Once again, the often-overlooked drilling industry has proven its worth to the world. There is an old saying: If it can’t be grown, it must be drilled for.

Usually I don’t name names in my articles because when mistakes are made, they make for good reading, and illustrate drilling practices from which we all can benefit. For instance, when my friends, D. and R., stepped on their tails, I didn’t name them. But, in the case of the rescue of the miners in Chile, the companies and people involved should all be very proud of their accomplishments, and deserve public recognition of their efforts. None of this would have happened 25 years ago— or probably even 10 years ago.

The rig used in the rescue was a T130XD Schramm. This is the latest generation rig. I’ve been around several of them, and they are a wonder. The only thing I could find that wasn’t automated was the coffee pot in the doghouse. I never had one with an angle package on it. Dick Schramm explained to me that most of the mining and exploration rigs have them. Because of the location and the layout of the mine, an angle hole had to be drilled to get to the miners. GyroData, out of Houston, provided the navigation for the small-diameter pilot hole. I understand these are the same folks who provided the precise navigation for the relief well on the Macondo location.

After the pilot hole was drilled, on target and under time, a small problem arose. The exploration crew was well experienced with the smaller diameter holes used for mineral exploration, but they admitted to being out of their depth, so to speak, when reaching the 23-inch hole for the rescue capsule. That is a job more suited to a water well driller. The contractor who owned the rig in Chile, Geotech Boyles Bros. SA, called its parent company, Layne Christensen, in Kansas. Did Layne have a driller with reaming experience on a T130? It so happened that they did. One of the best drillers in the world was drilling water wells in Afghanistan. Jeff Hart (Arvada, Colo.) got on the plane immediately bound for Chile. An experienced, Spanish-speaking crew was brought in from the western United States to complete the crew.

The next problem was the bit. Brandon Fisher, president of Center Rock in Berlin, Pa., stepped up. He offered his newest-generation hit to the Chilean government, and they accepted.

With the iron in place, reaming the “big hole” started. Everyone was very cautious about estimating the time it would take to reach the miners. Very hard rock, unknown conditions and Murphy’s Law will make most anyone cautious.

The driller, Jeff Hart, had one advantage beyond his years of experience, one that almost never happens in normal reaming. One of the parameters that separate a driller from a “brake-weight” is the ability to read his cuttings and adjust the weight on bit (WOB) for best overall performance. Too much weight makes big cuttings, and tends to break the compacts on the face of the bit. Not enough weight results in the cuttings, slowing penetration, and decreases bit life. Fortunately, the pilot hole went into the mine, and most of the cuttings went down-hole. The miners were able to scoop them up, examine them and show them to the driller in near real time, allowing precise adjustments for maximum penetration and bit life. The rig and the bit performed in a near flawless manner until they got near the top of the mine. One of my sources told me that, since the mine was so poorly mapped, the bit hit a steel beam, something even the hardest rock bit is not made to deal with, and tore up. Center Rock immediately built and shipped a fresh bit, and very little time was lost.

While the drilling was going on, concern for the miners was on everybody’s mind. NASA was consulted about the problems of isolation and diet. It provided a diet that would keep the miners healthy but not allow them to gain too much weight; after all, they had to fit in the rescue capsule. (Sorry, Porky; I’m afraid another reamer pass or two would have to be made — course they could have brought up four miners at a time.)

Other companies saw the need and stepped up. Since the miners had spent the longest shift in mining history in the dark, there was a very real concern for eye damage when they emerged into the bright sunshine. Oakley sent enough pairs of their now-famous sunglasses for all the miners. I read an advertising magazine the other day that claimed Oakley got $15 million worth of free advertising — not bad for a few pairs of glasses.

Many other private companies (my apologies to the many others I left out) saw the need and got involved, most without asking for money up front; they did it because it was the right thing to do. One company, Cupron, out of Richmond, Va., sent the miners special socks with copper thread woven in them to help the miners fight bacterial growth and foot odors. (Ya gonna figure they were getting a little gayer after that long hitch.) About the socks, the Chilean Health Minister said, “I never realized that kind of thing actually existed.”

The point is that we should all be very proud of the efforts by, mostly American, private enterprise, to do something that had never been done before, and couldn’t have been done very long ago. The Chilean government pretty much got out of the way. Can you imagine if our government had to handle this? I can see it now: First they would have had months of joint hearings during which they would have interviewed some actress because she once played a miners wife, then they would have demanded an environmental impact statement to make sure a mouse didn’t get run over, followed by partisan bickering over who is going to pay. It would all have been put off until after the next election, no matter how long it took. By the time they were done, they would be lowering Social Security checks and rule books down the pilot hole.

The dramatic rescue is owed to private enterprise and the can-do spirit of the people involved. Once again, I am proud to be a small part of the industry.