

21 July 2010  
Comments  
Share  
Donna Schmidt

New infrastructure, including more than 64,000 feet of underground and overland conveyor – the latter accounts for 14,000 of that total – rolls through the Appalachian foothills like a rollercoaster to the mine’s Shoemaker preparation facility along the Ohio River at Shoemaker Harbor.

Until January 2010, the large Marshall County mine had held the distinction of being the last remaining underground mine to use rail car haulage.

Shoemaker is of typical depth for the region, having 600-700ft of overburden. With one longwall panel and three continuous miner sections at press time (this will grow to four later this year), the three shifts of about 206 workers each are kept busy.

Currently, the operation is completing its last three panels in the 8 North Mains before moving personnel and equipment to a new area at 8 South adjacent to its main Golden Ridge portal.

Development is occurring in that area now via two CMs.

Until the longwall joins the 8 South CMs in 2012, workers continue the trek to the mine’s active 8 North sections, a 15,000ft trip which takes about 30 minutes aboard one of the mine’s Goodman and Eimco DC-powered rail mantrips. Once in the new area, the DC haulage will continue to be used but at some point will be transitioned to diesel units.

Shoemaker extracts from the prolific Pittsburgh 8 seam, where a longwall shearer has been rapidly cutting away since first installed in April 1975.

Current longwall panels are on average 1000ft wide and a healthy length of about 10,800ft.

Cutting height is 65-72in, while seam heights typically will match.

Longwall production was temporarily suspended at the northern Appalachian complex as the meat of the mine’s major belt overhaul was completed, but resumed January 15 with as much vim and vigor as ever.

In fact, superintendent Bob Wise noted, the panel and its crew were patiently awaiting its return to prime advancement levels this summer when a collection of planned upgrades are wrapped.

A Joy 7LS-1A shearer with 62in headgate and tailgate drum diameters powered by 710hp per arm glides along the Pittsburgh 8, passing 174 Bucyrus PM4 800-ton shields on passes that take about 45 minutes per cycle. Coal falls to the Bucyrus 1m face conveyor with Fenner Dunlop belt and 42mm Thiele chain moving at approximately 250ft/min. The headgate 1 and 2 are running at 750hp and the tailgate is powered at 800hp.

The BSL and crusher are both MTA/Bucyrus, with a 10-12in clearance range on the latter.

Overall, the longwall produces about 20,000t daily averaging approximately 75ft/day of retreat at 2500tph capacity. Equipment availability typically remains in the range of 85-95%.

Most read Archive

- 1 BMA orders new Bucyrus dragline MARKETS
- 2 Moranbah North miner killed MARKETS
- 3 Miner dies in West Virginia MARKETS
- 4 Mining costs demystified MARKETS
- 5 New projects in the Bowen Basin MARKETS

