

	DOTX 218	DOTX 219	DOTX 220	DOTX 221	DOTX 223	DOTX 225	DOTX 226	DOTX 304
Manned								
								
Unmanned								
Track Geometry (Manned)		X	X	X				X
RTGMS (Unmanned)				X		X	X	
Rail Profile		X	X	X				X
Ride Quality		X	X					
Rail Impact		X	X					
Right-of-Way Video		X	X					X
TrackBed Video		X	X					X
GRMS	X							
LiDAR			X					X
Joint Bar Inspection System (JBIS)			X					
Track Component Imaging System (TCIS)			X					
Rail Surface Imaging System (RSIS)			X					
Other	Vertical Track Deflection, Rail Roll		Ground Penetrating Radar		Buffer car for DOTX 219 12-axle operating rules			



Department of Transportation Federal Railroad Administration Office of Railroad Safety

AUTOMATED TRACK INSPECTION PROGRAM

The mission of FRA's Automated Track Inspection Program (ATIP) is to reduce track caused accidents nationwide. The program allows FRA to monitor railroad compliance with *Federal Track Safety Standards* and evaluate safety trends in the rail industry through deployment of a fleet of track geometry measurement rail cars. ATIP collects data on the nation's railroad infrastructure and provides railroads with information needed to ensure compliance with safety standards.

ATIP Complements and Supports FRA Track Inspectors

- Every year, ATIP enhances FRA track inspectors' coverage by finding 2.5 times more locations with noncompliant track geometry than manual inspection methods alone.
- ATIP provides objective, uniform, and accurate assessment of track geometry under the load of a heavy rail car.
- Historical ATIP data is available to inspectors in FRA's **Track Data Management System (TDMS)**.

ATIP Puts Priority on Inspecting Safety of:

- Amtrak and Commuter Passenger Routes,
- Hazmat Routes,
- Crude Oil Routes,
- STRACNET Routes critical to DOD for mobilization, and,
- Routes with Possible Safety Concerns.

FRA DOTX 219 TRACK GEOMETRY CAR SYSTEM CAPABILITIES

Track Geometry Measurement System (TGMS) measures track geometry parameters including track gage, alignment, and surface (cross level, warp, profile, etc.) and determines the limiting speed in curves. The TGMS measures track geometry parameters at speeds up to 125 miles per hour.

Location Detection System featuring Differential Global Positioning System (DGPS) receivers provide accurate position updates up to 5 times a second. Various limiting factors affecting GPS accuracy are overcome through the use of an Inertial Navigator system, which combines information from DGPS data and inertial sensors to provide accurate geospatial data even when DGPS signals are temporarily unavailable or inaccurate.

In addition to providing DGPS coordinates, Navigator includes an automated track feature detection module. Utilizing a predefined route database containing location information corresponding to mileposts, bridges, grade crossings and other features of interest, the utility automatically inserts markers corresponding to landmarks along the route into the data stream.

RailScan Gage/Profile Measurement System is the most technologically-advanced measurement of track gage and rail profile contours available for this testing platform. The system employs lasers that illuminate the rails and high-speed cameras to capture rail contours for the determination of track gage and rail profile-related parameters. RailScan can record and report track gage, transverse rail profiles, rail wear and rail cant data in real-time at a 1-foot sample rate at any speed up to 170 miles per hour.

Ride Quality Measurement System (RQMS) is designed to collect vehicle dynamic data and evaluate ride quality. The system also allows for the assessment of vehicle performance with respect to safety criteria established for passenger trains within the *Federal Track Safety Standards*.

Right-of-Way/Track Bed Imaging System captures digital video of the right-of-way as well as images of the track and its supporting structure during survey operations. The system provides FRA Headquarters and field personnel with a track structure image inventory for use in visual review of highway rail grade crossings, railroad bridges and track features of interest. Track bed and right-of-way images are synchronized with track exceptions to facilitate review of areas of concern.

Rail Impact Detection System employs axle-mounted inertial sensors to detect damage to the running surface of the rail at rail joints. This system generates an advisory notification for conditions which may lead to metallurgical failures if not addressed.

Track Quality Index (TQI) is a dimensionless parameter derived from "space curve" measurements to objectively assess and rate conditions of the track. FRA's profile, alignment, cross level and gage TQI are compared to national class-based benchmarks to facilitate assessment of track against the condition of other track in the same class.

ATIP Support Systems:

Onboard Moving Map is a near real-time display of the car's current position and that of exceptions and track features collected during the current survey.

Track Data Management System (TDMS) is an archive of over 800,000 miles of geometry data collected by ATIP geometry cars since 1998. The database is available to FRA Inspectors through a web interface to facilitate inspection prioritization, derailment investigation and track degradation trend analysis. Geometry data can be viewed in multiple formats and summarized in region-based statistical reports. The system integrates **GeoEdit™** software for offline strip chart viewing.



FRA DOTX 219 Track Geometry Car

FRA DOTX 219 CAR SPECIFICATIONS

Type:	Track Geometry Car (Specialized Maintenance Equipment), <i>Maximum Speed = 90 MPH</i> , Compatible with AAR Interchange Rules
Brakes:	Knorr Disk Brakes with Anti-skid, Snow Brakes, Parking Brake with Manual Override
Communications:	Internal Public Address and Two (2) 97 Channel Clean Cab Radios
Exception Marking:	Milepost/Foot Location and DGPS Reporting

DIMENSIONS AND WEIGHTS

Weight, w/ Fuel	212,700 pounds (106 tons)
Loading Each Axle	52,300 pounds (min)
Length over Pulling Force of Couplers (PFC)	91' 6"
Truck Center Distance	65' 11"
Truck Wheelbase	8' 2.5"
Maximum Length Carbody	86' 11"
Maximum Width Carbody	10' 6"
Maximum Height - Rail to Top of Air Conditioning Units, New Wheels, Light Car	15' 4"
Height, Rail to Top of Finished Floor.....	53 3/8"
Wheel Diameter (New)	36"
Fuel Capacity	1050 U.S. gal

ACCOMMODATIONS

Safety Equipment:	First Aid Kits; Evacuation Tools; Fire Extinguishers; Derails; Wheel Chocks; Blue Flags and Lights; Personal Protection Equipment (safety vests, eyewear, hard hat, breathing apparatus, etc.); Portable "Walkie-Talkies"; Warning Bell and Locomotive Horn.
Seating:	Seating for 20: Rear Observation (12), Computer Room (4), Forward Area (4).
Miscellaneous:	Flammable Storage Locker, Track Illumination Lights, (Rear) Instrumentation Illumination Lights, Storage Closets, Lockers, ADA Compliant Lavatory, Galley and Rear observation area.



Department of Transportation Federal Railroad Administration Office of Railroad Safety

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FRA DOTX 220 Track Geometry Car

FRA DOTX 220 CAR SPECIFICATIONS

Type:	Towed High Speed Railcar, <i>Maximum Speed = 90 MPH</i> , Compliant with 49 CFR 238 Passenger Equipment Standards, Compatible with Amtrak HEP, 27 pt. COMM and 27 pt. MU
Brakes:	Knorr MGS Wheel Slide, Wabco 26C Air Brake Control Valve, Main Reservoir, Trainline Equipped, Dual WABCO TFM Disc and BFC Tread Braking, Elcon National 800-LG Hand Brake
Communications:	Internal Public Address and Two (2) 97 Channel Clean Cab Radios
Exception Marking:	Milepost/Foot Location and DGPS Reporting

DIMENSIONS AND WEIGHTS

Weight, w/ Fuel	213,000 pounds (106.5 tons)
Loading Each Axle	53,250 pounds (min)
Length Over Pulling Force of Couplers (PFC)	85'
Truck Center Distance	59' 6"
Truck Wheelbase	8' 6"
Maximum Length Carbody	83' 1"
Maximum Width Carbody	10' 5 1/2"
Maximum Height - Rail to Top of Air Conditioning Units, New Wheels, Light Car	14' 8"
Height, Rail to Top of Finished Floor.....	51"
Wheel Diameter (New)	36"
Fuel Capacity	400 U.S. gal

ACCOMMODATIONS

Safety Equipment:	First Aid Kits; Evacuation Tools; Fire Extinguishers; Derails; Wheel Chocks; Blue Flags and Lights; Personal Protection Equipment (safety vests, eyewear, hard hat, breathing apparatus, etc.); Portable "Walkie-Talkies"; Locomotive Horn.
Seating:	Seating for 20: Rear Observation (16), Computer Room (4).
Miscellaneous:	Flammable Storage Locker, Track Illumination Lights, (Rear) Instrumentation Illumination Lights, Storage Closets, Coat Closet, Lockers, Galley and Rear observation area, Microphor Waste System.

Historical Assessment of the Special Permit Routes

Groups	RR	District	Point A	Point B	Last test date	last test car	RunID	Exceptions per 100 mi.	Exceptions 2 class drop	Approx. Route Miles	Comment
via Binghamton - Allentown											
1	NS	Ithaca Secondary	Sayre, PA	Waverly, NY	5/28/2013	220	2013052802020	3.96	0	Approx. 1 mi.	
2	NS	Southern Tier Line	Waverly, NY	Binghamton, NY	4/10/2019	219	2019041001019	1.96	0	MP 255 - MP 214	
2	NS	Sunbury (Harrisburg Div)	Binghamton, NY	Scranton, PA	4/22/2019	219	2019042201019	6.91	1	MP 614 - MP 679	
2	RBMN	Mainline	Scranton, PA	Penn Haven Jct, PA	6/7/2017	221	2017060701051	45.24	8	MP MP 130 - MP 177	
2	NS	Lehigh Line	Penn Haven Jct, PA	Allentown, PA	6/4/2012	219	2012060404019	4.93	0	MP 177 - MP 88	DOTX 304 covered portions of this
2	NS	Reading Line	Allentown, PA	Reading, PA	7/25/2018	220	2018072501020	7.63	0	MP 36 - MP 0 & MP 0 - MP 8	
4	NS	Harrisburg Line (Harrisburg Div)	Reading, PA	Philadelphia, PA (Abrams Yd)	11/8/2019	219	2019110801019	4.25	0	MP 61 - MP 0	
4	CSXT	Trenton	Philadelphia, PA (Abrams Yd)	Philadelphia, PA (CP-Park)	3/16/2015	220/218	2015031601020	34.13	3	Approx. 1 Mile	
4	CRSH	Delair Branch	Philadelphia, PA (CP-Park)	Delair, NJ	9/25/2013	218	2013092501	35.71	0	Approx. 8 miles	
	CRSH	Bordentown Secondary	Delair, NJ	Camden, NJ						MP 4 - MP 0	
4	CRSH	Vineland Secondary	Camden, NJ	Woodbury, N J	9/24/2013	218	2013092401	0.89	1	MP 0 - MP 9	
4	CRSH	Penns Grove Secondary	Woodbury, NJ	Gibbstown, NJ	9/24/2013	218	2013092401	112.43	2	MP 9 - MP 17.5	
via Binghamton - Enola											
1	NS	Ithaca Secondary	Sayre, PA	Waverly, NY	5/28/2013	220	2013052802020	3.96	0	Approx. 1 mi.	
2	NS	Southern Tier Line	Waverly, NY	Binghamton, NY	4/10/2019	219	2019041001019	1.96	0	MP 255 - MP 214	
3	NS	Sunbury (Harrisburg Div)	Binghamton, NY	Sunbury, PA	4/22/2019	219	2019042201019	6.91	1	MP 614 - MP 752	
3	NS	Buffalo (Harrisburg Div)	Sunbury, PA	Rockville, PA	4/22/2019	219	2019042201019	6.91	1	MP 257 - MP 306	
3	NS	Pittsburgh Line (Harrisburg Div)	Rockville, PA	Harrisburg, PA	4/22/2019	219	2019042201019	6.91	1	MP 110 - MP 104	
4	NS	Harrisburg Line (Harrisburg Div)	Harrisburg, PA	Philadelphia, PA (Abrams Yd)	11/8/2019	219	2019110801019	4.25	0	MP 112 - MP 0	
4	CSXT	Trenton	Philadelphia, PA (Abrams Yd)	Philadelphia, PA (CP-Park)	3/16/2015	220/218	2015031601020	34.13	3	Approx. 1 Mile	
4	CRSH	Delair Branch	Philadelphia, PA (CP-Park)	Delair, NJ	9/25/2013	218	2013092501	35.71	0	Approx. 8 miles	May have been included in the Vineland
	CRSH	Bordentown Secondary	Delair, NJ	Camden, NJ						MP 4 - MP 0	
4	CRSH	Vineland Secondary	Camden, NJ	Woodbury, N J	9/24/2013	218	2013092401	0.89	1	MP 0 - MP 9	
4	CRSH	Penns Grove Secondary	Woodbury, NJ	Gibbstown, NJ	9/24/2013	218	2013092401	112.43	2	MP 9 - MP 17.5	
Buffalo via Conway											
1	NS	Ithaca Secondary	Sayre, PA	Waverly, NY	5/28/2013	220	2013052802020	3.96	0	Approx. 1 mi.	
1	NS	Southern Tier Line	Waverly, NY	Buffalo, NY	4/10/2019	219	2019041001019	1.96	0	MP 255 - MP 420	
1	NS	Lake Shore	Buffalo, NY	Buffalo, NY (Bison Yd)	4/9/2019	219	2019040901019	2.68	1		This milage accounted for next line
1	NS	Lake Erie Dist (Harrisburg Div)	Buffalo, NY (Bison Yd)	Blasdeill, NY	4/9/2019	219	2019040901019	2.68	1	Approx. 9 miles	
1	NS	Lake Erie Dist (Pittsburgh Div)	Blasdeill, NY	Ashtabula, OH	4/9/2019	219	2019040901019	2.68	1	MP 7 - MP 129	
1	NS	Youngstown Line	Ashtabula, OH	Rochester, PA	7/2/2012	220	2012070202020	1.4	0	MP 0 - MP 97	There is a switch back connection here unmanned AA covers part of this segment; unmanned has different data
1	NS	Fort Wayne Line	Rochester, PA	West Pitt, PA	11/9/2019	221 UM	2019110904051			MP 26 - MP 0	
1	NS	Pittsburgh Line (Pittsburgh Div)	West Pitt	Harrisburg, PA	12/17/2018	220	2018121701020	8.64	0	MP 354 - MP 105	
4	NS	Harrisburg Line (Harrisburg Div)	Harrisburg, PA	Philadelphia, PA (Abrams Yd)	11/8/2019	219	2019110801019	4.25	0	MP 112 - MP 0	
4	CSXT	Trenton	Philadelphia, PA (Abrams Yd)	Philadelphia, PA (CP-Park)	3/16/2015	220/218	2015031601020	34.13	3	Approx. 1 Mile	
4	CRSH	Delair Branch	Philadelphia, PA (CP-Park)	Delair, NJ	9/25/2013	218	2013092501	35.71	0	Approx. 8 miles	
	CRSH	Bordentown Secondary	Delair, NJ	Camden, NJ						MP 4 - MP 0	
4	CRSH	Vineland Secondary	Camden, NJ	Woodbury, N J	9/24/2013	218	2013092401	0.89	1	MP 0 - MP 9	
4	CRSH	Penns Grove Secondary	Woodbury, NJ	Gibbstown, NJ	9/24/2013	218	2013092401	112.43	2	MP 9 - MP 17.5	
Note 1: Mileposts are included to give approximate distance overall.											
Note 2: Exceptions per 100 miles can be misleading, particularly when testing smaller segments of track where averaging did not occur.											
Note 3: Geometry car runs are snapshots in time, and as such are not necessarily indicative of present conditions.											
Note 4: An overlay of geometry runs on all these routes to be taken in 2020 will add up to date information.											
Analysis: FRA noted that the already non-preferred route of 800 miles through Buffalo, NY was too circuitous.											

DOTX 218 Geometry Car

United States Department of Transportation

AUTOMATED TRACK INSPECTION PROGRAM

TRACK GEOMETRY INSPECTION REPORT

Camden, NJ to Gibbstown, NJ

Railroad: CONRAIL SHARED ASSETS (CRSH)

Survey Number: 1303

Mile Post 1 to Mile Post 16



Prepared for:

United States Department of Transportation

Federal Railroad Administration

Office of Safety

Washington, D.C.

Prepared by:

ENSCO, Inc.

5400 Port Royal Rd

Springfield, VA 22151



Testing Cert. 2411.01

Approved By:

Survey Director:

MARTIN BROCK

Signature

Date

Under the U.S. Department of Transportation, Federal Railroad Administration (FRA), Office of Safety Assurance and Compliance, Automated Track Inspection Program and in accordance with 49 CFR 213 Federal Track Safety Standards, this Track Geometry Inspection Report provides a list of exceptions that relate only to the time and date the track was inspected and the required remedial action taken. This compliance report is offered only to the track owner and is not to be reproduced to others in whole or part without the expressed written consent of the FRA and the track owner. FRA requests any reprinting be labeled as a copy of the original.

NOTES

During an Automated Track Inspection Program (ATIP) survey, data is collected by the ATIP cars, which generate a Track Geometry Inspection Report (TGIR). These reports make the analysis of the track easier to read and comprehend than attempting to read exceptions from a video strip chart alone. TGIR are generated electronically for printing in near real-time onboard the ATIP cars or can be reprocessed later upon request to the FRA. Copies are transmitted electronically as a Portable Document Format (PDF) using satellite or Internet communications. Copies are distributed as follows:

1. One copy is given to the railroad
2. Two copies are given to the principal FRA Inspector
3. One copy is sent to the FRA Washington headquarters

TGIR consists of five separate sections. Exceptions are not reported for Profile and Alignment when ATIP car speed is less than five (5) and fifteen (15) mile per hour, respectively. The sample interval for track surveyed is one (1) foot.

