

Outline of Signal field log from VHLC at South Arcadia, July 21, 2012

1. 13:09:42 E Signal request
2. 13:25:06 BNSF train occupies approach; EA green signal lighted.
3. 13:26:53 BNSF train takes EA signal at South Arcadia
OS false (occupied)
EA signal red lamp is lighted
4. 13:27:23 East (BNSF North) approach occupied
5. 13:29:15 4ATPR (KCS NB Approach) false (Train on approach)
6. 13:29:30 W track (BNSF) unoccupied. Train is now occupying OS and east track
7. 13:29:31 OS picks up; train has moved out of OS
8. 13:29:43 4NPR false; KCS 4 signal is cleared
9. 13:31:56 EATR true; BNSF train clear of east approach
10. 13:35:34 4TPR false; KCS train occupies OS
4NPR true; KCS signal red
11. 13:35:40 3TPR false; KCS train across diamond
12. 13:35:49 3ATPR false; KCS train occupies opposite approach
13. 13:38:17 4TPR true; KCS train clears first portion of OS
14. 13:38:18 4APTR true; KCS train clear of approach
15. 13:38:21 3TPR true; KCS train is clear of OS and diamond
16. 13:42:14 3ATPR true; KCS train clear of north approach
17. 15:12:03 EGZ true; BNSF dispatcher sends a request to clear E signal
18. 15:23:59 EBYE true; BNSF north bound lower signal yellow light on
19. 15:26:22 4APTR false; KCS train on approach to South Arcadia Interlocker
20. 15:26:43 WTR false; BNSF train passes intermediate signal 120.1, which is the approach to South Arcadia. Logs from equipment at that location show that the signal was

Displaying a Y/Y aspect.

- 21. 15:29:31 OSTR false; BNSF train occupied OS
EBYE false; EB signal yellow lamp energy removed
EBRE true; EB signal red lamp on
- 22. 15:29:45 4TPR false; KCS train occupies OS at South Arcadia
- 23. 15:29:46 Logs indicate inputs from KCS signal equipment lost. This is the time of impact;
Trains collide and KCS signal equipment is destroyed.

Note

At 13:35:34, the 4NPR is true, indicating that the KCS 4 signal is red. At 15:29:57, the 4NPR goes false, as the KCS signal equipment is destroyed by the derailment, and inputs from their equipment is lost. **The 4 signal is red starting at 13:35:34, and stays red throughout these events.**