your finger tips, you may save your company thousands of dollars in legal costs. Think about that the next time you sit doing that dreaded paper work. Some people spend hundreds of dollars trying to impress their boss, you could impress yours by just taking a little extra time now, while it is fresh in your mind, to keep those important, but hated, records accurate.

Paper work is something that we all are tired of doing, but it is a necessity. So look at it this way, it can be a wealth of valuable information if it is consistency kept and used correctly.

Each Company must taylor their own records to fit their own needs, but there are some common threads. Records can be a valuable asset in projecting future production by showing what kind of production the plant produced with a certain hole size and powder ratio verses pattern and depth. These records will also help forecast maintenance and repair costs for the drilling equipment, face loadout machines, trucks and primary crushing

equipment. These same records will help in forecasting the need for future purchasing of the same equipment.

The records that I use, show the powder ratio, hole size, burden, spacing, face height, hole depth the number of decks and the seismograph reading. From this record you can expand and show the amount and type of pattern used - square, rectangle or staggered; single or multi row; number of holes, dry or wet holes; and if the area you are drilling has good or bad stone.

The first record that I keep is the **Magazine Inventory**. This record is a sheet that shows the manufacturer's name, size, weight, and code number and how much product is in the storage magazine for shot usage, and how much was purchased. This record should be completed immediately after the shot. Of all the reports used at the plant, this is the most important. Why? Because of County, State and Federal Regulations. This one report is our proof of what products were purchased and used and what is remaining in the Magazine. We keep copies of all Explosives Delivery Tickets, they help us to verify and maintain an accurate Magazine Inventory. We verify our inventory with a physical inventory count every two weeks. If labor is available, then we do a physical inventory every few days.

The next form used is the **Drill Report**. This log shows the date, drill equipment number, hole size, burden and spacing, face height, bore hole depth, type of pattern used and single or multiple row. The driller also notes any problems he encounters on the hole, such as thin or thick lamentations, soft spots, caves or clay seams. As each of you are aware, a good driller is a valuable wealth of information. He knows his machine and if he has been drilling for a while, he knows the stone in the area. He can "feel" when something is different or wrong.

The next form used is the **Explosive Use Report**. This is filled out when any explosive product is removed from the Magazine and taken to be used on the shot. As each hole is loaded, it is noted and logged on the **Blasting Record Report**. This report shows the amount and type of product that has been used. When you compare the Blasting Record Report and the Explosive Usage Report it will show how much explosives have been used and replaced back into the magazines.

The next report is the **Shot Report**. This report is a virtual world of knowledge. It shows the company name; shot location; date; blast time; blast location. I also made a **Property Survey Grid Map** by marking off the past, present and future blasting area in 200 feet square grids and labeling each one with a North/South and East/West coordinate, hole size,

distance from the shot and the reading from the seismograph, weather conditions, wind direction, time of shot and temperature, quantity of explosives and type of stemming and deck material and last but not last, the name and license number of the blaster.

So in closing, don't think of paperwork as "work, ". Think of it as an invaluable wealth of information that can be used in many ways. Information that can help prove a point. Information that may help you someday to "save the day" just when you least expect it. I have found, with this type of an attitude, I really don't mind doing and keeping up on these reports. In fact it is a challenge and challenges are mind builders! In our industry, we don't want weak minds, they are more dangerous than the explosives.