A complete description of the information provided in the report is available at <http://atip.fra.dot.gov/TGIR>

Exception Report
Exception List Section
Milepost 1 to Milepost 16
Camden, NJ to Gibbstown, NJ

Page 1 of 2
Run Date: 09/24/2013
Run ID: 2013092401

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	1	Class Change	1.00	0	16	B	0	0	1		
0	1	Track Change	0.00	0	16	B	0	0	1		
0	201	Posted Speed	10.00	0	4	E	0	0	1	39.945991	-75.101607
0	201	Track Change	0.00	0	4	E	0	0	7	39.945991	-75.101607
0	201	State Line	NJ	0	4	E	0	0	7	39.945991	-75.101607
0	202	Railroad	CRSH -	0	4	E	0	0	7	39.945990	-75.101610
0	203	Subdivision	VINELAN	0	4	E	0	0	7	39.945988	-75.101613
0	2885	Class Change	2.00	0	11	T	0	0	7	39.943812	-75.110645
0	2885	Posted Speed	30.00	0	11	T	0	0	7	39.943812	-75.110645
0	3202	Posted Speed	1.00	0	12	B	0	0	7	39.943569	-75.111724
0	3313	Posted Speed	15.00	0	13	C	0	0	7	39.943417	-75.112064
1	5563	Up Milepost	1.00	0	10	T	0	0	7	39.937566	-75.111736
1	2677	Posted Speed	20.00	0	14	E	0	0	7	39.930482	-75.111710
1	3883	GWR Maint	0.87	4	15	T	2	2	7	39.927980	-75.114379
1	4015	GWR Safety	1.07	6	15	T	2	2	7	39.927701	-75.114677
1	4214	GWR Maint	0.86	3	15	T	2	2	7	39.927282	-75.115126
1	4821	GWR Maint	0.94	5	13	C	2	2	7	39.925887	-75.116271
1	4838	GWR Maint	0.88	5	12	E	2	2	7	39.925843	-75.116292
1	4950	PLG24 Maint	58.03	3	12	E	2	2	7	39.925550	-75.116413
1	5290	PLG24 Maint	58.13	8	10	C	2	2	7	39.924639	-75.116643
1	5539	GWR Maint	0.80	3	9	E	2	2	7	39.923958	-75.116714
1	16507	GWR Safety	1.09	3	14	T	0	2	7	39.894052	-75.119048
1	23290	GWR Safety	1.14	5	16	T	0	2	7	39.876343	-75.124091
6	26582	Up Milepost	6.00	0	14	T	0	0	7	39.868584	-75.130146
7	5273	Up Milepost	7.00	0	15	T	0	0	7	39.856243	-75.139784
8	5300	Up Milepost	8.00	0	14	T	0	0	7	39.842822	-75.146752
8	586	GWR Safety	1.28	5	14	T	0	2	7	39.841378	-75.147451
8	2417	LG Safety	58.17	6	15	B	0	2	7	39.836692	-75.149724
8	3815	Posted Speed	15.00	0	15	E	0	0	7	39.833050	-75.151429
8	4011	Subdivision	PENNS	0	15	E	0	0	7	39.832548	-75.151668
8	4313	Gage Wide	57.96	7	14	B	1	2	7	39.831747	-75.151933
8	4696	Gage Wide	57.98	6	13	C	1	2	7	39.830827	-75.152563
9	5302	Up Milepost	9.00	0	13	C	0	0	7	39.830110	-75.154463
9	605	Class Change	3.00	0	18	E	0	0	7	39.830494	-75.156521
9	605	Posted Speed	30.00	0	18	E	0	0	7	39.830494	-75.156521
9	973	L Runoff*	2.14	31	23	T	2	3	7	39.830896	-75.157717
9	973	R Runoff*	2.11	31	23	T	2	3	7	39.830896	-75.157717
11	10708	Up Milepost	11.00	0	27	T	0	0	7	39.841510	-75.189359
12	5160	Up Milepost	12.00	0	27	T	0	0	7	39.842258	-75.206484
12	2569	GWR Safety	1.15	6	28	T	0	3	7	39.839773	-75.214919
13	5271	Up Milepost	13.00	0	26	T	0	0	7	39.837109	-75.223935
13	3624	Class Change	1.00	0	9	T	0	0	7	39.834590	-75.236206
13	3624	Posted Speed	10.00	0	9	T	0	0	7	39.834590	-75.236206
13	4236	Class Change	2.00	0	6	T	0	0	7	39.834578	-75.238364

Exception Report
Exception List Section
Milepost 1 to Milepost 16
Camden, NJ to Gibbstown, NJ

Page 2 of 2
Run Date: 09/24/2013
Run ID: 2013092401

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13	4236	Posted Speed	15.00	0	6	T	0	0	7	39.834578	-75.238364
13	4340	Track Change	0.00	0	7	T	0	0	5	39.834576	-75.238732
14	5445	Up Milepost	14.00	0	9	B	0	0	5	39.834556	-75.242651
14	323	Track Change	0.00	0	9	E	0	0	7	39.834581	-75.243795
14	583	Gage Wide	58.07	13	8	E	0	2	7	39.834542	-75.244715
14	605	LG Safety	58.03	4	8	E	0	2	7	39.834542	-75.244718
14	666	R Cant NEG*(132RE)	-4.90	23	7	E	0	2	7	39.834509	-75.245009
14	1104	Twist 31ft*	-2.28	6	6	E	0	2	7	39.834240	-75.246513
14	1119	Warp 62	2.36	34	6	E	1	2	7	39.834226	-75.246565
14	1164	Twist 31ft*	1.91	1	3	E	1	2	7	39.834189	-75.246717
14	2742	Warp 62	2.40	60	13	B	1	2	7	39.832779	-75.251999
14	3012	Track Change	0.00	0	14	T	0	0	5	39.832529	-75.252899
15	5296	Up Milepost	15.00	0	15	T	0	0	5	39.830514	-75.260565
16	5390	Up Milepost	16.00	0	14	T	0	0	5	39.827475	-75.279124
16	3564	Track Change	0.00	0	8	E	0	0	6	39.826774	-75.291719
16	3643	Warp 62	2.88	57	8	B	1	2	6	39.826738	-75.291996

Notes:

* Federal Track Safety Standard Advisory
Cant Exceptions are in degrees. The following fields are irrelevant for Cant Exceptions: LC, PC
Rail Impact Values are in Gs; the threshold is 20g peak to peak

Exception Report
Curve Analysis Section
Milepost 1 to Milepost 16

Page 1 of 1
Run Date: 09/24/2013
Run ID: 2013092401

Camden, NJ to Gibbstown, NJ

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
7	0	1	0	233	205	6	-0/51	0.74	15	60	0	116	-0/53	0.78	0	0	60	72	82	92	100	108	115	
7	0	273	0	422	150	3	-3/52	0.14	10	32	0	363	-3/53	0.18	0	0	32	37	42	46	50	53	56	
7	0	422	0	704	231	6	8/28	0.83	10	24	0	546	8/33	0.42	0	0	24	27	30	32	35	37	39	
7	0	704	0	804	101	10	-1/02	0.12	10	57	0	752	-1/09	0.34	0	0	57	67	76	83	90	97	103	
7	0	804	0	1049	246	9	4/27	0.02	10	30	0	898	4/31	-0.23	0	0	30	34	38	42	46	49	52	
7	0	1132	0	1426	295	9	2/19	0.5	10	46	0	1281	2/20	0.48	0	0	46	52	57	62	67	71	76	
7	0	1426	0	1791	366	10	-2/01	-0.69	10	49	0	1534	-2/08	-0.54	0	0	49	55	60	66	71	75	79	
7	0	3020	0	3774	755	14	-11/18	-1.75	15	24	0	3298	-11/14	-1.61	255	-1	24	26	28	31	33	34	36	
7	0	3774	0	3802	29	14	-1/27	-0.04	15	55	0	3801	-1/27	-0.04	0	0	55	63	70	77	83	88	94	
7	0	3802	0	4325	524	14	-9/52	-1.2	15	25	0	4052	-9/53	-1.19	0	0	25	27	29	32	34	36	38	
7	0	4325	0	4693	369	13	1/20	0.34	15	59	0	4528	1/22	0.33	0	0	59	67	74	81	87	93	99	
7	1	490	1	785	296	11	1/04	0.44	15	65	1	726	1/11	0.5	0	0	65	73	81	88	95	101	107	
7	1	785	1	929	145	13	-1/36	0.54	15	41	1	851	-1/43	0.97	0	0	41	50	58	64	70	76	81	
7	1	929	1	1308	380	14	3/04	-0.25	0	36	1	1085	3/11	-0.19	0	0	36	41	46	51	55	59	62	
7	1	1498	1	2918	1421	14	4/03	-0.17	0	31	1	2016	4/07	-0.3	0	0	31	35	40	44	48	51	54	
7	1	4198	1	4930	733	15	-4/08	-0.4	20	32	1	4580	-4/27	-0.11	0	0	32	36	40	44	47	51	54	
7	1	4930	1	5532	603	12	-2/47	-0.88	20	44	1	5285	-2/38	-0.51	0	0	44	49	54	59	63	67	71	
7	1	6719	1	6960	242	11	2/33	0.13	20	40	1	6859	2/40	0.03	0	0	40	46	51	56	61	65	69	
7	1	6960	1	7151	192	13	-2/47	-0.26	20	40	1	7050	-2/47	-0.15	0	0	40	46	51	56	60	64	68	
7	1	7151	1	7333	183	14	2/46	-0.23	20	38	1	7236	2/46	-0.24	0	0	38	44	49	54	59	63	67	
7	1	7333	1	7575	243	15	-2/06	-0.1	20	45	1	7467	-2/13	-0.11	0	0	45	51	57	62	67	72	76	
7	1	20073	1	21299	1227	15	1/38	0.81	20	44	1	20503	2/09	-0.09	0	0	44	50	57	62	67	72	76	
7	1	21299	1	21959	661	15	1/56	0.84	20	53	1	21614	1/58	0.78	0	0	53	59	64	70	75	80	84	
7	7	37	7	1265	1229	16	-1/01	-0.98	20	69	7	388	-1/06	-0.74	0	0	69	78	86	93	100	106	112	
7	8	1834	8	2141	308	14	0/26	0.26	20	95	8	2036	0/32	0.34	0	0	95	108	119	130	140	149	158	
7	8	2287	8	2547	261	15	-0/31	-0.1	20	81	8	2413	-0/41	-0.11	0	0	81	92	103	113	122	130	138	
7	8	3150	8	3711	562	14	-0/26	-0.56	20	100	8	3474	-0/29	-0.5	0	0	100	114	126	137	147	157	166	
7	8	3711	8	3871	161	15	3/50	-0.17	20	32	8	3814	3/50	-0.17	0	0	32	37	42	46	50	54	57	
7	8	3871	8	4121	251	15	-5/06	0.48	15	26	8	3955	-5/13	0.54	0	0	26	30	34	38	42	45	48	
7	8	4121	8	4255	135	15	-0/33	-0.07	15	89	8	4214	-0/33	-0.07	0	0	89	102	114	125	135	144	153	
7	8	4255	8	4598	344	13	7/57	0.41	15	24	8	4480	8/03	0.34	0	0	24	27	30	33	36	38	40	
7	8	4598	9	654	1359	14	7/08	0.53	15	25	8	4906	7/29	0.16	0	0	25	28	31	34	36	39	41	
7	11	2116	11	3545	1430	30	-4/05	-0.97	30	36	11	2988	-4/17	-0.88	0	0	36	40	44	47	51	54	57	
7	13	2035	13	3061	1027	20	3/03	1.23	30	44	13	2448	3/06	1.19	0	0	44	48	53	57	61	65	68	
5	13	5433	14	168	181	9	4/21	-0.21	15	29	14	100	4/23	-0.37	0	0	29	34	38	42	46	49	52	
7	14	168	14	360	193	9	-4/35	-1.31	15	35	14	237	-4/44	-1.13	0	0	35	39	42	46	49	52	55	
7	14	360	14	381	22	9	-0/38	0.04	15	82	14	380	-0/37	0.04	0	0	82	95	106	117	126	135	143	
7	14	381	14	750	370	9	-3/47	0.24	15	32	14	528	-3/47	0.35	0	0	32	37	41	46	50	53	57	
7	14	750	14	768	19	4	-1/10	-0.82	15	68	14	767	-1/10	-0.81	0	0	68	76	84	91	97	103	109	
7	14	768	14	1241	405	9	-2/05	-0.23	15	46	14	1067	-2/05	-0.07	0	0	46	52	58	64	69	74	78	
7	14	1241	14	1410	170	8	-0/19	-0	15	102	14	1255	-0/22	0.32	0	0	102	120	136	150	162	174	185	
7	14	2538	14	2730	193	13	-4/57	0.71	15	26	14	2672	-4/56	0.71	0	0	26	30	35	39	42	45	48	
7	14	2730	14	2913	184	12	4/55	-0.38	15	26	14	2803	4/59	-0.65	0	0	26	30	35	39	42	45	48	
5	15	2403	15	3424	1022	14	2/01	0.34	15	47	15	2899	2/07	0.26	0	0	47	53	59	64	69	74	79	
6	16	3417	16	3605	189	8	-4/28	0.27	15	30	16	3545	-4/29	0.26	0	0	30	34	38	42	46	49	52	
6	16	3605	16	3792	188	8	4/20	0	15	30	16	3671	4/23	-0.16	0	0	30	35	39	43	47	50	53	

Exception Report
Exception Summary Section
Milepost 1 to Milepost 16
Camden, NJ to Gibbstown, NJ

Page 1 of 1
Run Date: 09/24/2013
Run ID: 2013092401

		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Lim	Pst	
MP	FT	EXC	FT	Drop	EXC	FT	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	Cls	Cls	Trk
8	5300	2	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	7	
9	605	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	62	-	-	-	-	-	-	-	2	3	7	
14	323	1	13	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	94	-	2	7	1	-	0	2	7
16	3564	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	57	-	-	-	-	-	1	2	6
		3	26	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	62	-	3	151	-	2	7	1	-			

Total Miles: 16.90
Exceptions per 100 Miles: 59.17
CY12 National Average Exceptions per 100 miles: 11.3

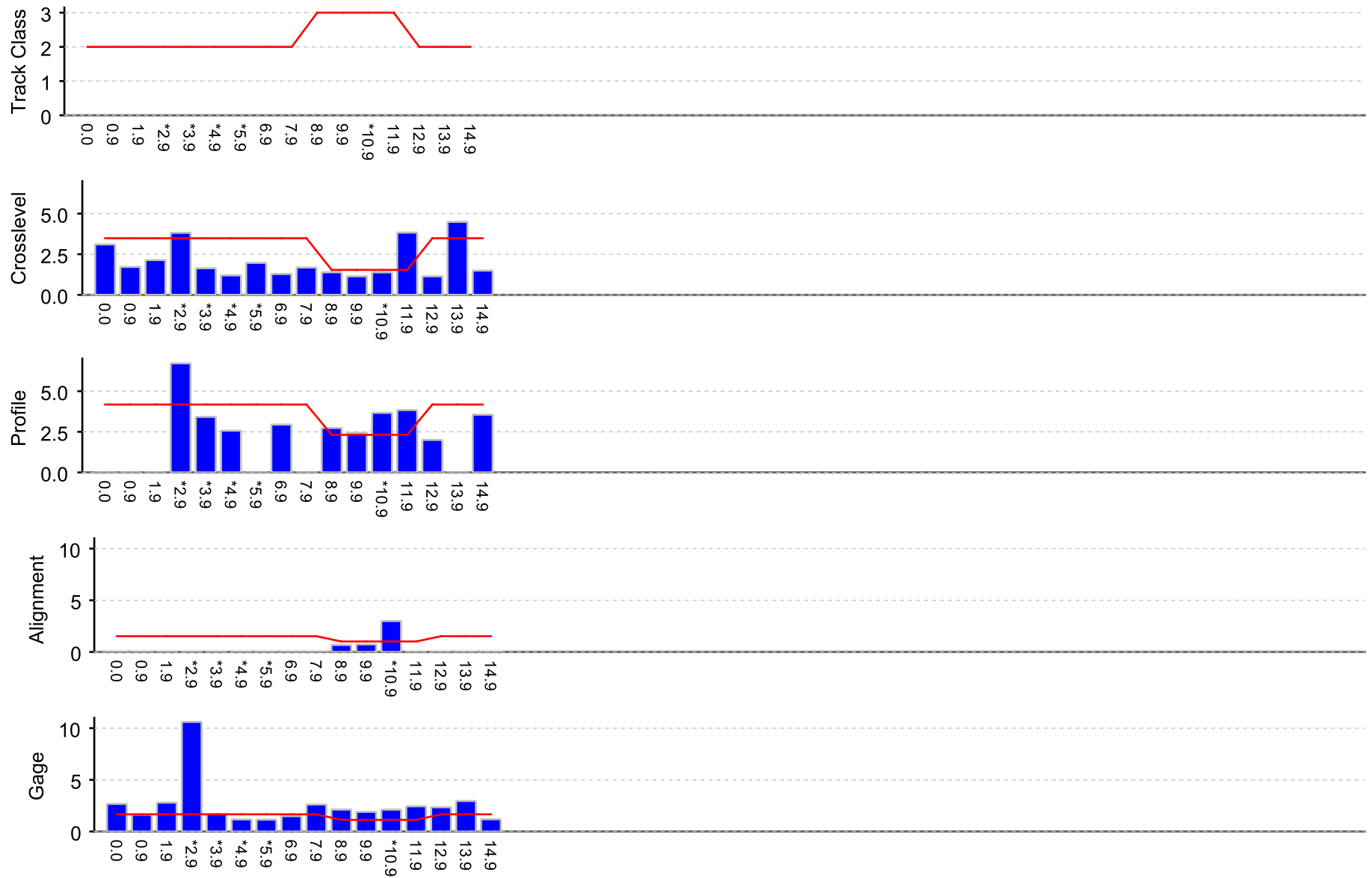
Track Quality Index

Page 1 of 1
Run Date: 2013-09-24
Run ID: 2013092401

Milepost 1 to Milepost 16

Camden, NJ

- Gibbstown, NJ



Exception Report
Class Plus 1 Exception List Section
Milepost 1 to Milepost 16
Camden, NJ to Gibbstown, NJ

Page 1 of 2
Run Date: 09/24/2013
Run ID: 2013092401

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	1	Class Change	1.00	0	16	B	0	0	1		
0	1	Track Change	0.00	0	16	B	0	0	1		
0	201	Posted Speed	10.00	0	4	E	0	0	1	39.945991	-75.101607
0	201	Track Change	0.00	0	4	E	0	0	7	39.945991	-75.101607
0	201	State Line	NJ	0	4	E	0	0	7	39.945991	-75.101607
0	202	Railroad	CRSH -	0	4	E	0	0	7	39.945990	-75.101610
0	203	Subdivision	VINELAN	0	4	E	0	0	7	39.945988	-75.101613
0	2885	Class Change	2.00	0	11	T	0	0	7	39.943812	-75.110645
0	2885	Posted Speed	30.00	0	11	T	0	0	7	39.943812	-75.110645
0	3202	Posted Speed	1.00	0	12	B	0	0	7	39.943569	-75.111724
0	3313	Posted Speed	15.00	0	13	C	0	0	7	39.943417	-75.112064
1	5563	Up Milepost	1.00	0	10	T	0	0	7	39.937566	-75.111736
1	975	Warp 62	2.23	49	14	B	2	3	7	39.934964	-75.111004
1	2677	Posted Speed	20.00	0	14	E	0	0	7	39.930482	-75.111710
1	15852	R Runoff*	2.31	31	15	T	2	3	7	39.895778	-75.118921
6	26582	Up Milepost	6.00	0	14	T	0	0	7	39.868584	-75.130146
7	5273	Up Milepost	7.00	0	15	T	0	0	7	39.856243	-75.139784
8	5300	Up Milepost	8.00	0	14	T	0	0	7	39.842822	-75.146752
8	3815	Posted Speed	15.00	0	15	E	0	0	7	39.833050	-75.151429
8	4011	Subdivision	PENNS	0	15	E	0	0	7	39.832548	-75.151668
8	4313	Gage Wide	57.96	7	14	B	1	3	7	39.831747	-75.151933
8	4696	Gage Wide	57.98	6	13	C	1	3	7	39.830827	-75.152563
9	5302	Up Milepost	9.00	0	13	C	0	0	7	39.830110	-75.154463
9	605	Class Change	3.00	0	18	E	0	0	7	39.830494	-75.156521
9	605	Posted Speed	30.00	0	18	E	0	0	7	39.830494	-75.156521
9	986	L Runoff*	2.15	31	24	T	2	4	7	39.830910	-75.157759
9	987	R Runoff*	2.46	31	24	T	2	4	7	39.830911	-75.157762
11	10708	Up Milepost	11.00	0	27	T	0	0	7	39.841510	-75.189359
11	994	L Runoff*	1.93	31	29	T	3	4	7	39.842591	-75.192577
12	5160	Up Milepost	12.00	0	27	T	0	0	7	39.842258	-75.206484
13	5271	Up Milepost	13.00	0	26	T	0	0	7	39.837109	-75.223935
13	21	Crosslevel	-1.58	2	26	T	3	4	7	39.837089	-75.224001
13	3624	Class Change	1.00	0	9	T	0	0	7	39.834590	-75.236206
13	3624	Posted Speed	10.00	0	9	T	0	0	7	39.834590	-75.236206
13	4236	Class Change	2.00	0	6	T	0	0	7	39.834578	-75.238364
13	4236	Posted Speed	15.00	0	6	T	0	0	7	39.834578	-75.238364
13	4340	Track Change	0.00	0	7	T	0	0	5	39.834576	-75.238732
14	5445	Up Milepost	14.00	0	9	B	0	0	5	39.834556	-75.242651
14	323	Track Change	0.00	0	9	E	0	0	7	39.834581	-75.243795
14	583	Gage Wide	58.07	13	8	E	0	3	7	39.834542	-75.244715
14	687	Twist 31ft*	1.74	3	7	E	2	3	7	39.834500	-75.245079
14	1104	Twist 31ft*	-2.28	9	6	E	0	3	7	39.834240	-75.246513
14	1119	Warp 62	2.36	34	6	E	1	3	7	39.834226	-75.246565
14	1164	Twist 31ft*	1.91	8	3	E	1	3	7	39.834189	-75.246717

