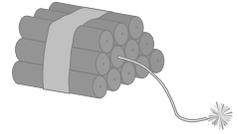


The Primer



Newsletter of the Golden West Chapter, International Society of Explosives Engineers
23633 Brewster Drive, Columbia, CA 95310

Volume 23

Summer 2012

Issue 2

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www.iseegoldenwest.org

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P O Box 2540
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or

mburneson@syar.com

President's Message...

Hey Members,

The depressing wet season is behind us and the summer temperatures are creeping upon us. That means only one thing to me: The Ocean Salmon season is on! Make sure not to miss out on the continuing tradition that we are determined to bring to you each and every year. The salmon fishing Gurus and Experts predict a banner year for the Salmon this year. If that turns out to be a disappointing prediction, no worries, we have set it up with the Captain to make it a Salmon & Rock Cod trip. So write that check out today and send it to me so that I can hold your spot.

The first activity of the year, the MSHA refresher course, was cancelled for not meeting the minimum number of attendees. However, Mike Burneson and Jerry Fulghum volunteered their services to anyone that needed to be certified. A lot of effort and planning goes into these activities so please show your support and take part. There is still time to take advantage of our next scheduled activity, so....

Let's go fishin! See ya on the boat!

Mike Chiurato
Office(916)645-3377
Cell(916)719-4507
mchiurato@alphaexplosives.com

The Primer

Editor's Notes....

This Summer edition of **The Primer** has information on our Fishing trip in July. If you are planning on going on the fishing trip and haven't contacted Mike Chiurato, you need to do so quickly. The fishing out of Bodega has been red hot. The fish are going to be really big in July. The fish have been full of krill and have a beautiful red color. We have been catching limits of eight to fifteen pound fish since the end of April and early May.

I would like to thank Tim Hurley for providing the article on the insurance fraud case.

Take the time to look at our web site. I really enjoy reading articles that are in the archives. We really have a wonderful resource as a chapter. Check out our web site and look at the really cool stuff that it has to offer. Our webmaster is the man.

Jerry Fulghum and I on behalf of The Golden West Chapter are still planning on offering an 8-hour MSHA refresher class for surface mining. We do charge \$40/person, but it includes student handouts & materials, lunch and beverages. Any excess goes to the GWC Scholarship fund, MSHA instructors are nonpaid volunteers. Had to cancel our April class, and looking to schedule another in 30-90 days. Jerry also passed along the following news that it's a good time to review the Heat Illness Prevention requirements with your crews (Section 3395, General Industry Safety Orders), and if they don't have one, to get one developed. Resources are free at Cal/OSHA's web site, and the link is:

<http://www.dir.ca.gov/DOSH/HeatIllnessInfo.html>

You may also want to sound the alert that the Cal/OSHA Standards Board is in the very last stages of adopting an entire revamping of the crane regulations, and the changes are major and significant.

Lake Herman Mike Live @ the Rock

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ATTENTION BLASTERS



A Salmon and Rock Cod Trip Fishing Trip has been chartered for Saturday July 14, 2012.

For all members, family, friends and associates of the Golden West Chapter.

We will meet at the Bodega Bay Sportfishing Center at 5:30am.

Port of Bodega Marina
1500 Bay Flat Road
Bodega Bay, CA 94923

We can take 30 anglers on this adventure. If you would like to attend you must prepay \$100.00 and your check must be received by June 29, 2012. Make your check out to **Golden West Chapter ISEE** and mail it to:

Alpha Explosives
P.O. Box 310
Lincoln, CA 95648
Attn: Mike Chiurato

Call 916-645-3377 to reserve your spot but remember, we must have your check by June 29th or we will fill the boat with others. Bring your own food and drink and something to take home your fish in. **Remember to bring your fishing license.** They are not available to purchase. Rod rentals are \$ 10.00. Tackle packages start at \$ 25.00. **Bring Cash.** No credit cards or checks can be accepted.

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INSURANCE FRAUD CASE **By Edward T. (Tim) Hurley**

In April 2009 I received word from an insurance company that they needed an expert on blasting to look into a claim from a mine owner that an explosives company had destroyed a large quantity of good coal with a blast that rendered the coal useless.

A drilling company had been doing drill and blast work for a mountain top coal mine operation near Hazard, Kentucky. The actual blasting was done with shot-site service provided by a local explosives distributor. A large blast done on November 22, 2008, is claimed to have destroyed (contaminated with waste rock) about 8,049 tons of coal with a value of \$740,535.60.

