

PUBLIC REPORT OF INVESTIGATION

Nodaway, IA

3/17/01

Amtrak/BNSF

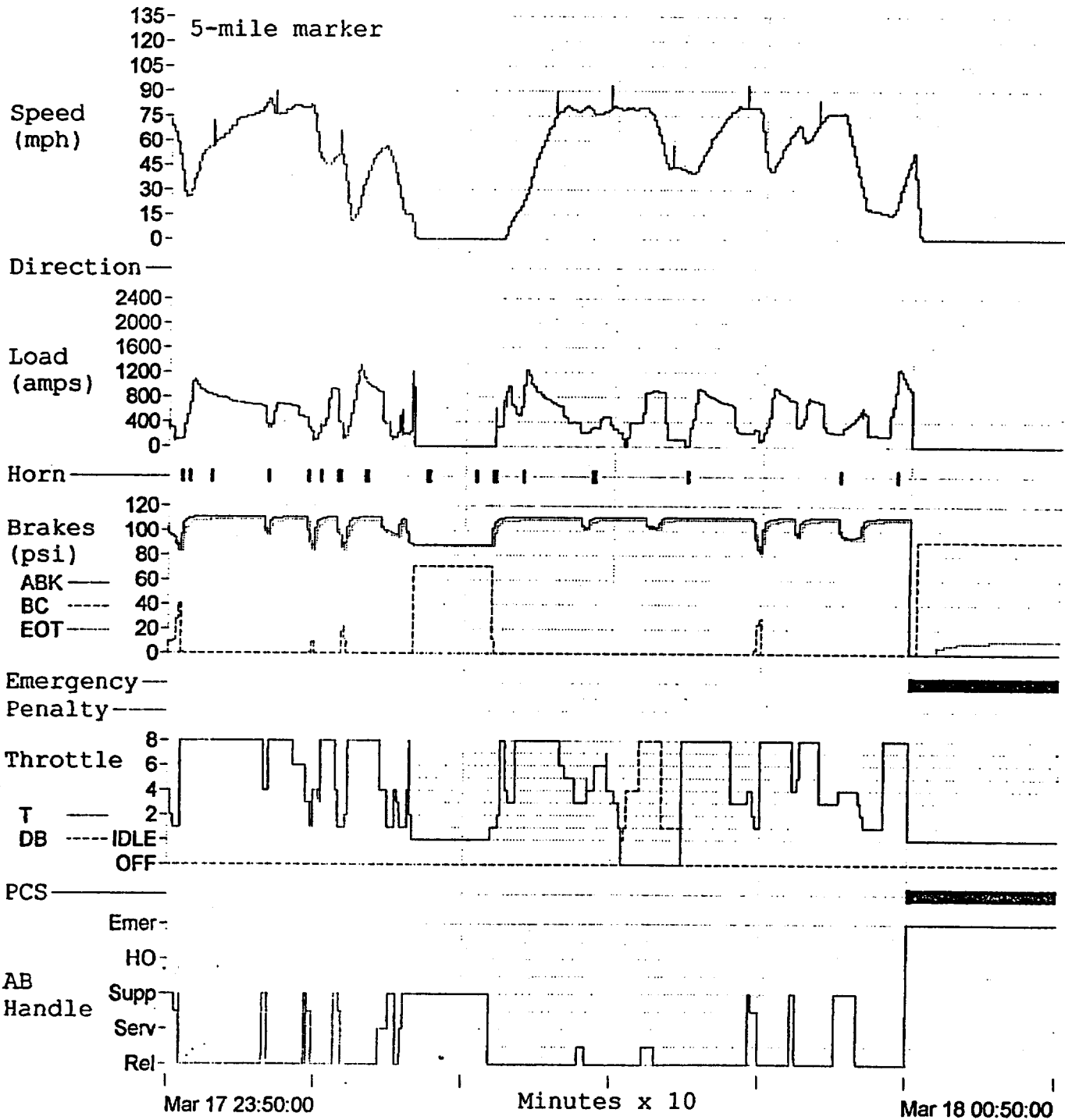
DCA01MR003

**Passenger Train
Derailment**

No. 10

Event Recorder

Railroad AM
Loco Num 140



Loco Num 140
 Total Dist 2149 mi 2824 ft
 Data Start 03/18/01 12:40:00
 Data End 03/15/01 08:00:00