Exception Report
Class Plus 1 Exception List Section
Milepost 1 to Milepost 16
Camden, NJ to Gibbstown, NJ

Page 2 of 2
Run Date: 09/24/2013
Run ID: 2013092401

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
14	1181	Twist 31ft*	1.53	4	3	E	2	3	7	39.834174	-75.246774
14	2742	Warp 62	2.40	60	13	B	1	3	7	39.832779	-75.251999
14	3012	Track Change	0.00	0	14	T	0	0	5	39.832529	-75.252899
15	5296	Up Milepost	15.00	0	15	T	0	0	5	39.830514	-75.260565
16	5390	Up Milepost	16.00	0	14	T	0	0	5	39.827475	-75.279124
16	3564	Track Change	0.00	0	8	E	0	0	6	39.826774	-75.291719
16	3571	Twist 31ft*	1.49	1	8	E	2	3	6	39.826771	-75.291744
16	3606	Twist 31ft*	-1.46	6	8	B	2	3	6	39.826755	-75.291866
16	3628	Twist 31ft*	-1.65	7	8	B	2	3	6	39.826744	-75.291944
16	3643	Warp 62	2.88	57	8	B	1	3	6	39.826738	-75.291996

Notes:

* Federal Track Safety Standard Advisory
Cant Exceptions are in degrees. The following fields are irrelevant for Cant Exceptions: LC, PC
Rail Impact Values are in Gs; the threshold is 20g peak to peak

Exception Report
Class Plus 1 Exception Summary Section
Milepost 1 to Milepost 16
Camden, NJ to Gibbstown, NJ

Page 1 of 1
Run Date: 09/24/2013
Run ID: 2013092401

		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Lim	Pst		
MP	FT	Exc	FT	Drop	Exc	FT	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	Cls	Cls	Trk			
1	5563	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	31	-	1	49	-	-	-	-	2	3	7	
8	5300	2	13	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	7			
9	605	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	62	2	-	-	-	-	-	-	2	4	7	
11	10708	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	31	-	-	-	-	-	-	3	4	7		
13	5271	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	7		
14	323	1	13	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	94	2	4	24	2	0	3	7	
16	3564	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	57	1	3	14	-	1	3	6	
		3	26	3	-	-	-	-	-	1	2	-	-	-	-	-	-	-	4	124	2	4	200	3	7	38	2	-			

Total Miles: 16.90
Exceptions per 100 Miles: 112.43
CY12 National Average Exceptions per 100 miles: 11.3

Page 1 of 1

Run Date: 09/24/2013

Run ID: 2013092401

Run ID: 2013092401

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
There were no Alignment 62 exceptions detected during this survey.											

DOTX 218 Geometry Car

United States Department of Transportation

AUTOMATED TRACK INSPECTION PROGRAM

TRACK GEOMETRY INSPECTION REPORT

Camden, NJ to Philadelphia, PA

Railroad: CONRAIL SHARED ASSETS (CRSH)

Survey Number: 1303

Mile Post 79 to Mile Post 87



Prepared for:

United States Department of Transportation
Federal Railroad Administration
Office of Safety
Washington, D.C.

Prepared by:

ENSCO, Inc.
5400 Port Royal Rd
Springfield, VA 22151



Testing Cert. 2411.01

Approved By:

Survey Director:

MARTIN BROCK

Signature

Date

Under the U.S. Department of Transportation, Federal Railroad Administration (FRA), Office of Safety Assurance and Compliance, Automated Track Inspection Program and in accordance with 49 CFR 213 Federal Track Safety Standards, this Track Geometry Inspection Report provides a list of exceptions that relate only to the time and date the track was inspected and the required remedial action taken. This compliance report is offered only to the track owner and is not to be reproduced to others in whole or part without the expressed written consent of the FRA and the track owner. FRA requests any reprinting be labeled as a copy of the original.

NOTES

During an Automated Track Inspection Program (ATIP) survey, data is collected by the ATIP cars, which generate a Track Geometry Inspection Report (TGIR). These reports make the analysis of the track easier to read and comprehend than attempting to read exceptions from a video strip chart alone. TGIR are generated electronically for printing in near real-time onboard the ATIP cars or can be reprocessed later upon request to the FRA. Copies are transmitted electronically as a Portable Document Format (PDF) using satellite or Internet communications. Copies are distributed as follows:

1. One copy is given to the railroad
2. Two copies are given to the principal FRA Inspector
3. One copy is sent to the FRA Washington headquarters

TGIR consists of five separate sections. Exceptions are not reported for Profile and Alignment when ATIP car speed is less than five (5) and fifteen (15) mile per hour, respectively. The sample interval for track surveyed is one (1) foot.

A complete description of the information provided in the report is available at <http://atip.fra.dot.gov/TGIR>

Exception Report
Exception List Section
Milepost 79 to Milepost 87
Camden, NJ to Philadelphia, PA

Page 1 of 1
Run Date: 09/25/2013
Run ID: 2013092501

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	157	State Line	NJ	0	6	T	0	0	1	39.945037	-75.104343
0	158	Railroad	CRSH -	0	6	T	0	0	1	39.945038	-75.104340
0	159	Subdivision	VINELAN	0	6	T	0	0	1	39.945039	-75.104336
0	160	Subdivision	DELAIR	0	6	T	0	0	1	39.945039	-75.104333
0	167	Posted Speed	10.00	0	6	T	0	0	1	39.945044	-75.104308
0	178	Track Change	0.00	0	6	B	0	0	7	39.945051	-75.104270
0	1050	Gage Wide	58.11	2	7	C	0	1	7	39.945799	-75.101331
0	3132	Gage Narrow	55.78	7	8	E	0	1	7	39.948077	-75.094623
0	5101	Gage Narrow	55.87	1	7	B	0	1	7	39.952041	-75.089920
0	15560	Track Change	0.00	0	9	C	0	0	5	39.973247	-75.066280
79	15742	Up Milepost	79.00	0	9	B	0	0	5	39.973732	-75.066126
79	3961	State Line	PA	0	10	T	0	0	5	39.982557	-75.069020
80	6900	Up Milepost	80.00	0	10	C	0	0	5	39.987993	-75.076691
80	329	Class Change	2.00	0	14	C	0	0	5	39.988705	-75.077400
80	329	Posted Speed	25.00	0	14	C	0	0	5	39.988705	-75.077400
80	2407	R Runoff*	-3.23	31	24	T	1	2	5	39.993397	-75.081555
81	3940	Up Milepost	81.00	0	24	C	0	0	5	39.996810	-75.084712
82	5317	Up Milepost	82.00	0	23	B	0	0	5	40.001923	-75.101946
83	5335	Up Milepost	83.00	0	24	T	0	0	5	40.004344	-75.120628
84	5255	Up Milepost	84.00	0	23	T	0	0	5	40.003218	-75.138726
85	5312	Up Milepost	85.00	0	24	T	0	0	5	39.996903	-75.155721
86	5027	Up Milepost	86.00	0	25	T	0	0	5	39.990103	-75.171198
86	5243	Posted Speed	20.00	0	14	T	0	0	5	39.981337	-75.185857
87	5255	Up Milepost	87.00	0	14	T	0	0	5	39.981311	-75.185887

Notes:

* Federal Track Safety Standard Advisory
Cant Exceptions are in degrees. The following fields are irrelevant for Cant Exceptions: LC, PC
Rail Impact Values are in Gs; the threshold is 20g peak to peak

Exception Report
Curve Analysis Section
Milepost 79 to Milepost 87

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Run Date: 09/25/2013
Run ID: 2013092501

Camden, NJ to Philadelphia, PA

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
1	0	1	0	89	57	5	-0/22	0.33	15	94	0	15	-0/27	0.14	0	0	94	110	124	136	147	157	167	
7	0	170	0	343	174	7	-0/32	0	10	84	0	242	-0/41	-0.43	0	0	84	96	106	116	124	133	140	
7	0	343	0	425	35	6	0/18	-0.29	10	108	0	349	0/20	-0.33	0	0	108	126	142	156	169	182	193	
7	0	425	0	616	192	7	-0/41	-0.17	10	77	0	574	-0/41	0.14	0	0	77	90	101	110	120	128	136	
7	0	616	0	909	294	6	-7/21	-0.48	10	26	0	812	-7/20	-0.48	0	0	26	29	32	35	38	40	42	
7	0	909	0	1175	267	7	5/59	0.63	10	29	0	1059	6/00	0.63	0	0	29	33	36	39	42	45	47	
7	0	1231	0	1533	303	9	0/24	0.03	10	99	0	1394	0/26	0.04	0	0	99	114	127	139	151	161	171	
7	0	1533	0	2109	577	10	-1/20	-0.48	10	59	0	2108	-1/24	-0.45	0	0	59	67	74	81	87	92	98	
7	0	2109	0	2412	304	9	-4/18	-0.45	10	34	0	2240	-4/19	-0.44	0	0	34	38	42	46	49	52	55	
7	0	2586	0	2883	298	8	-1/20	-0.5	10	61	0	2773	-1/21	-0.49	0	0	61	68	76	82	89	94	100	
7	0	2939	0	3146	208	9	-6/04	0.29	10	24	0	3043	-6/10	0.58	0	0	24	28	32	35	38	41	44	
7	0	3146	0	3441	296	9	-3/16	0	10	36	0	3255	-3/16	0	0	0	36	41	46	51	55	59	62	
7	0	4350	0	4550	201	9	-4/19	0.01	10	31	0	4492	-4/19	0	0	0	31	36	40	44	48	51	54	
7	0	4550	0	4632	83	8	2/46	0.1	10	40	0	4591	2/46	0.1	0	0	40	46	51	56	60	64	68	
7	0	4632	0	4791	160	9	-4/55	0.03	10	29	0	4690	-4/58	0.17	0	0	29	33	37	40	44	47	50	
7	0	5084	0	5194	111	7	0/19	-0.4	10	108	0	5137	0/20	-0.36	0	0	108	125	141	156	169	181	193	
7	0	5194	0	5263	70	7	-0/16	0.37	10	119	0	5203	-0/15	0.37	0	0	119	144	162	179	194	208	222	
7	0	5263	0	5525	263	9	4/52	0.02	10	29	0	5405	4/54	-0.08	0	0	29	33	37	41	44	48	50	
7	0	5613	0	5855	201	6	4/04	0.38	10	34	0	5723	4/11	0.31	0	0	34	38	42	46	49	53	56	
7	0	5855	0	6097	243	9	-4/52	-0.72	10	33	0	5990	-4/52	-0.71	0	0	33	37	40	44	47	50	53	
7	0	7288	0	7905	618	10	-0/19	-0.16	10	107	0	7753	-0/23	-0.18	0	0	107	123	137	150	162	173	183	
7	0	8041	0	8258	218	9	-0/18	-0.09	10	118	0	8195	-0/20	-0.25	0	0	118	135	150	164	177	189	200	
7	0	8370	0	8700	331	10	-2/58	-0.55	10	41	0	8555	-3/01	-0.55	0	0	41	46	51	55	59	63	67	
7	0	10251	0	10449	199	10	-4/35	-0.61	10	34	0	10392	-4/36	-0.62	0	0	34	37	41	45	48	51	54	
7	0	10449	0	10621	173	10	4/53	0.44	10	32	0	10536	4/53	0.44	0	0	32	36	39	43	46	49	52	
7	0	10621	0	10672	52	10	1/41	-0.22	10	46	0	10621	1/52	-0.25	0	0	46	53	60	66	72	77	81	
7	0	10672	0	11950	1279	12	1/48	-0.6	10	39	0	11618	1/47	-1.06	0	0	39	48	56	62	68	74	79	
7	0	12623	0	13651	1029	10	-1/50	-0.74	10	52	0	13650	-1/58	-0.79	0	0	52	59	64	70	75	80	84	
7	0	13651	0	14331	600	10	-2/39	-1.18	10	45	0	13804	-2/44	-0.84	0	0	45	50	55	59	63	67	71	
7	0	14331	0	14737	407	10	-3/02	-0.56	10	40	0	14527	-3/06	-0.48	0	0	40	45	50	54	58	62	66	
7	0	14737	0	14959	223	10	-2/03	-1.13	10	53	0	14812	-2/05	-1.12	0	0	53	59	64	69	74	79	83	
7	0	14959	0	15088	130	10	-0/15	0.18	10	125	0	14962	-0/14	0.27	0	0	125	148	167	184	200	214	227	
7	0	15088	0	15137	50	10	0/16	-0.11	10	124	0	15100	0/16	-0.1	0	0	124	143	161	176	191	204	217	
7	0	15137	0	15332	196	10	-2/57	-0.75	10	42	0	15239	-3/01	-0.66	0	0	42	46	51	56	60	63	67	
7	0	15332	0	15545	214	10	2/52	-0.16	10	38	0	15409	2/55	-0.12	0	0	38	43	48	53	58	62	66	
5	0	15545	0	15619	75	9	0/25	-0.01	10	102	0	15618	0/25	-0.01	0	0	102	117	131	144	156	166	176	
5	0	15619	79	321	445	10	3/25	0.94	10	40	79	36	3/28	0.81	0	0	40	44	48	53	56	60	63	
5	79	321	79	842	522	11	0/49	0.86	10	77	79	691	0/55	0.79	0	0	77	86	95	103	110	117	123	
5	79	1158	79	2100	943	10	-6/19	-1.05	10	30	79	1923	-6/24	-1.01	0	0	30	33	36	39	42	44	47	
5	79	2100	79	2549	450	10	-6/13	-1.09	10	30	79	2398	-6/21	-1.01	0	0	30	33	36	39	42	45	47	
5	79	5863	80	11	1049	10	0/58	-0.09	10	58	79	6138	1/09	-0.33	0	0	58	67	76	83	91	97	103	
5	80	11	80	663	653	19	0/52	0.71	10	67	80	112	1/17	1.09	0	0	67	75	82	88	94	100	105	
5	80	3313	81	778	1406	24	-1/21	-0.92	25	59	80	3630	-1/34	-0.88	0	0	59	66	73	79	84	89	94	
5	81	778	81	1052	275	23	-1/55	-1.07	25	53	81	899	-1/58	-0.91	0	0	53	59	65	70	75	80	84	
5	81	1052	81	2526	1475	24	-1/20	-0.91	25	56	81	2439	-1/32	-0.4	0	0	56	63	70	77	82	88	93	
5	81	2634	81	2815	182	24	-0/20	0.1	25	104	81	2716	-0/22	0.1	0	0	104	122	137	150	163	174	185	

Exception Report
Curve Analysis Section
Milepost 79 to Milepost 87

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Run Date: 09/25/2013
Run ID: 2013092501

Camden, NJ to Philadelphia, PA

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	81	2815	81	2892	78	24	0/17	0.08	25	118	81	2833	0/19	0.01	0	0	118	135	151	166	179	192	203	
5	81	3611	81	3929	319	26	-3/31	-0.03	25	35	81	3820	-3/31	-0.03	0	0	35	40	45	49	53	57	60	
5	81	4084	81	4319	236	23	-1/20	0.16	25	53	81	4232	-1/22	0.24	0	0	53	62	70	77	83	89	95	
5	81	4319	81	4533	215	22	1/55	0.39	25	50	81	4424	1/58	0.39	0	0	50	56	62	68	73	78	82	
5	81	4775	81	5116	342	22	1/55	0.27	25	48	81	4968	1/59	0.24	0	0	48	55	61	67	72	77	81	
5	81	5209	82	143	252	23	-2/32	0.04	25	41	82	47	-2/36	-0	0	0	41	46	52	57	62	66	70	
5	82	2218	82	2337	120	24	-0/15	0.12	25	126	82	2290	-0/15	0.11	0	0	126	149	167	183	198	212	225	
5	82	3007	82	3250	244	24	-1/28	-0.42	25	55	82	3166	-1/33	-0.34	0	0	55	63	70	76	82	87	92	
5	82	3250	82	3441	192	24	1/59	0.08	25	46	82	3333	2/04	0.03	0	0	46	52	58	64	69	74	78	
5	83	497	83	876	380	24	-1/01	-0.65	25	68	83	654	-1/07	-0.67	0	0	68	77	85	92	98	105	111	
5	83	876	83	968	93	24	0/17	-0.18	25	116	83	910	0/18	-0.18	0	0	116	134	151	166	180	192	204	
5	83	1157	83	1799	643	23	-1/32	-0.86	25	57	83	1624	-1/38	-0.7	0	0	57	64	70	76	82	87	92	
5	83	1874	83	2113	240	23	4/23	0.41	25	32	83	1998	4/26	0.23	0	0	32	36	41	44	48	51	54	
5	83	2113	83	2549	437	23	-2/23	-0.69	25	46	83	2220	-2/28	-0.68	0	0	46	52	57	62	66	70	74	
5	83	2549	83	2672	124	23	-0/25	-0.01	25	99	83	2613	-0/26	-0.08	0	0	99	115	128	140	151	161	171	
5	83	2957	83	4309	1353	24	-2/39	-1.06	25	44	83	3326	-2/43	-0.69	0	0	44	49	54	59	63	67	71	
5	83	4309	83	4431	123	23	-0/28	0.23	25	85	83	4333	-0/33	0.11	0	0	85	100	112	123	133	143	151	
5	84	1084	84	1192	109	23	-0/15	0.11	25	125	84	1144	-0/15	0.17	0	0	125	147	166	182	197	211	224	
5	85	1702	85	1834	133	27	-0/15	0.08	25	127	85	1778	-0/15	0.09	0	0	127	149	167	183	198	212	225	
5	85	1972	85	2220	249	27	-0/25	-0.14	25	103	85	2219	-0/25	-0.14	0	0	103	120	133	146	157	168	178	
5	85	2220	85	2685	466	26	-1/56	-1.77	25	59	85	2486	-1/59	-1.82	0	0	59	64	70	75	79	84	88	
5	85	4038	85	4180	143	22	-0/17	0.02	25	117	85	4108	-0/18	0.02	0	0	117	137	154	168	182	194	206	
5	86	1342	86	1634	293	25	-0/54	-0.64	25	71	86	1486	-0/58	-0.47	0	0	71	81	90	98	105	112	118	
5	86	1634	86	1809	176	25	1/20	-0.01	25	53	86	1709	1/22	-0.29	0	0	53	62	70	77	83	89	95	
5	86	1858	86	1983	126	25	0/16	0.01	25	124	86	1918	0/17	0.02	0	0	124	143	160	175	189	202	214	
5	86	2135	86	2651	517	25	-2/26	-0.52	25	45	86	2422	-2/30	-0.6	0	0	45	51	56	61	65	70	74	
5	86	2651	86	2744	94	24	-0/17	0.59	25	108	86	2698	-0/17	0.6	0	0	108	129	147	163	177	190	203	
5	86	2744	86	2890	147	22	0/59	0.28	25	60	86	2812	1/07	-0.26	0	0	60	69	78	85	93	99	106	
5	86	2890	86	3317	428	21	-0/23	0.01	25	84	86	2956	-0/34	0.17	0	0	84	98	111	121	132	141	150	
5	86	3317	86	3639	323	18	0/29	0.4	25	84	86	3382	0/40	0.29	0	0	84	95	106	115	124	132	140	
5	86	3639	86	3844	206	16	-0/34	0.48	25	71	86	3726	-0/44	0.42	0	0	71	83	94	104	113	121	129	
5	86	3865	86	4262	398	15	-0/26	0.1	25	91	86	4212	-0/30	0.07	0	0	91	105	118	130	140	150	159	
5	86	4262	86	4474	213	14	0/58	0.91	25	72	86	4357	1/05	0.92	0	0	72	80	88	95	102	108	114	
5	86	4827	86	5218	392	12	-3/06	-0.9	25	42	86	5015	-3/14	-0.96	0	0	42	46	51	55	59	62	66	
5	87	231	87	899	669	13	-5/54	-0.76	20	30	87	798	-5/59	-0.73	0	0	30	33	36	40	42	45	48	

