APPENDIX N

WVDEP SURFACE BLASTING

Appendix N
Surface Blasting on April 5, 2010

Although the US Geological Survey does not report events that are less than 1.0 Magnitude, the possibility of an association with surface blasting was assessed by portraying UBB workings in relation to surface mines on georeferenced air photos. The nearest surface operation is located nearly two miles from the vicinity of HG 22 and/or the 1 North Panel face. Surface shots conducted on April 5, 2010, the day of the explosion, were recorded by seismographs monitored by the West Virginia Department of Environmental Protection's (WVDEP) Office of Explosives and Blasting. The locations of surface blasts were plotted in a Geographic Information System (GIS) using coordinates provided by the WVDEP Office of Explosives and Blasting, along with the times of surface blasting. Four surface blasts were recorded approximately 2 ½ miles from the face of the 1 North Panel, but the earliest was over one hour after the 3:02 p.m. time of the explosion. The WVDEP was requested to provide the locations and times of all surface blasts for the week prior to the explosion, within a five mile radius of the 1 North Panel face. Discussions with David Vande Linde (Office of Explosives and Blasting) conducted on April 29-30, 2010, revealed that seismographs were located at Lindytown and Synergy, and agreed with the time data provided by the company, although located 1,500-2,000 feet away from the blast (Figure N-1). Mr. Vande Linde indicated that at that distance, the seismic magnitudes resulting from the surface shots were 0.01-0.06 Magnitude, representing very small events.

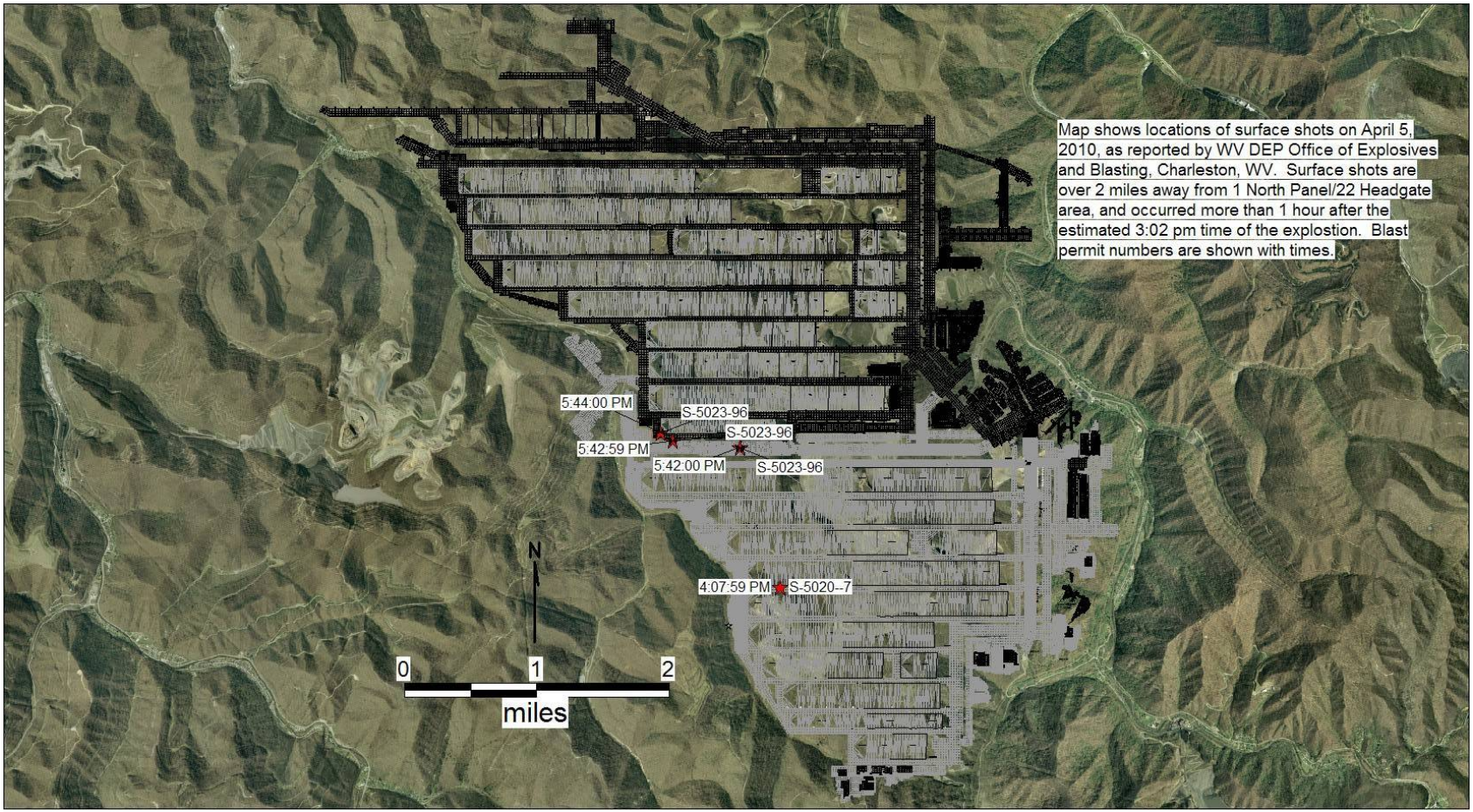

Figure N-1. UBB in relation to surface blasting events on April 5, 2010. Surface shots all occurred at least one hour after the 3:02 p.m. time of the explosion, and were located more than two miles south of the 1 North panel.