Railroad
 Wheel Size AM 40.00"
 Milepost
 POR

GE IFC Data Analysis
 Version 3.5
 Wabtec Railway Electronics

| Date | Time | Distance | | Speed mph | Load amps | AB psi | BC psi | EOT psi | IBS | Throttle | | Horn | | AB | | | |
|-------|----------|----------|------|--------------|--------------|-----------|-----------|------------|-----|------------|------------|------|-----|------|--------|------|-----|
| | | mile | feet | | | | | | | D112345678 | 0123456789 | Bell | PCS | Emer | Handle | Dir | |
| 03/18 | 00:41:00 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:59 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:58 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:57 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:56 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:55 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:54 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:53 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:52 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:51 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:50 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:49 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:48 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:47 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:46 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:45 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:44 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:43 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:42 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:41 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:40 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:39 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:38 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:37 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:36 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:35 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:34 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:33 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:32 | 0 | 0 | 0 | 0 | 0 | 77 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:31 | 0 | 0 | 1 | 0 | 0 | 35 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:30 | 0 | 1 | 0 | 0 | 0 | 7 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:29 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:28 | 0 | 7 | 3 | 0 | 0 | 0 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:27 | 0 | 12 | 6 | 0 | 0 | 0 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:26 | 0 | 23 | 6 | 0 | 0 | 0 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:25 | 0 | 32 | 10 | 0 | 0 | 0 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:24 | 0 | 48 | 10 | 0 | 0 | 0 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:23 | 0 | 63 | 13 | 0 | 0 | 0 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:22 | 0 | 83 | 16 | 0 | 0 | 0 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:21 | 0 | 107 | 16 | 0 | 0 | 0 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:20 | 0 | 131 | 20 | 0 | 0 | 0 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:19 | 0 | 161 | 20 | 0 | 0 | 0 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:18 | 0 | 191 | 23 | 0 | 0 | 0 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:17 | 0 | 226 | 23 | 0 | 0 | 0 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:16 | 0 | 261 | 27 | 0 | 0 | 0 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:15 | 0 | 302 | 27 | 0 | 0 | 0 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:14 | 0 | 343 | 31 | 0 | 0 | 0 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:13 | 0 | 389 | 31 | 0 | 0 | 0 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:12 | 0 | 435 | 34 | 0 | 0 | 0 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:11 | 0 | 486 | 34 | 0 | 0 | 0 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:10 | 0 | 538 | 38 | 0 | 0 | 0 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:09 | 0 | 595 | 38 | 0 | 0 | 0 | 0 | Rel | | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:08 | 0 | 651 | 41 | 0 | 0 | 0 | 0 | Rel | | | | Off | Open | EIE | Emer | For |

Loco Num 140
 Total Dist 2149 mi 2824 ft
 Data Start 03/18/01 12:40:00
 Data End 03/15/01 08:00:00

Railroad AM
 Wheel Size 40.00"
 Milepost
 POR

GE IFC Data Analysis
 Version 3.5
 Wabtec Railway Electronics

| Date | Time | Distance mile | Speed feet | Load mph | AB amps | BC psi | EOT psi | IBS | Throttle DI12345678 | Horn 0123456789 | Bell | PCS | Emer | AB Handle | Dir | |
|-------|----------|------------------|---------------|-------------|------------|-----------|------------|-----|------------------------|--------------------|------|-----|------|--------------|------|-----|
| 03/18 | 00:40:07 | 0 | 712 | 43 | 0 | 0 | 0 | 8 | Rel | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:06 | 0 | 775 | 44 | 0 | 0 | 0 | 51 | Rel | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:05 | 0 | 840 | 47 | 0 | 0 | 0 | 78 | Rel | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:04 | 0 | 910 | 48 | 0 | 0 | 0 | 109 | Rel | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:03 | 0 | 981 | 50 | 0 | 40 | 0 | 109 | Rel | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:02 | 0 | 1055 | 51 | 376 | 106 | 0 | 109 | Rel | | | Off | Open | EIE | Emer | For |
| 03/18 | 00:40:01 | 0 | 1131 | 52 | 920 | 108 | 0 | 109 | Rel | 5 | | Off | Cls | None | Supp | For |
| 03/18 | 00:40:00 | 0 | 1207 | 52 | 920 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Supp | For |
| 03/18 | 00:39:59 | 0 | 1285 | 52 | 912 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:58 | 0 | 1362 | 52 | 912 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:57 | 0 | 1439 | 52 | 928 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:56 | 0 | 1515 | 52 | 928 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:55 | 0 | 1592 | 52 | 928 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:54 | 0 | 1668 | 52 | 928 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:53 | 0 | 1745 | 50 | 928 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:52 | 0 | 1819 | 50 | 960 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:51 | 0 | 1893 | 50 | 960 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:50 | 0 | 1967 | 50 | 960 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:49 | 0 | 2041 | 48 | 960 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:48 | 0 | 2113 | 48 | 984 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:47 | 0 | 2184 | 48 | 984 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:46 | 0 | 2255 | 48 | 984 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:45 | 0 | 2326 | 48 | 984 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:44 | 0 | 2398 | 46 | 984 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:43 | 0 | 2466 | 46 | 1016 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:42 | 0 | 2534 | 46 | 1016 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:41 | 0 | 2602 | 46 | 1016 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:40 | 0 | 2670 | 44 | 1016 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:39 | 0 | 2736 | 44 | 1048 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:38 | 0 | 2801 | 44 | 1048 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:37 | 0 | 2867 | 44 | 1048 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:36 | 0 | 2932 | 42 | 1048 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:35 | 0 | 2994 | 42 | 1080 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:34 | 0 | 3057 | 42 | 1080 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:33 | 0 | 3119 | 42 | 1080 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:32 | 0 | 3181 | 42 | 1080 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:31 | 0 | 3243 | 39 | 1080 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:30 | 0 | 3302 | 39 | 1120 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:29 | 0 | 3361 | 39 | 1120 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:28 | 0 | 3420 | 39 | 1120 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:27 | 0 | 3478 | 39 | 1120 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:26 | 0 | 3537 | 37 | 1120 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:25 | 0 | 3592 | 37 | 1176 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:24 | 0 | 3648 | 37 | 1176 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:23 | 0 | 3703 | 37 | 1176 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:22 | 0 | 3758 | 37 | 1176 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:21 | 0 | 3813 | 34 | 1176 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:20 | 0 | 3865 | 34 | 1216 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:19 | 0 | 3917 | 34 | 1216 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:18 | 0 | 3969 | 34 | 1216 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:17 | 0 | 4021 | 34 | 1216 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:16 | 0 | 4072 | 32 | 1216 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |
| 03/18 | 00:39:15 | 0 | 4120 | 32 | 1272 | 111 | 0 | 109 | Rel | 8 | | Off | Cls | None | Rel | For |