Exception Report
Exception Summary Section
Milepost 79 to Milepost 87
Camden, NJ to Philadelphia, PA

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Run Date: 09/25/2013
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		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			Trk
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Lim	Pst				
MP	FT	EXC	FT	Drop	EXC	FT	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	Cls	Cls				
0	178	1	2	-	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	1	7			
80	329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	31	-	-	-	-	-	-	1	2	5		
		1	2	-	2	8	-	-	-	-	-	-	-	-	-	-	-	-	1	31	-	-	-	-	-	-	-	-	-		

Total Miles: 11.20
Exceptions per 100 Miles: 35.71
CY12 National Average Exceptions per 100 miles: 11.3

Track Quality Index

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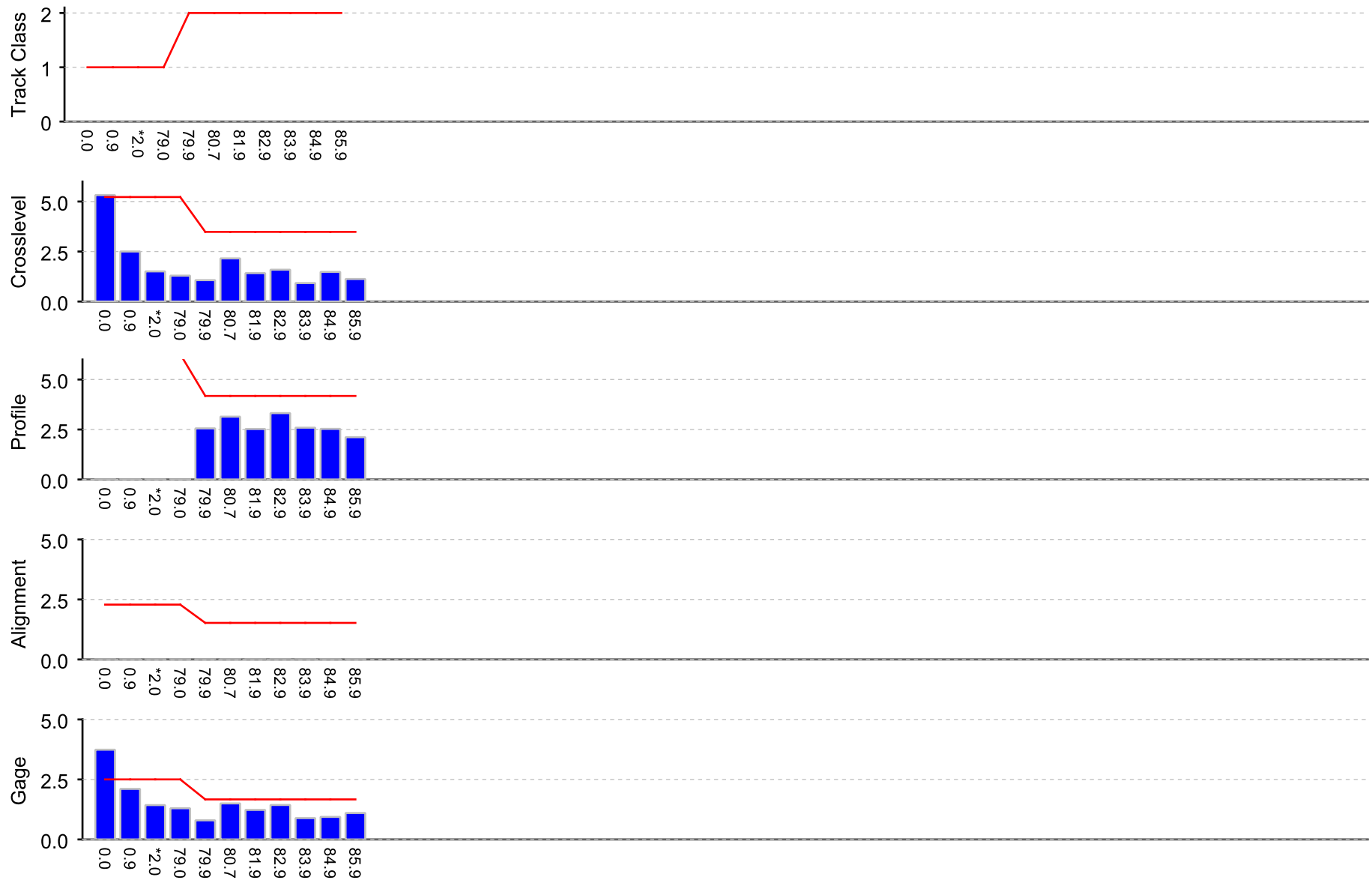
Run Date: 2013-09-25

Run ID: 2013092501

Milepost 79 to Milepost 87

Camden, NJ

- Philadelphia, PA



Exception Report
Class Plus 1 Exception List Section
Milepost 79 to Milepost 87
Camden, NJ to Philadelphia, PA

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Run Date: 09/25/2013
Run ID: 2013092501

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	157	State Line	NJ	0	6	T	0	0	1	39.945037	-75.104343
0	158	Railroad	CRSH -	0	6	T	0	0	1	39.945038	-75.104340
0	159	Subdivision	VINELAN	0	6	T	0	0	1	39.945039	-75.104336
0	160	Subdivision	DELAIR	0	6	T	0	0	1	39.945039	-75.104333
0	167	Posted Speed	10.00	0	6	T	0	0	1	39.945044	-75.104308
0	178	Track Change	0.00	0	6	B	0	0	7	39.945051	-75.104270
0	1050	Gage Wide	58.11	11	7	C	0	2	7	39.945799	-75.101331
0	2198	Gage Wide	57.99	11	9	B	1	2	7	39.946757	-75.097453
0	3132	Gage Narrow	55.78	7	8	E	0	2	7	39.948077	-75.094623
0	5101	Gage Narrow	55.87	1	7	B	0	2	7	39.952041	-75.089920
0	15560	Track Change	0.00	0	9	C	0	0	5	39.973247	-75.066280
79	15742	Up Milepost	79.00	0	9	B	0	0	5	39.973732	-75.066126
79	3961	State Line	PA	0	10	T	0	0	5	39.982557	-75.069020
80	6900	Up Milepost	80.00	0	10	C	0	0	5	39.987993	-75.076691
80	329	Class Change	2.00	0	14	C	0	0	5	39.988705	-75.077400
80	329	Posted Speed	25.00	0	14	C	0	0	5	39.988705	-75.077400
80	2407	R Runoff*	-3.23	31	24	T	1	3	5	39.993397	-75.081555
80	2410	L Runoff*	-2.76	31	24	T	2	3	5	39.993403	-75.081561
81	3940	Up Milepost	81.00	0	24	C	0	0	5	39.996810	-75.084712
81	1001	R Runoff*	-2.61	31	22	E	2	3	5	39.998627	-75.087352
81	2412	L Align 62	-2.15	13	24	C	2	3	5	40.000271	-75.091859
81	2412	R Align 62	-2.41	17	24	C	2	3	5	40.000271	-75.091859
81	2424	L Runoff*	-2.47	31	24	C	2	3	5	40.000280	-75.091900
81	2425	R Runoff*	-2.78	31	24	C	2	3	5	40.000281	-75.091903
81	2508	Twist 31ft*	-1.60	10	24	E	2	3	5	40.000339	-75.092189
81	3807	R Align 62	-2.37	24	26	C	2	3	5	40.001217	-75.096661
81	3808	L Align 62	-2.74	30	25	C	2	3	5	40.001218	-75.096664
81	3829	L Align 31	-1.65	5	25	E	2	3	5	40.001228	-75.096738
81	3860	L Align 62	2.23	14	25	E	2	3	5	40.001241	-75.096846
82	5317	Up Milepost	82.00	0	23	B	0	0	5	40.001923	-75.101946
83	5335	Up Milepost	83.00	0	24	T	0	0	5	40.004344	-75.120628
83	2666	L Runoff*	-3.02	31	23	E	1	3	5	40.005098	-75.130036
84	5255	Up Milepost	84.00	0	23	T	0	0	5	40.003218	-75.138726
85	5312	Up Milepost	85.00	0	24	T	0	0	5	39.996903	-75.155721
85	1937	R Runoff*	-2.59	31	27	T	2	3	5	39.994598	-75.161912
85	1937	L Runoff*	-2.58	31	27	T	2	3	5	39.994598	-75.161912
86	5027	Up Milepost	86.00	0	25	T	0	0	5	39.990103	-75.171198
86	5243	Posted Speed	20.00	0	14	T	0	0	5	39.981337	-75.185857
87	5255	Up Milepost	87.00	0	14	T	0	0	5	39.981311	-75.185887

Exception Report
Class Plus 1 Exception List Section
Milepost 79 to Milepost 87
Camden, NJ to Philadelphia, PA

Page 2 of 2
Run Date: 09/25/2013
Run ID: 2013092501

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude

Notes:

* Federal Track Safety Standard Advisory
Cant Exceptions are in degrees. The following fields are irrelevant for Cant Exceptions: LC, PC
Rail Impact Values are in Gs; the threshold is 20g peak to peak

Exception Report
Class Plus 1 Exception Summary Section
Milepost 79 to Milepost 87
Camden, NJ to Philadelphia, PA

Page 1 of 1
Run Date: 09/25/2013
Run ID: 2013092501

		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd				
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Lim	Pst		
MP	FT	EXC	FT	Drop	EXC	FT	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	Cls	Cls	Trk	
0	178	2	22	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	2	7		
80	329	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	62	1	-	-	-	-	-	-	-	1	3	5	
81	3940	-	-	-	-	-	6	103	-	-	-	-	-	-	-	-	-	-	3	93	-	-	-	-	1	10	-	-	2	3	5	
83	5335	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	31	1	-	-	-	-	-	-	-	1	3	5	
85	5312	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	62	-	-	-	-	-	-	-	-	2	3	5	
		2	22	1	2	8	6	103	-	-	-	-	-	-	-	-	-	-	8	248	2	-	-	-	1	10	-	-				

Total Miles: 11.20
Exceptions per 100 Miles: 169.64
CY12 National Average Exceptions per 100 miles: 11.3

Page 1 of 1

Run Date: 09/25/2013

Run ID: 2013092501

Camden, NJ to Philadelphia, PA

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude

There were no Alignment 62 exceptions detected during this survey.

DOTX 220 Geometry Car

United States Department of Transportation

AUTOMATED TRACK INSPECTION PROGRAM

TRACK GEOMETRY INSPECTION REPORT

Manville, NJ to Philadelphia, PA

Railroad: CSX TRANSPORTATION (CSXT)

Survey Number: 1516

Mile Post 57 to Mile Post 1



Prepared for:

United States Department of Transportation
Federal Railroad Administration
Office of Safety
Washington, D.C.

Prepared by:

ENSCO, Inc.
5400 Port Royal Rd
Springfield, VA 22151



Testing Cert. 2411.01

Approved By:

Survey Director:

MARTIN BROCK

Signature

Date

Under the U.S. Department of Transportation, Federal Railroad Administration (FRA), Office of Safety Assurance and Compliance, Automated Track Inspection Program and in accordance with 49 CFR 213 Federal Track Safety Standards, this Track Geometry Inspection Report provides a list of exceptions that relate only to the time and date the track was inspected and the required remedial action taken. This compliance report is offered only to the track owner and is not to be reproduced to others in whole or part without the expressed written consent of the FRA and the track owner. FRA requests any reprinting be labeled as a copy of the original.

NOTES

During an Automated Track Inspection Program (ATIP) survey, data is collected by the ATIP cars, which generate a Track Geometry Inspection Report (TGIR). These reports make the analysis of the track easier to read and comprehend than attempting to read exceptions from a video strip chart alone. TGIR are generated electronically for printing in near real-time onboard the ATIP cars or can be reprocessed later upon request to the FRA. Copies are transmitted electronically as a Portable Document Format (PDF) using satellite or Internet communications. Copies are distributed as follows:

1. One copy is given to the railroad
2. Two copies are given to the principal FRA Inspector
3. One copy is sent to the FRA Washington headquarters

TGIR consists of five separate sections. Exceptions are not reported for Profile and Alignment when ATIP car speed is less than five (5) and fifteen (15) mile per hour, respectively. The sample interval for track surveyed is one (1) foot.

A complete description of the information provided in the report is available at <http://atip.fra.dot.gov/TGIR>

Exception Report
Exception List Section
Milepost 57 to Milepost 1
Manville, NJ to Philadelphia, PA

Page 1 of 6
Run Date: 03/16/2015
Run ID: 2015031601

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	160	State Line	NJ	0	9	T	0	0	7	40.544884	-74.579271
57	160	Down Milepost	57.00	0	9	T	0	0	7	40.544881	-74.579273
57	1	Railroad	CSXT -	0	9	T	0	0	7	40.544881	-74.579273
57	2	Subdivision	TRENTON	0	9	T	0	0	7	40.544879	-74.579276
57	4	Track Change	0.00	0	9	T	0	0	6	40.544875	-74.579280
57	17	Posted Speed	50.00	0	9	T	0	0	6	40.544847	-74.579310
56	5406	Down Milepost	56.00	0	31	T	0	0	6	40.533393	-74.591513
55	5666	Down Milepost	55.00	0	26	T	0	0	6	40.521346	-74.604351
55	2078	Posted Speed	45.00	0	39	C	0	0	6	40.516940	-74.609082
55	2459	Track Change	0.00	0	39	E	0	0	5	40.516151	-74.609980
55	2927	Posted Speed	50.00	0	39	T	0	0	5	40.515143	-74.611020
54	5157	Down Milepost	54.00	0	46	T	0	0	5	40.510391	-74.616063
53	5953	Down Milepost	53.00	0	47	T	0	0	5	40.497753	-74.629551
52	4929	Down Milepost	52.00	0	46	T	0	0	5	40.487283	-74.640731
51	4849	Down Milepost	51.00	0	46	T	0	0	5	40.476983	-74.651724
51	3921	Class Change	2.00	0	23	T	0	0	5	40.468655	-74.660611
51	3921	Posted Speed	25.00	0	23	T	0	0	5	40.468655	-74.660611
51	4692	Class Change	4.00	0	24	T	0	0	5	40.467014	-74.662360
51	4692	Posted Speed	50.00	0	24	T	0	0	5	40.467014	-74.662360
50	5192	Down Milepost	50.00	0	24	T	0	0	5	40.465952	-74.663486
49	5217	Down Milepost	49.00	0	48	T	0	0	5	40.454867	-74.675313
49	5195	PLG24 Maint	58.35	7	46	T	4	4	5	40.443883	-74.687024
48	5231	Down Milepost	48.00	0	46	T	0	0	5	40.443752	-74.687162
48	494	L Prof 62	-2.14	2	47	T	3	4	5	40.442704	-74.688278
48	494	R Prof 62	-2.34	6	47	T	2	4	5	40.442704	-74.688278
48	4887	PLG24 Maint	58.17	4	47	T	4	4	5	40.433421	-74.698169
47	5166	Down Milepost	47.00	0	47	T	0	0	5	40.432774	-74.698856
47	1883	R Prof 62	-2.42	4	43	T	2	4	5	40.428775	-74.703115
46	5414	Down Milepost	46.00	0	26	T	0	0	5	40.421266	-74.711107
46	917	Class Change	2.00	0	21	T	0	0	5	40.419320	-74.713171
46	917	Posted Speed	25.00	0	21	T	0	0	5	40.419320	-74.713171
46	1320	Class Change	4.00	0	21	T	0	0	5	40.418464	-74.714088
46	1320	Posted Speed	50.00	0	21	T	0	0	5	40.418464	-74.714088
45	5111	Down Milepost	45.00	0	34	T	0	0	5	40.411237	-74.723721
44	5542	Down Milepost	44.00	0	30	T	0	0	5	40.402987	-74.740398
43	5115	Down Milepost	43.00	0	29	T	0	0	5	40.395365	-74.755783
43	2431	Class Change	2.00	0	22	T	0	0	5	40.391741	-74.763090
43	2431	Posted Speed	25.00	0	22	T	0	0	5	40.391741	-74.763090
43	2869	Class Change	4.00	0	22	T	0	0	5	40.391084	-74.764402
43	3233	Posted Speed	50.00	0	23	T	0	0	5	40.390546	-74.765493
42	5549	Down Milepost	42.00	0	34	T	0	0	5	40.387093	-74.772468
42	3736	PLG24 Maint	58.13	5	41	C	4	4	5	40.381282	-74.783330
42	3767	PLG24 Maint	58.03	4	40	C	4	4	5	40.381216	-74.783400
42	3968	PLG24 Maint	58.16	5	41	C	4	4	5	40.380776	-74.783834

Exception Report
Exception List Section
Milepost 57 to Milepost 1
Manville, NJ to Philadelphia, PA