On May 29 I visited with the land owner. He and I toured the mine site where the coal had been damaged and also viewed a face of coal and overburden that was inactive because of the lower coal prices. We discussed the mining, drilling, and blasting procedures. The owner stated that most of the holes were drilled at 6 $\frac{3}{4}$ inch diameter with one exception when they were drilled at about 5 inches. The actual drilled diameter from the blast reports is 4 $\frac{3}{4}$ inches. He said the driller would drill to the coal, which was determined by the change in drill cuttings. The hole would then be backfilled with 3 feet of drill cuttings, the purpose of which is to keep the explosives 3 feet above and away from the coal. He gave me undated photos of the damaged coal. He also said that they were able to salvage and ship some of the coal but did not give a tonnage. When I mentioned the possibility of running the coal through a preparation plant, he went silent. No coal was observed in the pit and the owner said it was "wasted out". He also gave me the invoice from the drilling company for the drill and blasting service who then pays the distributor for the blasting service.

A coal preparation plant can upgrade the coal by separating the rock and coal by using a heavy media separation process. This is also known as "float-sink" where the coal floats on a heavy liquid and the heavier rock sinks, thus completing the separation.

On May 30 I visited with the president of the local explosives distributor. He described the same drill and blast procedure as did the owner. One change the owner requested was to have the driller put only 2 feet of backfill in the hole instead of the 3 feet as done previously. In the previous shot, with the 4 $\frac{3}{4}$ inch holes, the rock directly above the coal was not broken sufficiently and was hard to remove. The November 22, 2008 shot was drilled with 6 $\frac{3}{4}$ inch holes and the 2 feet of back fill. The drill and blast contractor has not been back to this mine since.

The coal seam has two layers, a top at 17 inches and a lower at 38 inches, separated by a 2 inch shale parting. The over burden is 35 to 37 feet thick sandstone rock.

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Insurance Fraud Case (continued)

DRILL, BLAST AND MINING METHOD

In most cases 6 ¾ inch diameter holes were drilled on a 17 ft by 17 ft spacing. The driller contacts the coal and stops. Three (3) feet of drill cuttings are then put into the hole. This keeps the explosive material away from the coal and will also leave a hard protective rock layer on top of the coal. This method used about one pound or less of explosive per cubic yard of rock broken, per blast reports. The broken rock is then aggressively stripped with dozers equipped with rippers. The hard layer is an indicator that the coal is close and more care must be taken in the stripping the rock to protect the softer coal. Lighter equipment is now used to expose, mine and ship the upper 17 inch coal layer. The 2 inch parting is then selectively removed and the lower 38 inch layer mined and shipped.

CHRONOLOGY

Blasting was done on the following dates and drilled hole size

August 1	6 ¾ inch holes
August 5	6 ¾ inch holes
August 22	6 ¾ inch holes
October 17	6 ¾ inch holes
October 27	*4 ¾ inch holes *
November 22	6 ¾ inch holes

On June 7, 2009, I received the blast reports for the above listed dates from the drill and blast contractor.

On April 2, 2009, the drill and blast contractor received a letter from the owner's attorney, claiming the lost coal values from the November 22, 2008 blast. This letter was forwarded to the distributor's insurance company. Accompanying this letter was an engineer's report from a local surveyor/mine consultant, dated March 9, 2009. The area of contaminated coal was surveyed at 1.12 acres, with 8049.30 tons, and an estimated the value of \$740,535.60.

OBSERVATIONS AND FINDINGS

The surface area from the survey is 1.12 acres. The surface area from the November 22, 2008 shoot report calculates to .76 acres. This is based on a drill pattern of 17' X 17', or 289 sq ft per hole times 115 holes. All else being equal, the area is over stated by 47%.

The loss is now closer to \$504,795.00. **Inflated the area!!!**

The shot report for November 2, 2008 estimated 45,544 cubic yards were broken. This calculated correctly with the 33,235 sq ft area of the shot and 37 ft of overburden thickness which matches the drill hole depth on the blast report. If this amount of cubic yardage were spread over 1.12 acres it would be 25 feet thick. **Big discrepancy!!!**

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Insurance Fraud Case (continued)

With the shot done on October 27 there was a change of conditions. The owner brought in a different driller who made holes of 4 ¾ inch diameter on a 10 ft by 10 ft pattern and backfilled with the 3 ft of cuttings. This shot apparently did not over break to the bottom as well as the 6 ¾ inch holes. He reacted to this by requesting the next driller put only 2 ft of backfill in the holes. He did not realize the original driller with the larger 6 ¾ drill had returned. This combination of changes would have a real effect of the results. The larger holes now had the explosives closer to the coal. The hard indicator layer would not be present. The broken material would be removed with the Cat D10 dozer equipped with a ripper and stripped down into the coal. The first indication of a problem was when the coal showed in the stripped rock. The long ripper shank would easily reach through the top 17 inch coal layer, through the 2 inch parting and into the bottom 37 inch coal layer. The results would be the long linear damages seen in the photos. At this time the procedure would change. The top layer would be mined and some of the coal saved, per the owner and his photographs. The 2 inch parting would be damaged by the equipment, but generally remain in place, per photos. This parting could then be removed exposing the largely undamaged lower coal layer to be mined and shipped. In the photographs this parting was claimed to have been part of the contamination.

Operator poor judgment.

