

Figure 5.—Location of instruments in 5660-05-level intersection.

MINING AND MONITORING PROCEDURES

After the instruments were calibrated at SRL, they were installed in the mined-out cut 8 of the 5660-05 stope prior to placement of the backfill. Figure 6 is a longitudinal projection of the Lucky Friday Mine with the test stope location shown in the lower west corner. Figure 7 is an expanded view showing the cut sequence for the 5660 and 5750 sublevels and the location of the instrument site. On October 15, 1997, the intersection was backfilled with 2.3 m (7.5 ft) of cemented mill tailings so that the truss legs were completely covered. Because the stope was only filled for 2.3 m (7.5 ft) of its 3.3-m (11-ft) height, additional string potentiometers were installed wall-to-wall in the gap on October 16. The datalogger was then moved

to a position in the gap between the fills so it would not be damaged by blasting during mining of cut 9.

The instruments were initially monitored hourly, then every 2 hr, and by the end of the project, every 12 hr. The monitoring rate was changed to lengthen the time the system would operate without having to retrieve the data storage canister.

Mining the next cut (5660-05 stope, cut 9) began by blasting the bottom of the cut 8 ramp on October 20. The load cells were installed on the exposed ends of the rock bolts on October 29 after mining had proceeded far enough so that the instrument wires would not be damaged by blasting. The mine installed a 3-m- (10-ft-) long cap across the west side of the intersection in

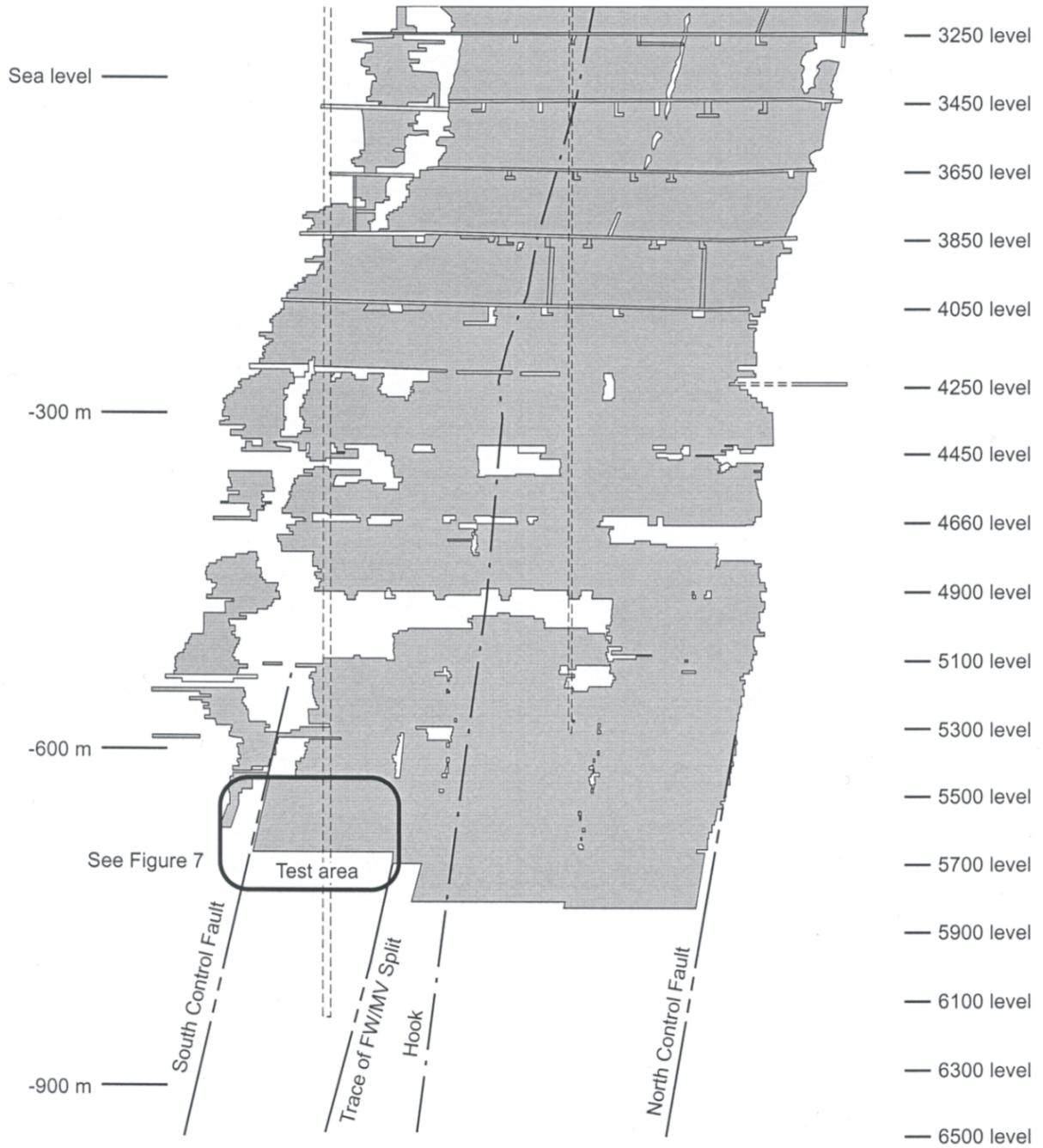


Figure 6.—Longitudinal projection of Lucky Friday Mine.