Page 2 of 6
Run Date: 03/16/2015
Run ID: 2015031601

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
42	4188	PLG24 Maint	58.22	9	42	C	4	4	5	40.380270	-74.784262
42	4486	Gage Wide	57.62	2	42	C	3	4	5	40.379488	-74.784795
42	4511	LG Safety	58.06	12	41	C	4	4	5	40.379486	-74.784797
41	5198	Down Milepost	41.00	0	43	E	0	0	5	40.377627	-74.785557
40	5358	Down Milepost	40.00	0	45	T	0	0	5	40.363109	-74.788400
40	1164	Crosslevel	1.41	7	37	T	3	4	5	40.359956	-74.789013
40	1252	Crosslevel	1.37	1	36	T	3	4	5	40.359717	-74.789059
40	1325	Crosslevel	1.38	7	35	T	3	4	5	40.359519	-74.789098
40	1473	Crosslevel	1.75	15	34	T	3	4	5	40.359118	-74.789177
40	1557	Crosslevel	1.37	2	33	T	3	4	5	40.358891	-74.789220
40	1565	Crosslevel	1.36	1	33	T	3	4	5	40.358869	-74.789225
40	1577	Crosslevel	1.42	10	33	T	3	4	5	40.358837	-74.789231
40	1619	Crosslevel	1.45	13	33	T	3	4	5	40.358724	-74.789253
40	2942	Class Change	2.00	0	24	T	0	0	5	40.355139	-74.789941
40	2942	Posted Speed	25.00	0	24	T	0	0	5	40.355139	-74.789941
40	3218	Class Change	4.00	0	24	T	0	0	5	40.354389	-74.790091
40	3218	Posted Speed	50.00	0	24	T	0	0	5	40.354389	-74.790091
39	5158	Down Milepost	39.00	0	32	T	0	0	5	40.349146	-74.791074
38	5813	Down Milepost	38.00	0	25	C	0	0	5	40.333374	-74.794206
37	5125	Down Milepost	37.00	0	25	T	0	0	5	40.319536	-74.796955
36	5074	Down Milepost	36.00	0	21	T	0	0	5	40.305674	-74.798413
36	2238	L Prof 62	-2.23	2	20	T	3	4	5	40.299565	-74.799000
36	2347	Track Change	0.00	0	21	T	0	0	2	40.299268	-74.799033
35	5489	Down Milepost	35.00	0	29	T	0	0	2	40.290687	-74.799939
34	4959	Down Milepost	34.00	0	21	T	0	0	2	40.277620	-74.804163
33	5420	Down Milepost	33.00	0	13	T	0	0	2	40.263953	-74.811757
33	116	Class Change	2.00	0	13	T	0	0	2	40.263666	-74.811924
33	116	Posted Speed	25.00	0	13	T	0	0	2	40.263666	-74.811924
33	2386	Class Change	3.00	0	20	T	0	0	2	40.257943	-74.815114
33	2386	Posted Speed	60.00	0	20	T	0	0	2	40.257943	-74.815114
32	5318	Down Milepost	32.00	0	34	C	0	0	2	40.250541	-74.819202
32	2910	State Line	PA	0	37	T	0	0	2	40.243168	-74.823151
31	4905	Down Milepost	31.00	0	37	C	0	0	2	40.238272	-74.826272
30	5408	Down Milepost	30.00	0	40	T	0	0	2	40.228550	-74.840856
29	5729	Down Milepost	29.00	0	38	T	0	0	2	40.218324	-74.856400
28	5279	Down Milepost	28.00	0	28	T	0	0	2	40.208058	-74.869677
27	4460	Down Milepost	27.00	0	28	T	0	0	2	40.199261	-74.880745
27	1223	R Prof 62	-2.41	2	27	T	2	3	2	40.196851	-74.883779
27	1937	Track Change	0.00	0	26	E	0	0	5	40.195416	-74.885515
27	2376	Class Change	4.00	0	25	T	0	0	5	40.194554	-74.886603
27	2376	Posted Speed	50.00	0	25	T	0	0	5	40.194554	-74.886603
27	4355	Class Change	2.00	0	17	C	0	0	5	40.190435	-74.891183
27	4355	Posted Speed	25.00	0	17	C	0	0	5	40.190435	-74.891183
27	4671	Class Change	4.00	0	18	C	0	0	5	40.189688	-74.891754

Exception Report
Exception List Section
Milepost 57 to Milepost 1
Manville, NJ to Philadelphia, PA

Page 3 of 6
Run Date: 03/16/2015
Run ID: 2015031601

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
27	4671	Posted Speed	50.00	0	18	C	0	0	5	40.189688	-74.891754
26	5231	Down Milepost	26.00	0	19	C	0	0	5	40.188315	-74.892649
26	3570	Class Change	2.00	0	5	C	0	0	5	40.178957	-74.896329
26	3570	Posted Speed	25.00	0	5	C	0	0	5	40.178957	-74.896329
26	4890	Class Change	4.00	0	21	C	0	0	5	40.175482	-74.897636
26	4890	Posted Speed	50.00	0	21	C	0	0	5	40.175482	-74.897636
25	6101	Down Milepost	25.00	0	24	B	0	0	5	40.172296	-74.898855
25	791	R Cant POS*(136RE)	5.60	14	27	E		4	5	40.170373	-74.900147
25	3254	PLG24 Maint	58.05	3	28	B	4	4	5	40.164786	-74.904937
24	5245	Down Milepost	24.00	0	15	T	0	0	5	40.161544	-74.910662
24	3561	Class Change	2.00	0	14	T	0	0	5	40.158080	-74.922493
24	3561	Posted Speed	25.00	0	14	T	0	0	5	40.158080	-74.922493
24	4057	Class Change	4.00	0	14	T	0	0	5	40.157696	-74.924192
24	4057	Posted Speed	50.00	0	14	T	0	0	5	40.157696	-74.924192
24	4087	PLG24 Maint	58.42	6	14	T	2	2	5	40.157692	-74.924213
24	4160	PLG24 Maint	58.18	6	14	T	4	4	5	40.157635	-74.924463
24	4196	PLG24 Maint	58.71	16	14	T	4	4	5	40.157607	-74.924586
23	5312	Down Milepost	23.00	0	15	T	0	0	5	40.156723	-74.928495
22	5284	Down Milepost	22.00	0	14	C	0	0	5	40.151386	-74.946005
22	1084	R Runoff*	2.09	31	16	T	2	4	5	40.150299	-74.949603
22	3295	Crosslevel	-1.39	3	14	T	3	4	5	40.148218	-74.957013
19	5661	Down Milepost	19.00	0	5	C	0	0	5	40.145517	-74.964665
19	1147	Class Change	3.00	0	8	B	0	0	5	40.143479	-74.967774
19	1147	Posted Speed	40.00	0	8	B	0	0	5	40.143479	-74.967774
19	1188	Track Change	0.00	0	7	B	0	0	6	40.143400	-74.967879
18	5119	Down Milepost	18.00	0	7	T	0	0	6	40.135841	-74.977885
17	4740	Down Milepost	17.00	0	23	T	0	0	6	40.126689	-74.989903
17	1781	Class Change	2.00	0	23	T	0	0	6	40.123254	-74.994417
17	1781	Posted Speed	25.00	0	23	T	0	0	6	40.123254	-74.994417
17	4117	Class Change	3.00	0	24	E	0	0	6	40.118734	-75.000330
17	4117	Posted Speed	30.00	0	24	E	0	0	6	40.118734	-75.000330
17	4281	L Align 62	2.07	11	25	E	2	3	6	40.118401	-75.000722
17	4392	Track Change	0.00	0	25	T	0	0	5	40.118185	-75.001002
17	4734	Posted Speed	40.00	0	27	T	0	0	5	40.117526	-75.001870
17	5118	Class Change	4.00	0	31	T	0	0	5	40.116786	-75.002844
17	5118	Posted Speed	50.00	0	31	T	0	0	5	40.116786	-75.002844
16	5475	Down Milepost	16.00	0	32	T	0	0	5	40.116095	-75.003752
16	937	Class Change	2.00	0	22	T	0	0	5	40.114292	-75.006125
16	937	Posted Speed	25.00	0	22	T	0	0	5	40.114292	-75.006125
16	1475	Class Change	4.00	0	21	T	0	0	5	40.113251	-75.007488
16	1475	Posted Speed	50.00	0	21	T	0	0	5	40.113251	-75.007488
15	5286	Down Milepost	15.00	0	30	T	0	0	5	40.105888	-75.017157
15	3138	Class Change	2.00	0	23	T	0	0	5	40.099833	-75.025113
15	3138	Posted Speed	25.00	0	23	T	0	0	5	40.099833	-75.025113

Exception Report
Exception List Section
Milepost 57 to Milepost 1
Manville, NJ to Philadelphia, PA

Page 4 of 6
Run Date: 03/16/2015
Run ID: 2015031601

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
15	3470	Class Change	4.00	0	23	T	0	0	5	40.099194	-75.025953
15	3470	Posted Speed	50.00	0	23	T	0	0	5	40.099194	-75.025953
14	5534	Down Milepost	14.00	0	30	T	0	0	5	40.095199	-75.031188
13	4344	Down Milepost	13.00	0	25	T	0	0	5	40.086815	-75.042196
12	5751	Down Milepost	12.00	0	27	T	0	0	5	40.075702	-75.056766
11	5596	Down Milepost	11.00	0	17	C	0	0	5	40.067098	-75.073092
11	2851	Class Change	1.00	0	17	C	0	0	5	40.064106	-75.082484
11	2851	Posted Speed	10.00	0	17	C	0	0	5	40.064106	-75.082484
11	3866	Class Change	2.00	0	12	B	0	0	5	40.062722	-75.085626
11	3866	Posted Speed	25.00	0	12	B	0	0	5	40.062722	-75.085626
11	4553	Class Change	4.00	0	10	T	0	0	5	40.061474	-75.087473
11	4553	Posted Speed	50.00	0	10	T	0	0	5	40.061474	-75.087473
10	5012	Down Milepost	10.00	0	9	T	0	0	5	40.060602	-75.088674
10	1338	Class Change	3.00	0	21	T	0	0	5	40.058106	-75.092151
10	1338	Posted Speed	40.00	0	21	T	0	0	5	40.058106	-75.092151
9	5500	Down Milepost	9.00	0	30	T	0	0	5	40.051010	-75.103747
9	4624	PLG24 Maint	58.53	9	28	B	3	3	5	40.040695	-75.112548
8	5548	Down Milepost	8.00	0	25	T	0	0	5	40.038882	-75.114971
8	3457	LG Safety	58.11	15	11	B	3	3	5	40.032595	-75.124024
8	3511	LG Safety	58.38	8	12	B	3	3	5	40.032535	-75.124201
8	3531	PLG24 Maint	58.11	7	13	B	3	3	5	40.032515	-75.124267
8	3567	LG Safety	58.26	8	13	B	3	3	5	40.032480	-75.124387
7	4777	Down Milepost	7.00	0	14	T	0	0	5	40.032496	-75.128732
7	1772	PLG24 Maint	58.48	11	15	T	3	3	5	40.033291	-75.134870
7	1789	PLG24 Maint	58.19	8	15	T	3	3	5	40.033298	-75.134930
7	1797	PLG24 Maint	58.05	3	15	T	3	3	5	40.033302	-75.134958
7	3052	PLG24 Maint	58.18	11	15	B	3	3	5	40.033503	-75.139408
7	3135	PLG24 Maint	58.28	5	15	C	3	3	5	40.033452	-75.139696
7	3253	PLG24 Maint	58.24	6	14	C	3	3	5	40.033360	-75.140099
7	3307	PLG24 Maint	58.09	3	14	C	3	3	5	40.033320	-75.140277
7	3585	PLG24 Maint	58.33	15	13	C	3	3	5	40.032987	-75.141174
7	3623	PLG24 Maint	58.20	13	13	C	3	3	5	40.032934	-75.141291
7	3665	PLG24 Maint	58.22	24	13	C	3	3	5	40.032873	-75.141418
7	3909	Class Change	2.00	0	12	T	0	0	5	40.032457	-75.142211
7	3909	Posted Speed	25.00	0	12	T	0	0	5	40.032457	-75.142211
6	5267	Down Milepost	6.00	0	10	T	0	0	5	40.030349	-75.146205
6	308	PLG24 Maint	58.13	4	11	B	2	2	5	40.029912	-75.147039
6	381	LG Safety	58.06	12	11	B	2	2	5	40.029794	-75.147249
6	702	PLG24 Maint	58.24	8	12	E	2	2	5	40.029252	-75.148152
6	801	PLG24 Maint	58.45	8	12	B	2	2	5	40.029091	-75.148435
6	2878	Class Change	1.00	0	8	T	0	0	5	40.025822	-75.154603
6	2878	Posted Speed	10.00	0	8	T	0	0	5	40.025822	-75.154603
6	5701	Class Change	2.00	0	7	E	0	0	5	40.020159	-75.160937
6	5701	Posted Speed	25.00	0	7	E	0	0	5	40.020159	-75.160937

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MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
5	6146	Down Milepost	5.00	0	9	T	0	0	5	40.018980	-75.160525
5	1155	PLG24 Maint	58.05	3	5	B	2	2	5	40.016030	-75.159439
5	3193	Track Change	0.00	0	15	T	0	0	1	40.012525	-75.164964
4	5071	Down Milepost	4.00	0	15	T	0	0	1	40.009712	-75.170568
3	4831	Down Milepost	3.00	0	11	T	0	0	1	40.006975	-75.187126
3	497	Posted Speed	20.00	0	9	B	0	0	1	40.006892	-75.188905
3	606	PLG24 Maint	58.02	3	9	B	2	2	1	40.006870	-75.189197
3	1029	PLG24 Maint	58.20	4	8	B	2	2	1	40.006657	-75.190677
3	1089	PLG24 Maint	58.44	9	8	B	2	2	1	40.006603	-75.190880
3	1175	PLG24 Maint	58.42	7	8	B	2	2	1	40.006508	-75.191161
3	1224	PLG24 Maint	58.13	5	7	C	2	2	1	40.006446	-75.191315
3	1258	PLG24 Maint	58.07	4	7	C	2	2	1	40.006401	-75.191420
3	1291	PLG24 Maint	58.37	9	7	C	2	2	1	40.006353	-75.191521
3	1285	Posted Speed	25.00	0	6	C	0	0	1	40.006324	-75.191578
3	1326	PLG24 Maint	58.21	3	6	C	2	2	1	40.006300	-75.191625
3	1851	PLG24 Maint	58.11	5	9	C	2	2	1	40.005205	-75.192808
3	1889	LG Safety	58.11	9	9	C	2	2	1	40.005108	-75.192859
3	2015	PLG24 Maint	58.09	6	12	C	2	2	1	40.004779	-75.192994
2	5372	Down Milepost	2.00	0	24	T	0	0	1	39.995981	-75.196620
2	5382	PLG24 Maint	58.41	7	24	T	2	2	1	39.984832	-75.203192
1	5893	Down Milepost	1.00	0	25	B	0	0	1	39.983630	-75.202085
1	980	PLG24 Maint	58.34	8	24	B	2	2	1	39.981804	-75.199658
1	994	Gage Wide	57.87	2	24	B	1	2	1	39.981740	-75.199546
1	1019	LG Safety	58.11	32	24	B	2	2	1	39.981740	-75.199546
1	1058	LG Safety	58.22	19	24	B	2	2	1	39.981680	-75.199432
1	1034	Gage Wide	57.88	1	24	B	1	2	1	39.981678	-75.199429
1	1072	LG Safety	58.11	14	24	B	2	2	1	39.981659	-75.199389
1	1092	LG Safety	58.21	41	24	B	2	2	1	39.981630	-75.199329
1	1070	Gage Wide	57.87	1	24	B	1	2	1	39.981626	-75.199320
1	1170	LG Safety	58.08	18	24	B	2	2	1	39.981527	-75.199085
1	1200	LG Safety	58.10	11	24	B	2	2	1	39.981492	-75.198989
1	1217	PLG24 Maint	58.24	19	24	C	2	2	1	39.981473	-75.198933
1	1246	PLG24 Maint	58.11	4	24	C	2	2	1	39.981443	-75.198838
1	1263	PLG24 Maint	58.16	6	23	C	2	2	1	39.981426	-75.198781
1	1641	PLG24 Maint	58.12	5	23	B	2	2	1	39.981054	-75.197533
1	1678	LG Safety	58.21	15	23	B	2	2	1	39.981008	-75.197416
1	1779	PLG24 Maint	58.05	6	23	B	2	2	1	39.980859	-75.197112
1	1789	PLG24 Maint	58.05	5	23	B	2	2	1	39.980842	-75.197084
1	1881	PLG24 Maint	58.26	8	23	C	2	2	1	39.980676	-75.196838
1	1934	PLG24 Maint	58.33	9	23	C	2	2	1	39.980571	-75.196714
1	1972	PLG24 Maint	58.06	4	23	C	2	2	1	39.980492	-75.196627
1	3564	Posted Speed	20.00	0	19	T	0	0	1	39.977853	-75.192212
1	3968	PLG24 Maint	58.27	7	17	T	2	2	1	39.977434	-75.190973
1	4438	PLG24 Maint	58.18	5	13	E	2	2	1	39.977167	-75.189341

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MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
1	5216	Track Change	0.00	0	19	E	0	0	5	39.975652	-75.187471
1	5377	PLG24 Maint	58.24	5	19	E	2	2	5	39.975313	-75.187266
1	6415	PLG24 Maint	58.23	23	3	B	2	2	5	39.972666	-75.185927
1	6462	LG Safety	58.16	6	1	B	2	2	5	39.972547	-75.185862
1	6478	PLG24 Maint	58.12	3	3	B	2	2	5	39.972507	-75.185839
1	8516	Class Change	1.00	0	13	T	0	0	5	39.968267	-75.180993
1	8516	Posted Speed	10.00	0	13	T	0	0	5	39.968267	-75.180993
1	9322	PLG24 Maint	58.07	3	9	B	1	1	5	39.966649	-75.179179
1	9331	PLG24 Maint	58.25	8	9	B	1	1	5	39.966627	-75.179165
1	9415	PLG24 Maint	58.16	6	9	B	1	1	5	39.966417	-75.179042
1	9429	PLG24 Maint	58.18	6	9	C	1	1	5	39.966380	-75.179025
1	9641	PLG24 Maint	58.17	6	8	C	1	1	5	39.965812	-75.178884
1	10117	Class Change	2.00	0	11	E	0	0	5	39.964468	-75.179217
1	10117	Posted Speed	20.00	0	11	E	0	0	5	39.964468	-75.179217
1	11655	Subdivision	PHILADE	0	8	T	0	0	5	39.960345	-75.179243
0	11788	Up Milepost	0.00	0	9	B	0	0	5	39.959994	-75.179104
0	254	Class Change	3.00	0	10	C	0	0	5	39.959324	-75.178886
0	254	Posted Speed	30.00	0	10	C	0	0	5	39.959324	-75.178886
0	317	Track Change	0.00	0	10	C	0	0	1	39.959157	-75.178828
0	3468	PLG24 Maint	58.02	3	4	E	3	3	1	39.950886	-75.180971
1	7263	Up Milepost	1.00	0	17	T	0	0	1	39.943284	-75.190269

Notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Rail Impact Values are unitless; indicating a location with a large vertical axle acceleration

Rail Cant Exceptions values indicate degrees.