The blasting contractor has no way to determine the amount of back fill in the holes and has to trust the driller.

COAL GOT SOLD TWICE?

There was no coal observed in the pit and the pit was not reclaimed. It is hard to hide 8900 tons as claimed, or even the potentially actual 6000 tons of coal. According to the local Yellow Pages there are three coal preparation plants in the area.

The time frame between the shot and the attorney's letter is too long. The owner knew when the overburden was stripped that there was a problem. This stripping would take a month at worst and the problem should have been apparent when the first coal was uncovered. The loss should have been reported near the end of December 2008. Why wait until March or April 2009.

Tampering with evidence.

The 8900 tons could be moved over 40 working days, two months at the rate of 225 tons/days. The coal trucks in this area are notoriously overloaded and the coal could be moved more quickly. The limitations on how much coal could be moved per day would depend on the combination of the preparation plant capacity, truck availability, and some extent, the weather. Most of the coal seen in the photographs was undamaged and would be shipped and sold in the normal fashion.

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Insurance Fraud Case (continued)

SUMMARY

- 1) The area of damage and thus the tonnage and values are over stated.
- 2) The owner initiated changes in the drill hole diameter, and the back fill amounts, both which affect the explosives performance. The larger holes with less back fill were by design going to over break the rock immediately above the coal and potentially into the coal. Damage by the blasting would be a round crater like feature and not the linear damage shown in the photographs. The photographs were taken when mining had reached the 2" parting and another 38" of good coal remained to be mined.
- 3) Where's the coal? Was it sold?

With this report it was possible for the insurance company to file charges with the local DA for insurance fraud. The case has settled but the expert only gets a letter to that effect.

One final mystery is "What was going through the mine owner's mind as he talked with a man from New Mexico who had never been in a coal mine?".

Edward T. (Tim) Hurley
Safety Consultant

Chapter Activities - 2012

MSHA Refresher Training - To be announced	?
Ocean Fishing Trip - Bodega Bay	July 14
Barbecue - Pioneer Park, Nevada City, CA	Sept. 15
Annual Dinner Meeting (Mt. Pleasant Hall - Lincoln, CA)	Jan. 12, 2013

Publication schedule for *The Primer*

Fall issue	-	deadline: August 6	-	posting date: August 13
Winter issue	-	deadline: Dec 3	-	posting date: Dec 10

The Primer

Call for Scholarship application Starting June 1, 2012

Scholarship Eligibility: Graduating high school seniors or students already enrolled in college who are sons or daughters of an employee of an Explosives or other industry employing explosives may apply for the scholarship.

Judging Committee: Scholarship applications will be reviewed and judged by a panel, including the Chapter Officers and Board and the past President of the GWC or their respective designees

Application Deadline and Scholarship Presentation: The scholarship application process will be an Internet-based process. Starting June 1, 2012 applicants will be able to apply via GWC on-line application process at <http://iseegoldenwest.org>.

The deadline for applications is August 31, 2012. The winning applicant will be named by September 30, 2012. The Scholarship will be issued to the winner at five hundred dollars per semester provided the student is considered by the institution as a full time student and maintains a grade point average of 3.0.

For more information, contact Gerald Fulghum 916-481-1421 or at

GRFULGHUM@SBCGLOBAL.NET

To apply for the Scholarship please include these four items:

The completed application.

A letter of recommendation from your industry representative.

A 300 to 500 word statement of your plans for a career in the explosives or aggregate industry;

If you have work experience in the aggregate or explosives industry as a summer employee, an intern or through a cooperative work program, please include one or more recommendations letters from your employer(s).

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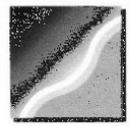
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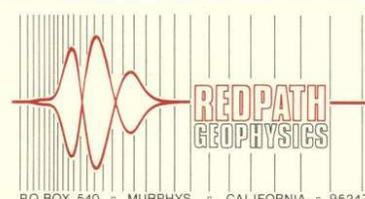


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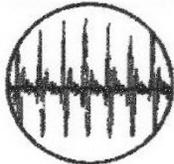
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Fire in the Hole....

The Lone Ranger and Tonto are camping in the desert. They set up their tent and are fast asleep.

Some hours later, the Lone Ranger wakes his faithful friend.

"Tonto, look up and tell me what you see."

Tonto replies, "Me see millions of stars."

"What does that tell you?" asks the Lone Ranger.

Tonto ponders the question for a minute, then replies, "Astronomically speaking, it tells me that there are millions of galaxies and potentially billions of planets. Astrologically, it tells me that Saturn is in Leo. Time wise, it appears to be approximately quarter past three. Theologically, it's evident the Lord is all powerful and we are small and insignificant. Meteorologically, it seems we will have a beautiful day tomorrow.

What it tell you, Kemo Sabi?"

The Lone Ranger is silent for a moment and then speaks.

"Tonto, you dumb ass, someone has stolen our tent."