Roof bolters do a heads up job of keeping mine safe

Prairie Eagle roof bolter Patrick Smillie is as cognizant of aesthetics as he is the safety ramifications to his job. “They say this mine is going to be here for 20 years so these bolts are going to have to show for a long time,” Smillie said. “We like to keep the pins together in neat rows especially in the mains.”

Smillie works in tandem with Bill Ward. The two were hired one day apart and their close knit relationship is evident. They seem to know what the other is thinking.

“I’m his trailer man,” Ward said as Smillie negotiates the electric-powered (all machines in an underground run on electric) Fletcher roof bolter to a fresh, unpinned cut. “I’ll keep the cables out of the way while he sets it in place.”

It’s a little past 7 a.m. and the two are readying for the day. Pins of various lengths are being delivered and Ward is sizing up the ceiling 6 feet above. Each cut has its own characteristics. To the casual observer the roof is slick and uniform, but closer inspection finds its far from that. This is, afterall, decayed and compressed organic material sandwiched between varying rock strata. Faults, referred to underground as slips, are common and require added measures to secure them.

The men take note of a slip in this particular cut. When they get to it they’ll pin 8 inch by 8 inch plates, known as pizza pans and which are wider than normal plates, along it for added protection.

The Fletcher is a two man rig with controls and booms on both sides. Ward’s in charge of positioning the booms. Like raising palms to the heavens, Ward pushes the boom against the ceiling. This bracing aids in torque performance of the drills. He inserts a bit into the drill. The bit has markings to show how deep they must drill to hit rock. When the bit hits coal it whines. When it hits rock it squeals. When it begins to squeal it’s retracted and removed; a bolt is then inserted in the slot.

“What do you say, about three feet?” Smillie asks Ward even though he knew the answer just from hearing the sound of the drilling.

The men are now focused on securing the roof. They work independently but seem to move simultaneously.

Typical cuts are about 40 feet deep and 20 feet wide on the side tunnels; about a foot narrower on main runs. The men will pop 40 pins into the cut. Ward will also add test holes demarked by orange spray paint. Those are for mine inspectors to peruse.

“It we tell them we used 3 foot pins then that hole better be 3 feet deep,” Smillie said.

Keeping the bolts in a straight line can be tricky when you’re constantly craning your neck upwards. To do so, Smillie said continued on page 3
Crews prepare highwall cut in at Royal Falcon

Safety Supervisor Bill Sanders said that sometime by mid-December he expects crews to begin scratching into the highwall at Royal Falcon marking the birth of the new underground mine. Describing the move in this manner is apropos as Sanders stressed that the digging will be a slow process.

"We'll make five or 10 cuts just to get a couple of rows of pins in there then another 10 feet bolted and then a 20-foot cut," he said. "The conditions on top will dictate how big a cut we make. We won't turn across before at least 100 feet."

Sanders said the preparation work has advanced nicely. The equipment is ready, the warehouse is under construction, the canopies are built and the new incline is near completion. He is awaiting approvals for some plans.

"Approvals for our roof control and ventilation are being signed off on," he said.

Earthwork for the mine began this spring and crews have dug down 165 feet to reach coal. Barry Sargeant said a lot of dirt was moved on this project.

"We've moved 3.1 million cubic yards of overburden to make this hole," Sargeant said. "By comparison, they'll move 1.8 million cubic yards a month at Creek Paum."

More than 3.1 million cubic yards of overburden was moved to make way for the Royal Eagle underground mine.

The warehouse is near completion and framing for the bathhouse is being done.

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a four-foot edge on each side created by the miner and known as a core line. The men use it to keep their outside rows even. It makes it easier to line up the inside ones.

After the cut has been properly bolted the men pack up and move the Fletcher to the main channel ready for the next one to open up. In the distance the miner churns through the coal seam with a "rumpa-rumpa" sound of an unbalanced washing machine on the spin cycle.

Cars brimming with coal shoot through the tunnels headed for the belt-line. Empty cars hum in the darkness awaiting another load. The sense of isolation that could overcome a person in the darkness of an underground mine is broken when it's understood that everyone is shows up quickly down here," Smillie adds.

The two along with the rest of the shift crew arrived at the mine around 6 a.m. The sun was still an hour away from cresting the horizon and they traveled by bus in the darkness to the entrance of the hole. When they'd emerge in mid afternoon there would be little daylight left. By late December, there'll be none at all when their day is done.

That's of little concern to Ward and Smillie. Both prefer life underground than on the surface.

"I didn't like dealing with the weather," Smillie said.

"I prefer underground and roof bolting is the best job here," Ward said. "There is something a little different every day."

Justin Lemons restocks the roof bolters with boards from plastic curtains will be hung to control air flows dependent on everyone else there.

"This is a team effort and we all depend upon one another," Ward said.

"Safety is the real key down here and that starts with the individual."

"If there is a weak link on a team it