(RSA) indicates possible Rail Seat Abrasion. The following fields are irrelevant for Cant Exceptions: LC, PC

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Milepost 57 to Milepost 1

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Manville, NJ to Philadelphia, PA

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point														
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at								
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0		
6	55	1877	55	2203	327	39	1/28	0.66	45	57	55	2037	1/34	0.61	0	0	57	64	71	77	83	88	93		
5	55	2203	55	2467	265	39	-1/46	0.17	45	47	55	2334	-1/47	0.29	0	0	47	54	61	67	73	78	83		
5	55	2487	55	2762	276	39	-0/49	-0.18	45	70	55	2616	-0/51	0.03	0	0	70	81	91	100	108	115	122		
5	55	3054	55	3314	261	39	0/54	0.17	50	70	55	3221	0/59	0.35	0	0	70	79	87	95	103	109	116		
5	46	2754	46	4677	1924	36	0/59	1.32	50	73	46	4022	1/06	1.13	0	0	73	81	89	96	102	108	114		
5	42	2549	41	330	2980	43	-2/01	-1.95	50	58	42	3721	-2/02	-1.85	0	0	58	64	69	74	78	83	87		
5	39	5365	38	523	972	25	0/48	1.34	50	82	38	245	0/52	1.1	0	0	82	91	100	108	115	122	128		
5	38	1878	38	2503	626	23	-2/22	-1.67	50	53	38	2165	-2/24	-1.67	0	0	53	58	63	67	71	75	79		
5	36	631	36	1222	470	7	-0/26	-0.95	50	97	36	988	-0/35	-0.86	0	0	97	109	120	130	139	147	155		
2	35	1463	35	3443	1981	26	0/58	0.95	50	75	35	1946	1/00	0.92	0	0	75	83	91	99	106	112	119		
2	34	5022	34	5289	268	14	0/15	1.06	50	139	34	5157	0/18	0.99	0	0	139	154	168	182	195	206	218		
2	33	309	33	633	325	15	-0/29	-0.46	25	83	33	438	-0/41	-0.4	0	0	83	95	105	115	123	131	139		
2	33	1182	33	1458	235	7	-0/14	0.19	25	126	33	1334	-0/15	0.13	0	0	126	148	166	183	198	212	225		
2	33	5092	32	245	472	35	-0/19	-0.58	60	124	32	85	-0/19	-0.58	0	0	124	143	157	171	183	195	206		
2	32	1323	32	1760	438	38	0/23	0.93	60	111	32	1499	0/28	0.97	0	0	111	124	136	147	157	166	175		
2	32	3990	31	643	1559	37	2/16	4.66	60	68	32	4433	2/17	4.37	0	0	68	72	76	80	84	87	91		
2	29	336	29	1113	778	37	-0/53	-0.89	60	75	29	879	-0/59	-0.93	0	0	75	84	92	100	107	114	120		
2	27	1413	27	1690	278	26	-1/48	0.01	60	46	27	1535	-1/50	0.26	26	-1	46	54	60	66	72	77	82		
5	27	1690	27	1966	277	26	1/28	0.1	60	54	27	1859	1/34	0.16	47	-1	54	61	68	75	80	86	91		
5	27	3058	26	917	3091	22	-1/02	-0.72	50	64	27	4728	-1/07	-0.22	0	0	64	73	81	89	96	102	108		
5	26	3353	26	5817	2424	24	-0/02	0.11	50	124	26	3523	-0/16	0.09	0	0	124	146	164	180	194	208	221		
5	26	5817	25	840	1125	26	2/01	2.01	50	59	25	400	2/05	1.99	0	0	59	64	69	74	78	82	86		
5	25	2949	25	4714	1766	29	1/56	2.05	50	59	25	4368	1/54	1.69	0	0	59	65	70	76	80	85	89		
5	24	799	24	2156	1358	15	0/50	0.97	50	73	24	1499	0/59	0.65	0	0	73	82	90	98	105	112	118		
5	23	1122	23	1883	762	15	-0/24	-1.03	50	97	23	1882	-0/37	-1.16	0	0	97	109	119	128	137	145	153		
5	23	1883	23	2247	365	14	-0/56	-1.06	50	75	23	1991	-1/02	-1.08	0	0	75	83	91	98	105	111	117		
5	23	2247	23	3132	886	15	-0/23	-0.81	50	113	23	2810	-0/25	-0.73	0	0	113	128	141	153	164	174	184		
5	23	5144	22	782	923	14	0/25	1.56	50	118	22	388	0/28	1.51	0	0	118	130	142	152	162	171	180		
5	22	4116	22	4535	420	11	-1/15	-1.06	50	67	22	4327	-1/15	-0.95	0	0	67	75	82	89	95	101	106		
5	22	4535	19	1064	2064	10	-1/08	-0.76	50	63	19	844	-1/15	-0.49	0	0	63	71	79	86	92	98	104		
6	19	1085	19	1370	286	7	1/34	0.01	40	51	19	1201	1/41	0.06	0	0	51	58	65	71	77	82	87		
6	19	1370	19	1690	321	9	-1/47	-0	40	48	19	1480	-1/48	0.05	0	0	48	56	62	68	74	79	84		
6	19	2797	19	3206	267	4	-0/21	0.12	40	107	19	3022	-0/21	0.1	0	0	107	126	141	155	167	179	190		
6	17	3929	17	4156	228	24	-3/04	0.62	30	32	17	4069	-3/12	0.7	0	0	32	38	43	48	53	57	60		
6	17	4156	17	4366	211	24	2/47	-0.2	30	37	17	4245	2/49	-0.36	0	0	37	42	48	53	58	62	66		
5	12	714	12	5319	4606	25	0/25	1.09	50	98	12	2992	0/32	0.65	0	0	98	110	122	132	142	151	159		
5	12	5319	11	69	347	17	0/15	1.19	50	151	12	5576	0/16	1.2	0	0	151	169	184	198	212	224	236		
5	11	2532	11	2810	279	17	-1/16	-0.8	50	64	11	2760	-1/16	-0.69	0	0	64	72	80	86	93	98	104		
5	11	2810	11	3554	745	17	-1/08	-1.1	10	60	11	3080	-1/14	-0.16	0	0	60	69	77	84	91	97	103		
5	11	3627	11	4083	457	11	-2/45	-0.77	25	44	11	3902	-2/45	-0.77	0	0	44	49	54	59	63	67	71		
5	11	4083	11	4376	294	8	-1/41	-1.02	25	57	11	4121	-1/35	-0.67	0	0	57	64	71	77	83	88	93		
5	10	1880	10	2752	873	25	0/55	0.93	40	74	10	2215	0/56	0.59	0	0	74	83	92	100	107	114	121		
5	9	499	9	2628	2130	30	-1/59	-1.27	40	54	9	1803	-2/06	-1.29	0	0	54	59	65	70	75	79	83		
5	9	3409	9	4406	998	29	1/58	2.4	40	59	9	3673	2/05	2.12	0	0	59	64	69	74	79	83	87		
5	9	4406	9	4787	382	28	2/56	2.6	40	52	9	4548	3/02	2.62	0	0	52	55	59	63	67	70	74		
5	8	2490	8	3055	566	9	1/26	2.79	40	76	8	3054	1/27	2.79	0	0	76	81	87	93	98	103	107		

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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

									Average				Limiting Point														
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at										
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0				
5	8	3055	8	3685	631	14	4/31	3.56	40	44	8	3464	4/43	3.47	0	0	44	47	50	53	56	58	61				
5	8	3685	8	4492	808	15	3/48	3.76	40	49	8	3686	3/54	3.69	0	0	49	53	56	59	62	65	68				
5	7	1694	7	1833	140	15	-0/18	-0.2	40	114	7	1759	-0/20	-0.11	0	0	114	133	148	162	175	187	198				
5	7	1899	7	2510	612	17	-1/09	-1.92	40	74	7	2197	-1/12	-1.59	0	0	74	81	88	95	101	106	112				
5	7	2510	7	3809	1300	15	-3/41	-4.31	40	49	7	2945	-4/17	-4.2	0	0	49	52	55	58	61	63	66				
5	6	136	6	562	427	12	-2/18	-0.53	25	46	6	319	-2/19	-0.44	0	0	46	52	57	62	67	72	76				
5	6	562	6	970	409	12	1/26	0.48	25	57	6	790	1/28	0.4	0	0	57	65	72	78	84	90	95				
5	6	1345	6	2000	656	14	-0/23	-0.64	25	109	6	1941	-0/25	-0.52	0	0	109	125	138	150	161	172	182				
5	6	3280	6	3648	369	11	0/50	0.65	10	78	6	3579	0/51	0.65	0	0	78	88	97	105	113	120	127				
5	6	3648	6	3832	185	9	-2/48	-0.45	10	42	6	3794	-2/49	-0.47	0	0	42	47	52	57	61	65	69				
5	6	3832	6	4985	1154	10	-2/14	-0.25	10	42	6	3889	-2/40	-0.36	0	0	42	48	53	58	62	66	70				
5	6	4985	6	5026	42	8	-1/28	-0.04	10	53	6	4985	-1/18	0.39	0	0	53	63	71	78	85	91	97				
5	6	5026	6	5230	205	8	-2/07	-0.1	10	38	6	5110	-3/13	-0.18	0	0	38	43	47	52	56	60	63				
5	6	5230	6	5775	472	8	-9/22	-0.26	25	22	6	5635	-9/25	-0.14	0	0	22	25	27	30	32	35	37				
5	6	5775	6	6141	367	8	-7/58	-0.68	25	26	6	5905	-7/58	-0.68	0	0	26	28	31	34	37	39	41				
5	5	172	5	616	445	9	3/22	0.59	25	39	5	374	3/26	0.61	0	0	39	43	48	52	56	59	63				
5	5	616	5	714	99	8	-0/20	1.3	25	77	5	643	-0/22	1.46	0	0	77	100	118	134	148	161	172				
5	5	714	5	1800	1087	6	8/38	2.33	25	29	5	1525	8/46	2.22	0	0	29	31	34	36	38	40	42				
1	4	195	4	883	689	14	1/37	0.73	25	55	4	403	1/44	0.71	0	0	55	62	68	74	79	84	89				
1	4	957	4	1295	339	13	1/53	0.83	25	52	4	1131	1/58	0.75	0	0	52	58	64	69	74	79	84				
1	4	1295	4	1830	536	15	1/08	0.96	25	64	4	1296	1/18	0.68	0	0	64	71	79	85	91	97	103				
1	4	1830	4	2200	371	13	1/29	1.08	25	59	4	1957	1/37	0.98	0	0	59	66	72	78	83	88	93				
1	4	2374	4	2986	613	14	1/15	0.49	25	63	4	2724	1/16	0.48	0	0	63	71	78	85	92	98	103				
1	4	4156	4	4535	330	5	-0/14	0.03	25	124	4	4349	-0/15	0.18	0	0	124	147	165	182	197	211	224				
1	3	21	3	435	415	11	-0/25	-0.73	25	105	3	434	-0/30	-0.96	0	0	105	119	130	141	150	160	168				
1	3	435	3	780	346	9	-2/31	-0.48	20	44	3	626	-2/40	-0.57	0	0	44	49	54	59	63	67	71				
1	3	780	3	833	54	9	-1/03	-0.52	20	69	3	832	-1/02	-0.52	0	0	69	78	87	94	101	108	114				
1	3	833	3	1316	484	8	-6/14	-2	25	31	3	1066	-6/29	-1.49	0	0	31	34	37	40	43	45	48				
1	3	1316	3	2084	769	10	-6/17	-2.38	25	34	3	1879	-6/23	-2.2	0	0	34	37	40	42	45	47	50				
1	3	4155	3	5167	1013	25	2/05	1.15	25	51	3	4849	2/10	0.97	0	0	51	57	62	67	72	76	81				
1	2	681	2	2219	1539	21	1/56	1.09	25	54	2	1565	1/56	0.99	0	0	54	60	66	71	76	81	85				
1	2	2219	2	2316	98	20	-0/16	-0.33	25	129	2	2238	-0/17	-0.37	0	0	129	149	165	180	193	206	218				
1	2	2870	2	3354	485	21	-4/31	-0.48	25	31	2	3084	-4/43	-0.1	0	0	31	35	39	42	46	49	52				
1	2	3354	2	4492	1139	21	-7/45	-0.97	25	25	2	3799	-7/49	-0.51	0	0	25	28	31	34	37	39	41				
1	2	5830	1	644	708	25	-3/14	-0.71	25	40	1	413	-3/15	-0.71	0	0	40	45	50	54	58	61	65				
1	1	827	1	1325	499	24	-6/21	-0.7	25	29	1	1102	-6/22	-0.69	0	0	29	32	35	38	41	44	46				
1	1	1447	1	2116	670	23	8/14	1.5	25	28	1	1847	8/14	1.5	0	0	28	30	33	36	38	40	42				
1	1	2316	1	2991	676	20	-7/33	-1.87	25	30	1	2759	-7/33	-1.87	0	0	30	33	36	38	40	43	45				
1	1	3883	1	4320	438	15	-6/52	-0.73	20	28	1	4044	-6/55	-0.73	0	0	28	31	34	37	39	42	44				
1	1	4320	1	4667	348	15	11/14	1.3	20	23	1	4654	11/14	1.29	0	0	23	25	28	30	32	34	36				
1	1	4667	1	4730	64	15	11/17	1.39	20	24	1	4710	11/18	1.39	0	0	24	26	28	30	32	34	36				
1	1	4730	1	5073	344	16	11/05	1.58	20	23	1	4736	11/11	1.3	0	0	23	26	28	30	32	34	36				
5	1	5183	1	5256	74	19	-0/15	-0.17	20	133	1	5187	-0/15	-0.2	0	0	133	154	172	188	202	216	229				
5	1	5256	1	5512	257	19	2/20	0.32	20	44	1	5381	2/23	0.27	0	0	44	50	56	61	65	70	74				
5	1	6070	1	6916	762	8	-5/53	-1.14	20	32	1	6622	-5/53	-1.14	0	0	32	35	38	41	44	47	49				
5	1	8717	1	8987	271	8	-0/23	1.22	10	56	1	8841	-0/29	1.91	0	0	56	78	95	110	123	134	145				

Exception Report
Curve Analysis Section
Milepost 57 to Milepost 1

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Manville, NJ to Philadelphia, PA

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

						Average				Limiting Point													
Track	Starting	Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0
5	1	8987	1	9999	1013	9	7/49	3.39	10	33	1	9520	8/02	3.26	0	0	33	35	38	40	42	44	46
5	1	9999	1	10173	175	10	-0/17	-0.01	20	117	1	10030	-0/18	0.01	0	0	117	137	154	168	182	195	206
5	1	10548	1	11392	845	10	-5/43	-2.02	20	33	1	10962	-5/55	-1.64	0	0	33	36	40	42	45	48	50
5	1	11728	0	167	228	9	1/16	0.15	20	60	0	43	1/16	0.15	0	0	60	68	76	83	90	96	101
1	0	167	0	483	317	11	-0/38	0.05	30	48	0	240	-1/28	0.6	0	0	48	57	65	72	78	84	90
1	0	483	0	1367	885	12	5/02	1.6	30	34	0	791	5/06	1.18	0	0	34	38	41	44	47	50	53
1	0	2949	0	3367	288	5	-0/17	-0.07	30	120	0	3160	-0/17	-0.08	0	0	120	141	158	173	186	199	211
1	0	3367	0	3947	581	8	5/22	1.19	30	33	0	3536	5/20	1.07	0	0	33	36	40	43	46	49	51
1	0	4013	0	4083	71	13	0/16	0.33	30	130	0	4066	0/16	0.18	0	0	130	148	165	180	194	208	220
1	0	4083	0	4172	90	13	0/16	0.31	30	133	0	4104	0/16	0.34	0	0	133	151	168	183	197	210	222
1	1	318	1	1546	1229	11	2/53	1.29	30	44	1	1024	2/56	1.05	0	0	44	49	54	58	62	66	69
1	1	1667	1	2935	1225	12	-3/58	-1.52	30	39	1	2258	-3/59	-1.22	0	0	39	43	47	50	54	57	60

Notes:

+ Maximum curve speed is limited at qualified cant deficiency.
However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Exception Report
Exception Summary Section
Milepost 57 to Milepost 1
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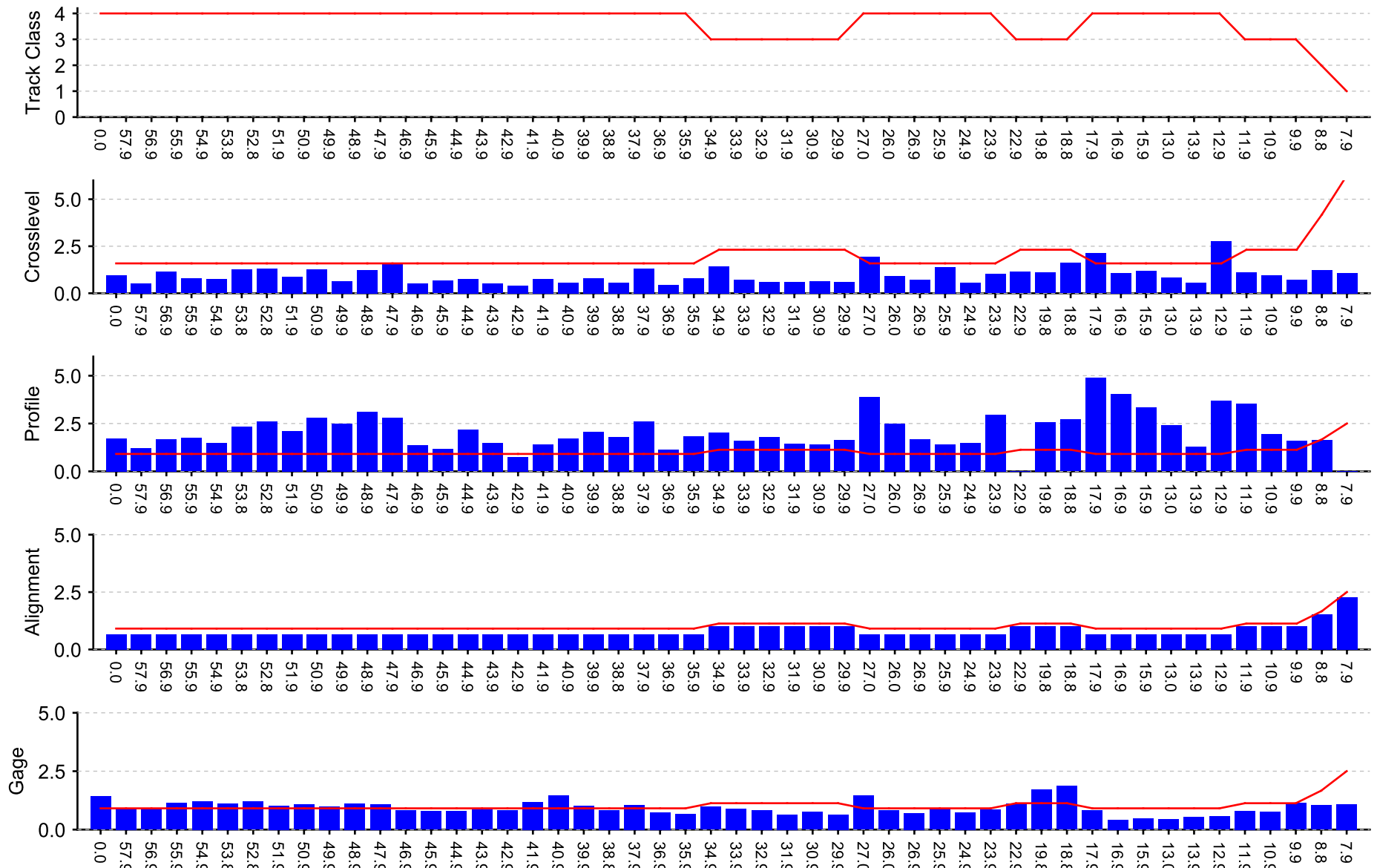
		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot			
MP	FT	EXC	FT	Drop	EXC	FT	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	Cls	Cls	Trk
48	5231	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	1	-	-	-	-	-	-	-	-	-	-	2	4	5
47	5166	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	1	-	-	-	-	-	-	-	-	-	-	2	4	5
42	5549	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5
40	5358	-	-	-	-	-	-	-	-	8	56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5
36	5074	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	3	4	5
27	4460	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	2	3	2
22	5284	-	-	-	-	-	-	-	-	1	3	-	-	-	-	-	-	-	1	31	1	-	-	-	-	-	-	-	2	4	5
17	4117	-	-	-	-	-	1	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	6
1	5893	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	1
		4	6	-	-	-	1	11	-	9	59	-	-	-	-	5	16	2	1	31	1	-	-	-	-	-	-	-			

Total Miles: 58.60
Exceptions per 100 Miles: 34.13
CY13 National Average Exceptions per 100 miles: 12.4

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Milepost 57 to Milepost 1
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Track Quality Index

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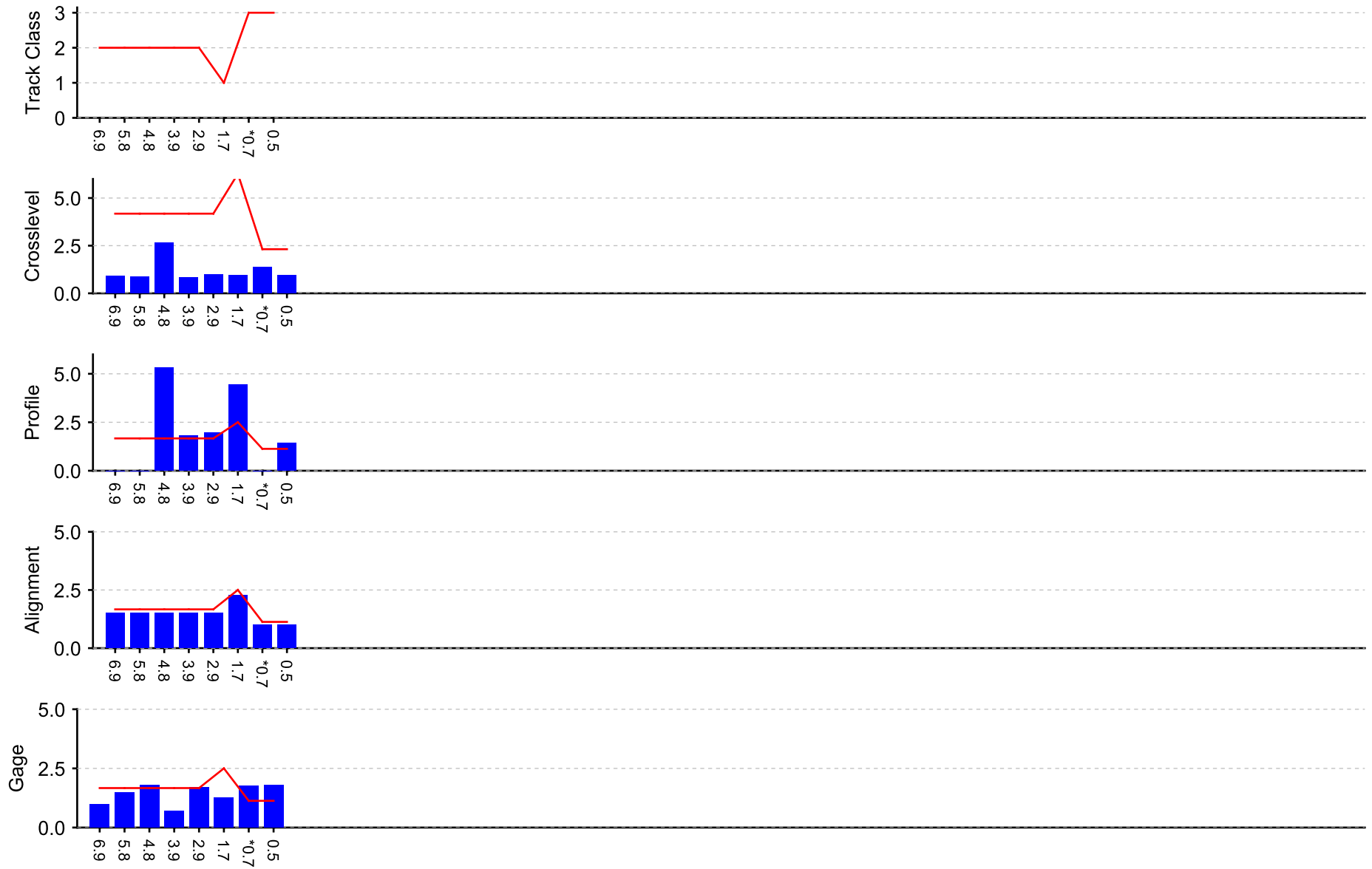
Run Date: 2015-03-16

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Milepost 57 to Milepost 1

Manville, NJ

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Exception Report
Class Plus 1 Exception List Section
Milepost 57 to Milepost 1
Manville, NJ to Philadelphia, PA

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Run Date: 03/16/2015
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MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	160	State Line	NJ	0	9	T	0	0	7	40.544884	-74.579271
57	160	Down Milepost	57.00	0	9	T	0	0	7	40.544881	-74.579273
57	1	Railroad	CSXT -	0	9	T	0	0	7	40.544881	-74.579273
57	2	Subdivision	TRENTON	0	9	T	0	0	7	40.544879	-74.579276
57	4	Track Change	0.00	0	9	T	0	0	6	40.544875	-74.579280
57	17	Posted Speed	50.00	0	9	T	0	0	6	40.544847	-74.579310
57	3683	L Align 62	0.86	1	29	T	4	5	6	40.537059	-74.587608
57	3731	L Align 62	-0.95	1	29	T	4	5	6	40.536957	-74.587717
57	3786	L Align 62	1.01	7	29	T	4	5	6	40.536840	-74.587841
56	5406	Down Milepost	56.00	0	31	T	0	0	6	40.533393	-74.591513
55	5666	Down Milepost	55.00	0	26	T	0	0	6	40.521346	-74.604351
55	2078	Posted Speed	45.00	0	39	C	0	0	6	40.516940	-74.609082
55	2091	R Align 62	0.76	4	39	E	4	5	6	40.516913	-74.609113
55	2191	L Align 62	0.85	20	39	E	4	5	6	40.516709	-74.609353
55	2197	R Align 62	0.92	12	39	E	4	5	6	40.516696	-74.609367
55	2207	R Align 62	0.76	1	39	B	4	5	6	40.516676	-74.609391
55	2236	Rev Elevation	1.39	3	39	B	3	5	6	40.516617	-74.609462
55	2388	R Align 62	-1.20	16	39	E	4	5	6	40.516302	-74.609820
55	2389	L Align 62	-0.91	17	39	E	4	5	6	40.516300	-74.609822
55	2420	R Align 62	0.86	10	39	E	4	5	6	40.516234	-74.609892
55	2423	L Align 62	0.88	12	39	E	4	5	6	40.516228	-74.609899
55	2459	Track Change	0.00	0	39	E	0	0	5	40.516151	-74.609980
55	2762	Crosslevel	-1.18	6	39	T	4	5	5	40.515501	-74.610658
55	2915	Warp 62	1.70	61	39	T	4	5	5	40.515169	-74.610994
55	2927	Posted Speed	50.00	0	39	T	0	0	5	40.515143	-74.611020
55	3046	Crosslevel	1.24	12	39	T	4	5	5	40.514884	-74.611282
55	3231	L Align 62	0.80	6	39	C	4	5	5	40.514485	-74.611691
54	5157	Down Milepost	54.00	0	46	T	0	0	5	40.510391	-74.616063
54	3666	R Prof 62	-1.52	3	48	T	4	5	5	40.502611	-74.624364
53	5953	Down Milepost	53.00	0	47	T	0	0	5	40.497753	-74.629551
53	4627	L Prof 62	-1.59	2	46	T	4	5	5	40.487930	-74.640040
52	4929	Down Milepost	52.00	0	46	T	0	0	5	40.487283	-74.640731
52	253	R Prof 62	-1.51	2	46	T	4	5	5	40.486747	-74.641302
51	4849	Down Milepost	51.00	0	46	T	0	0	5	40.476983	-74.651724
51	2675	L Prof 62	-2.15	10	27	T	3	5	5	40.471304	-74.657784
51	3921	Class Change	2.00	0	23	T	0	0	5	40.468655	-74.660611
51	3921	Posted Speed	25.00	0	23	T	0	0	5	40.468655	-74.660611
51	4692	Class Change	4.00	0	24	T	0	0	5	40.467014	-74.662360
51	4692	Posted Speed	50.00	0	24	T	0	0	5	40.467014	-74.662360
50	5192	Down Milepost	50.00	0	24	T	0	0	5	40.465952	-74.663486
49	5217	Down Milepost	49.00	0	48	T	0	0	5	40.454867	-74.675313
49	439	Crosslevel	1.26	1	48	T	3	5	5	40.453936	-74.676305
49	439	R Prof 62	-1.70	3	48	T	4	5	5	40.453936	-74.676305
49	2842	L Prof 62	-1.63	11	48	T	4	5	5	40.448830	-74.681749

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Class Plus 1 Exception List Section
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Manville, NJ to Philadelphia, PA

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MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
49	2842	R Prof 62	-1.74	12	48	T	4	5	5	40.448830	-74.681749
49	5171	R Prof 62	-1.41	3	46	T	4	5	5	40.443883	-74.687024
48	5231	Down Milepost	48.00	0	46	T	0	0	5	40.443752	-74.687162
48	494	L Prof 62	-2.14	15	47	T	3	5	5	40.442704	-74.688278
48	494	R Prof 62	-2.34	19	47	T	2	5	5	40.442704	-74.688278
48	526	R Prof 62	1.57	9	47	T	4	5	5	40.442637	-74.688351
48	527	L Prof 62	1.53	8	47	T	4	5	5	40.442635	-74.688353
47	5166	Down Milepost	47.00	0	47	T	0	0	5	40.432774	-74.698856
47	788	R Prof 62	-1.41	3	46	T	4	5	5	40.431102	-74.700637
47	1054	R Prof 62	-1.42	5	45	T	4	5	5	40.430539	-74.701236
47	1055	L Prof 62	-1.43	3	45	T	4	5	5	40.430537	-74.701238
47	1883	R Prof 62	-2.42	12	43	T	2	5	5	40.428775	-74.703115
47	1884	L Prof 62	-2.01	10	43	T	3	5	5	40.428773	-74.703117
47	4981	L Prof 62	-1.63	3	29	T	4	5	5	40.422189	-74.710125
46	5414	Down Milepost	46.00	0	26	T	0	0	5	40.421266	-74.711107
46	917	Class Change	2.00	0	21	T	0	0	5	40.419320	-74.713171
46	917	Posted Speed	25.00	0	21	T	0	0	5	40.419320	-74.713171
46	1320	Class Change	4.00	0	21	T	0	0	5	40.418464	-74.714088
46	1320	Posted Speed	50.00	0	21	T	0	0	5	40.418464	-74.714088
46	2420	Crosslevel	1.22	1	28	T	4	5	5	40.416124	-74.716578
46	3967	R Prof 62	1.74	17	36	C	4	5	5	40.413036	-74.720361
46	3969	L Prof 62	1.73	15	36	C	4	5	5	40.413032	-74.720366
45	5111	Down Milepost	45.00	0	34	T	0	0	5	40.411237	-74.723721
44	5542	Down Milepost	44.00	0	30	T	0	0	5	40.402987	-74.740398
43	5115	Down Milepost	43.00	0	29	T	0	0	5	40.395365	-74.755783
43	2431	Class Change	2.00	0	22	T	0	0	5	40.391741	-74.763090
43	2431	Posted Speed	25.00	0	22	T	0	0	5	40.391741	-74.763090
43	2869	Class Change	4.00	0	22	T	0	0	5	40.391084	-74.764402
43	3233	Posted Speed	50.00	0	23	T	0	0	5	40.390546	-74.765493
43	3756	R Prof 62	-1.51	8	25	T	4	5	5	40.389767	-74.767069
42	5549	Down Milepost	42.00	0	34	T	0	0	5	40.387093	-74.772468
42	4486	Gage Wide	57.62	2	42	C	3	5	5	40.379488	-74.784795
41	5198	Down Milepost	41.00	0	43	E	0	0	5	40.377627	-74.785557
40	5358	Down Milepost	40.00	0	45	T	0	0	5	40.363109	-74.788400
40	1164	Crosslevel	1.41	248	37	T	3	5	5	40.359956	-74.789013
40	1473	Crosslevel	1.75	223	34	T	3	5	5	40.359118	-74.789177
40	2942	Class Change	2.00	0	24	T	0	0	5	40.355139	-74.789941
40	2942	Posted Speed	25.00	0	24	T	0	0	5	40.355139	-74.789941
40	3218	Class Change	4.00	0	24	T	0	0	5	40.354389	-74.790091
40	3218	Posted Speed	50.00	0	24	T	0	0	5	40.354389	-74.790091
40	5071	R Align 62	1.25	15	31	T	4	5	5	40.349385	-74.791026
39	5158	Down Milepost	39.00	0	32	T	0	0	5	40.349146	-74.791074
39	4963	L Prof 62	-1.67	10	26	T	4	5	5	40.335676	-74.793727
39	4965	R Prof 62	-1.71	10	26	T	4	5	5	40.335671	-74.793728

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Class Plus 1 Exception List Section
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MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
38	5813	Down Milepost	38.00	0	25	C	0	0	5	40.333374	-74.794206
37	5125	Down Milepost	37.00	0	25	T	0	0	5	40.319536	-74.796955
37	218	L Prof 62	1.37	2	25	T	4	5	5	40.318943	-74.797016
37	4362	L Prof 62	-1.52	3	22	T	4	5	5	40.307628	-74.798194
36	5074	Down Milepost	36.00	0	21	T	0	0	5	40.305674	-74.798413
36	2207	L Prof 62	1.47	3	20	T	4	5	5	40.299650	-74.798991
36	2236	R Prof 62	-2.03	13	20	T	3	5	5	40.299571	-74.799000
36	2238	L Prof 62	-2.23	13	20	T	3	5	5	40.299565	-74.799000
36	2268	R Prof 62	1.79	14	20	T	4	5	5	40.299484	-74.799008
36	2276	R Align 62	1.18	8	20	T	4	5	5	40.299462	-74.799010
36	2309	R Align 62	-0.95	7	21	T	4	5	5	40.299371	-74.799020
36	2347	Track Change	0.00	0	21	T	0	0	2	40.299268	-74.799033
36	2420	Crosslevel	1.27	2	21	T	3	5	2	40.299069	-74.799053
36	2928	L Prof 62	-1.74	7	24	T	4	5	2	40.297680	-74.799201
36	2948	L Prof 62	-1.73	5	24	T	4	5	2	40.297626	-74.799207
35	5489	Down Milepost	35.00	0	29	T	0	0	2	40.290687	-74.799939
35	623	L Runoff*	1.57	31	29	T	3	5	2	40.288984	-74.800114
35	623	R Runoff*	1.51	31	29	T	3	5	2	40.288984	-74.800114
34	4959	Down Milepost	34.00	0	21	T	0	0	2	40.277620	-74.804163
34	4400	R Prof 62	-1.36	1	16	T	4	5	2	40.266525	-74.810314
34	5292	Crosslevel	1.16	4	12	T	4	5	2	40.264276	-74.811570
34	5338	Crosslevel	1.12	1	12	T	4	5	2	40.264162	-74.811636
33	5420	Down Milepost	33.00	0	13	T	0	0	2	40.263953	-74.811757
33	116	Class Change	2.00	0	13	T	0	0	2	40.263666	-74.811924
33	116	Posted Speed	25.00	0	13	T	0	0	2	40.263666	-74.811924
33	2386	Class Change	3.00	0	20	T	0	0	2	40.257943	-74.815114
33	2386	Posted Speed	60.00	0	20	T	0	0	2	40.257943	-74.815114
32	5318	Down Milepost	32.00	0	34	C	0	0	2	40.250541	-74.819202
32	2910	State Line	PA	0	37	T	0	0	2	40.243168	-74.823151
31	4905	Down Milepost	31.00	0	37	C	0	0	2	40.238272	-74.826272
30	5408	Down Milepost	30.00	0	40	T	0	0	2	40.228550	-74.840856
29	5729	Down Milepost	29.00	0	38	T	0	0	2	40.218324	-74.856400
28	5279	Down Milepost	28.00	0	28	T	0	0	2	40.208058	-74.869677
27	4460	Down Milepost	27.00	0	28	T	0	0	2	40.199261	-74.880745
27	1223	R Prof 62	-2.41	14	27	T	2	4	2	40.196851	-74.883779
27	1937	Track Change	0.00	0	26	E	0	0	5	40.195416	-74.885515
27	2376	Class Change	4.00	0	25	T	0	0	5	40.194554	-74.886603
27	2376	Posted Speed	50.00	0	25	T	0	0	5	40.194554	-74.886603
27	4355	Class Change	2.00	0	17	C	0	0	5	40.190435	-74.891183
27	4355	Posted Speed	25.00	0	17	C	0	0	5	40.190435	-74.891183
27	4671	Class Change	4.00	0	18	C	0	0	5	40.189688	-74.891754
27	4671	Posted Speed	50.00	0	18	C	0	0	5	40.189688	-74.891754
26	5231	Down Milepost	26.00	0	19	C	0	0	5	40.188315	-74.892649
26	3570	Class Change	2.00	0	5	C	0	0	5	40.178957	-74.896329

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26	3570	Posted Speed	25.00	0	5	C	0	0	5	40.178957	-74.896329
26	4890	Class Change	4.00	0	21	C	0	0	5	40.175482	-74.897636
26	4890	Posted Speed	50.00	0	21	C	0	0	5	40.175482	-74.897636
25	6101	Down Milepost	25.00	0	24	B	0	0	5	40.172296	-74.898855
25	2672	R Prof 62	-1.59	4	29	T	4	5	5	40.166057	-74.903835
25	2672	Crosslevel	1.38	7	29	T	3	5	5	40.166057	-74.903835
24	5245	Down Milepost	24.00	0	15	T	0	0	5	40.161544	-74.910662
24	3561	Class Change	2.00	0	14	T	0	0	5	40.158080	-74.922493
24	3561	Posted Speed	25.00	0	14	T	0	0	5	40.158080	-74.922493
24	4057	Class Change	4.00	0	14	T	0	0	5	40.157696	-74.924192
24	4057	Posted Speed	50.00	0	14	T	0	0	5	40.157696	-74.924192
23	5312	Down Milepost	23.00	0	15	T	0	0	5	40.156723	-74.928495
23	4549	L Prof 62	-1.45	5	14	T	4	5	5	40.152218	-74.943611
23	4549	R Prof 62	-1.73	15	14	T	4	5	5	40.152218	-74.943611
23	4882	Crosslevel	1.24	9	14	T	4	5	5	40.151839	-74.944693
22	5284	Down Milepost	22.00	0	14	C	0	0	5	40.151386	-74.946005
22	1084	R Runoff*	2.09	31	16	T	2	5	5	40.150299	-74.949603
22	1088	L Runoff*	1.58	31	16	T	3	5	5	40.150295	-74.949616
22	3295	Crosslevel	-1.39	11	14	T	3	5	5	40.148218	-74.957013
19	5661	Down Milepost	19.00	0	5	C	0	0	5	40.145517	-74.964665
19	1147	Class Change	3.00	0	8	B	0	0	5	40.143479	-74.967774
19	1147	Posted Speed	40.00	0	8	B	0	0	5	40.143479	-74.967774
19	1188	Track Change	0.00	0	7	B	0	0	6	40.143400	-74.967879
18	5119	Down Milepost	18.00	0	7	T	0	0	6	40.135841	-74.977885
18	2587	Crosslevel	1.43	4	21	T	3	4	6	40.130848	-74.984442
17	4740	Down Milepost	17.00	0	23	T	0	0	6	40.126689	-74.989903
17	993	Crosslevel	1.54	15	24	T	3	4	6	40.124776	-74.992421
17	1182	Crosslevel	1.60	12	24	T	3	4	6	40.124411	-74.992900
17	1781	Class Change	2.00	0	23	T	0	0	6	40.123254	-74.994417
17	1781	Posted Speed	25.00	0	23	T	0	0	6	40.123254	-74.994417
17	4117	Class Change	3.00	0	24	E	0	0	6	40.118734	-75.000330
17	4117	Posted Speed	30.00	0	24	E	0	0	6	40.118734	-75.000330
17	4143	Twist 31ft*	-1.23	13	24	E	3	4	6	40.118681	-75.000391
17	4281	L Align 62	2.07	19	25	E	2	4	6	40.118401	-75.000722
17	4289	R Align 62	1.72	11	25	E	3	4	6	40.118385	-75.000742
17	4392	Track Change	0.00	0	25	T	0	0	5	40.118185	-75.001002
17	4734	Posted Speed	40.00	0	27	T	0	0	5	40.117526	-75.001870
17	5118	Class Change	4.00	0	31	T	0	0	5	40.116786	-75.002844
17	5118	Posted Speed	50.00	0	31	T	0	0	5	40.116786	-75.002844
17	5325	Warp 62	1.67	23	32	T	4	5	5	40.116386	-75.003369
17	5370	R Prof 62	-1.57	6	32	T	4	5	5	40.116299	-75.003483
17	5370	L Prof 62	-1.65	9	32	T	4	5	5	40.116299	-75.003483
17	5401	L Prof 62	1.38	3	31	T	4	5	5	40.116240	-75.003562
17	5402	R Prof 62	1.60	10	31	T	4	5	5	40.116238	-75.003565

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17	5464	R Align 62	-0.87	2	32	T	4	5	5	40.116118	-75.003722
17	5464	L Align 62	-0.91	3	32	T	4	5	5	40.116118	-75.003722
16	5475	Down Milepost	16.00	0	32	T	0	0	5	40.116095	-75.003752
16	20	L Align 62	0.88	2	32	T	4	5	5	40.116058	-75.003800
16	130	R Prof 62	-1.59	3	32	T	4	5	5	40.115846	-75.004079
16	135	L Prof 62	-1.47	4	32	T	4	5	5	40.115836	-75.004092
16	937	Class Change	2.00	0	22	T	0	0	5	40.114292	-75.006125
16	937	Posted Speed	25.00	0	22	T	0	0	5	40.114292	-75.006125
16	1475	Class Change	4.00	0	21	T	0	0	5	40.113251	-75.007488
16	1475	Posted Speed	50.00	0	21	T	0	0	5	40.113251	-75.007488
15	5286	Down Milepost	15.00	0	30	T	0	0	5	40.105888	-75.017157
15	3138	Class Change	2.00	0	23	T	0	0	5	40.099833	-75.025113
15	3138	Posted Speed	25.00	0	23	T	0	0	5	40.099833	-75.025113
15	3391	R Prof 62	-2.53	7	23	T	2	3	5	40.099346	-75.025752
15	3392	L Prof 62	-2.68	10	23	T	2	3	5	40.099344	-75.025755
15	3470	Class Change	4.00	0	23	T	0	0	5	40.099194	-75.025953
15	3470	Posted Speed	50.00	0	23	T	0	0	5	40.099194	-75.025953
15	5351	Crosslevel	-1.11	1	31	T	4	5	5	40.095553	-75.030720
15	5362	Crosslevel	-1.12	4	31	T	4	5	5	40.095532	-75.030748
14	5534	Down Milepost	14.00	0	30	T	0	0	5	40.095199	-75.031188
14	1458	L Prof 62	-1.39	5	22	T	4	5	5	40.092389	-75.034882
14	1458	R Prof 62	-1.75	12	22	T	4	5	5	40.092389	-75.034882
13	4344	Down Milepost	13.00	0	25	T	0	0	5	40.086815	-75.042196
12	5751	Down Milepost	12.00	0	27	T	0	0	5	40.075702	-75.056766
12	5057	R Prof 62	-1.45	8	17	C	4	5	5	40.067682	-75.071322
12	5141	R Prof 62	1.36	1	17	C	4	5	5	40.067590	-75.071595
12	5172	R Prof 62	-1.42	5	17	C	4	5	5	40.067555	-75.071696
11	5596	Down Milepost	11.00	0	17	C	0	0	5	40.067098	-75.073092
11	1423	R Prof 62	-1.44	6	17	T	4	5	5	40.065617	-75.077787
11	2274	Crosslevel	-1.13	5	18	T	4	5	5	40.064725	-75.080591
11	2509	Warp 62	1.77	62	18	T	3	5	5	40.064469	-75.081361
11	2516	L Prof 62	-1.56	7	18	T	4	5	5	40.064461	-75.081384
11	2534	Twist 31ft*	0.92	5	17	B	4	5	5	40.064442	-75.081443
11	2588	Twist 31ft*	0.87	3	17	B	4	5	5	40.064383	-75.081620
11	2851	Class Change	1.00	0	17	C	0	0	5	40.064106	-75.082484
11	2851	Posted Speed	10.00	0	17	C	0	0	5	40.064106	-75.082484
11	3866	Class Change	2.00	0	12	B	0	0	5	40.062722	-75.085626
11	3866	Posted Speed	25.00	0	12	B	0	0	5	40.062722	-75.085626
11	3992	Twist 31ft*	1.52	5	10	E	2	3	5	40.062509	-75.085980
11	4553	Class Change	4.00	0	10	T	0	0	5	40.061474	-75.087473
11	4553	Posted Speed	50.00	0	10	T	0	0	5	40.061474	-75.087473
10	5012	Down Milepost	10.00	0	9	T	0	0	5	40.060602	-75.088674
10	1338	Class Change	3.00	0	21	T	0	0	5	40.058106	-75.092151
10	1338	Posted Speed	40.00	0	21	T	0	0	5	40.058106	-75.092151

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9	5500	Down Milepost	9.00	0	30	T	0	0	5	40.051010	-75.103747
8	5548	Down Milepost	8.00	0	25	T	0	0	5	40.038882	-75.114971
8	3436	Gage Wide	57.75	8	12	B	3	4	5	40.032591	-75.124034
8	3489	Gage Wide	57.70	7	12	C	3	4	5	40.032533	-75.124207
8	3545	Gage Wide	57.72	5	13	C	3	4	5	40.032478	-75.124394
7	4777	Down Milepost	7.00	0	14	T	0	0	5	40.032496	-75.128732
7	3111	Gage Wide	57.84	6	15	C	1	4	5	40.033452	-75.139700
7	3562	Gage Wide	57.66	7	13	C	3	4	5	40.032985	-75.141181
7	3629	Gage Wide	57.61	2	13	E	3	4	5	40.032889	-75.141385
7	3640	Gage Wide	57.61	2	13	E	3	4	5	40.032873	-75.141418
7	3909	Class Change	2.00	0	12	T	0	0	5	40.032457	-75.142211
7	3909	Posted Speed	25.00	0	12	T	0	0	5	40.032457	-75.142211
6	5267	Down Milepost	6.00	0	10	T	0	0	5	40.030349	-75.146205
6	2878	Class Change	1.00	0	8	T	0	0	5	40.025822	-75.154603
6	2878	Posted Speed	10.00	0	8	T	0	0	5	40.025822	-75.154603
6	5701	Class Change	2.00	0	7	E	0	0	5	40.020159	-75.160937
6	5701	Posted Speed	25.00	0	7	E	0	0	5	40.020159	-75.160937
5	6146	Down Milepost	5.00	0	9	T	0	0	5	40.018980	-75.160525
5	3193	Track Change	0.00	0	15	T	0	0	1	40.012525	-75.164964
4	5071	Down Milepost	4.00	0	15	T	0	0	1	40.009712	-75.170568
3	4831	Down Milepost	3.00	0	11	T	0	0	1	40.006975	-75.187126
3	497	Posted Speed	20.00	0	9	B	0	0	1	40.006892	-75.188905
3	1285	Posted Speed	25.00	0	6	C	0	0	1	40.006324	-75.191578
2	5372	Down Milepost	2.00	0	24	T	0	0	1	39.995981	-75.196620
1	5893	Down Milepost	1.00	0	25	B	0	0	1	39.983630	-75.202085
1	994	Gage Wide	57.87	2	24	B	1	3	1	39.981740	-75.199546
1	1034	Gage Wide	57.88	1	24	B	1	3	1	39.981678	-75.199429
1	1070	Gage Wide	57.87	1	24	B	1	3	1	39.981626	-75.199320
1	3564	Posted Speed	20.00	0	19	T	0	0	1	39.977853	-75.192212
1	5090	R Prof 62	-2.38	3	18	T	2	3	1	39.975968	-75.187661
1	5216	Track Change	0.00	0	19	E	0	0	5	39.975652	-75.187471
1	8516	Class Change	1.00	0	13	T	0	0	5	39.968267	-75.180993
1	8516	Posted Speed	10.00	0	13	T	0	0	5	39.968267	-75.180993
1	8810	Rev Elevation	2.44	10	8	B	1	2	5	39.967674	-75.180282
1	10117	Class Change	2.00	0	11	E	0	0	5	39.964468	-75.179217
1	10117	Posted Speed	20.00	0	11	E	0	0	5	39.964468	-75.179217
1	11655	Subdivision	PHILADE	0	8	T	0	0	5	39.960345	-75.179243
0	11788	Up Milepost	0.00	0	9	B	0	0	5	39.959994	-75.179104
0	254	Class Change	3.00	0	10	C	0	0	5	39.959324	-75.178886
0	254	Posted Speed	30.00	0	10	C	0	0	5	39.959324	-75.178886
0	317	Track Change	0.00	0	10	C	0	0	1	39.959157	-75.178828
1	7263	Up Milepost	1.00	0	17	T	0	0	1	39.943284	-75.190269

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MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude

Notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Rail Impact Values are unitless; indicating a location with a large vertical axle acceleration

Rail Cant Exceptions values indicate degrees.

(RSA) indicates possible Rail Seat Abrasion. The following fields are irrelevant for Cant Exceptions: LC, PC

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		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot			
MP	FT	Exc	FT	Drop	Exc	FT	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	Cls	Cls	Trk
57	4	-	-	-	-	-	3	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	6	
55	5666	-	-	-	-	-	8	92	-	1	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	5	6	
55	2459	-	-	-	-	-	1	6	-	2	18	-	-	-	-	-	-	-	-	-	-	1	61	-	-	-	-	4	5	5	
54	5157	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	-	-	-	-	-	-	-	-	4	5	5	
53	5953	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	4	5	5	
52	4929	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	4	5	5	
51	4849	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	10	1	-	-	-	-	-	-	-	-	-	3	5	5	
49	5217	-	-	-	-	-	-	-	-	1	1	1	-	-	-	4	29	-	-	-	-	-	-	-	-	-	-	3	5	5	
48	5231	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	51	2	-	-	-	-	-	-	-	-	-	2	5	5	
47	5166	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	36	2	-	-	-	-	-	-	-	-	-	2	5	5	
46	1320	-	-	-	-	-	-	-	-	1	1	-	-	-	-	2	32	-	-	-	-	-	-	-	-	-	-	4	5	5	
43	2869	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	8	-	-	-	-	-	-	-	-	-	-	4	5	5	
42	5549	1	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	5	5	
40	5358	-	-	-	-	-	-	-	-	2	471	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	5	5	
40	3218	-	-	-	-	-	1	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
39	5158	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	20	-	-	-	-	-	-	-	-	-	-	4	5	5	
37	5125	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	5	-	-	-	-	-	-	-	-	-	-	4	5	5	
36	5074	-	-	-	-	-	2	15	-	-	-	-	-	-	-	4	43	2	-	-	-	-	-	-	-	-	-	3	5	5	
36	2347	-	-	-	-	-	-	-	-	1	2	1	-	-	-	2	12	-	-	-	-	-	-	-	-	-	-	3	5	2	
35	5489	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	62	2	-	-	-	-	-	-	3	5	2	
34	4959	-	-	-	-	-	-	-	-	2	5	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	4	5	2	
27	4460	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	14	1	-	-	-	-	-	-	-	-	-	2	4	2	
25	6101	-	-	-	-	-	-	-	-	1	7	1	-	-	-	1	4	-	-	-	-	-	-	-	-	-	-	3	5	5	
23	5312	-	-	-	-	-	-	-	-	1	9	-	-	-	-	2	20	-	-	-	-	-	-	-	-	-	-	4	5	5	
22	5284	-	-	-	-	-	-	-	-	1	11	1	-	-	-	-	-	-	2	62	2	-	-	-	-	-	-	2	5	5	
18	5119	-	-	-	-	-	-	-	-	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	6	
17	4740	-	-	-	-	-	-	-	-	2	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	6	
17	4117	-	-	-	-	-	2	30	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	13	-	-	2	4	6

Exception Report
Class Plus 1 Exception Summary Section
Milepost 57 to Milepost 1
Manville, NJ to Philadelphia, PA

Page 2 of 2
Run Date: 03/16/2015
Run ID: 2015031601

		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl				
MP	FT	Exc	FT	Drop	Exc	FT	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	Cls	Cls	Trk
17	5118	-	-	-	-	-	2	5	-	-	-	-	-	-	-	4	28	-	-	-	-	1	23	-	-	-	-	-	4	5	5
16	5475	-	-	-	-	-	1	2	-	-	-	-	-	-	-	2	7	-	-	-	-	-	-	-	-	-	-	-	4	5	5
15	3138	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	17	-	-	-	-	-	-	-	-	-	-	-	2	3	5
15	3470	-	-	-	-	-	-	-	-	2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5
14	5534	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	17	-	-	-	-	-	-	-	-	-	-	-	4	5	5
12	5751	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	14	-	-	-	-	-	-	-	-	-	-	-	4	5	5
11	5596	-	-	-	-	-	-	-	-	1	5	-	-	-	-	2	13	-	-	-	-	1	62	1	2	8	-	-	3	5	5
11	3866	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5	-	-	2	3	5
8	5548	3	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5
7	4777	4	17	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	5
1	5893	3	4	3	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	-	-	-	-	-	-	-	-	-	1	3	1
1	8516	-	-	-	-	-	-	-	-	1	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	5
		11	43	5	-	-	20	174	1	20	579	7	-	-	-	52	391	8	4	124	4	3	146	1	4	26	-	-			

Total Miles: 58.60
Exceptions per 100 Miles: 194.54
CY13 National Average Exceptions per 100 miles: 12.4

Exception Report
Alignment 62 MCO Stations
Milepost 57 to Milepost 1
Manville, NJ to Philadelphia, PA

Page 1 of 1
Run Date: 03/16/2015
Run ID: 2015031601

	MP	FT	Parameter		Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
	17	4281	L Align 62		2.07	11	25	E	2	3	6	40.118401	-75.000722
	MP	FT	LAlign62	LAlignMCO	RAlign62	RAlignMCO	Curve		Xlevel		Gage		
1	17	4219	0.72	3.26			2.61		-0.35		56.98		
2	17	4235	0.27	3.02			2.79		-0.55		57.13		
3	17	4250	0.09	2.82			2.81		-0.22		57.09		
4	17	4266	1.0	3.64			2.7		0.28		57.16		
5	17	4281	2.07	4.47			2.41		0.08		57.34		
6	17	4296	1.14	3.2			1.99		-0.11		56.77		
7	17	4312	-0.86	0.88			1.48		-0.04		56.59		
8	17	4327	-1.23	0.24			1.0		-0.21		56.6		
9	17	4343	-0.88	0.19			0.56		0.15		56.44		
AVG				2.41									

DOTX 220 Geometry Car

United States Department of Transportation

AUTOMATED TRACK INSPECTION PROGRAM

TRACK GEOMETRY INSPECTION REPORT

Laurel, MT to Helena, MT

Railroad: MONTANA RAIL LINK (MRL)

Survey Number: 1370

Mile Post 16 to Mile Post 237



Prepared for:

United States Department of Transportation
Federal Railroad Administration
Office of Safety
Washington, D.C.

Prepared by:

ENSCO, Inc.
5400 Port Royal Rd
Springfield, VA 22151



Testing Cert. 2411.01

Approved By:

Survey Director:

CARLOS ALFARO

Signature

Date

Under the U.S. Department of Transportation, Federal Railroad Administration (FRA), Office of Safety Assurance and Compliance, Automated Track Inspection Program and in accordance with 49 CFR 213 Federal Track Safety Standards, this Track Geometry Inspection Report provides a list of exceptions that relate only to the time and date the track was inspected and the required remedial action taken. This compliance report is offered only to the track owner and is not to be reproduced to others in whole or part without the expressed written consent of the FRA and the track owner. FRA requests any reprinting be labeled as a copy of the original.

NOTES

During an Automated Track Inspection Program (ATIP) survey, data is collected by the ATIP cars, which generate a Track Geometry Inspection Report (TGIR). These reports make the analysis of the track easier to read and comprehend than attempting to read exceptions from a video strip chart alone. TGIR are generated electronically for printing in near real-time onboard the ATIP cars or can be reprocessed later upon request to the FRA. Copies are transmitted electronically as a Portable Document Format (PDF) using satellite or Internet communications. Copies are distributed as follows:

1. One copy is given to the railroad
2. Two copies are given to the principal FRA Inspector
3. One copy is sent to the FRA Washington headquarters

TGIR consists of five separate sections. Exceptions are not reported for Profile and Alignment when ATIP car speed is less than five (5) and fifteen (15) mile per hour, respectively. The sample interval for track surveyed is one (1) foot.

A complete description of the information provided in the report is available at <http://atip.fra.dot.gov/TGIR>

Exception Report
Exception List Section
Milepost 16 to Milepost 237
Laurel, MT to Helena, MT

Page 1 of 7
Run Date: 09/24/2013
Run ID: 2013092401

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	142	Class Change	1.00	0	4	C	0	0	7	45.669026	-108.754216
0	142	Posted Speed	10.00	0	4	C	0	0	7	45.669026	-108.754216
0	142	State Line	MT	0	4	C	0	0	7	45.669026	-108.754216
0	143	Railroad	MRL -	0	4	C	0	0	7	45.669027	-108.754220
0	143	Track Change	0.00	0	4	C	0	0	7	45.669027	-108.754220
0	144	Subdivision	1ST	0	4	C	0	0	7	45.669027	-108.754224
0	3114	Class Change	2.00	0	5	T	0	0	7	45.670763	-108.762312
0	3114	Posted Speed	25.00	0	5	T	0	0	7	45.670763	-108.762312
0	3114	Track Change	0.00	0	5	T	0	0	2	45.670763	-108.762312
0	5170	Class Change	3.00	0	9	T	0	0	2	45.668913	-108.769864
0	5170	Posted Speed	40.00	0	9	T	0	0	2	45.668913	-108.769864
0	5176	Subdivision	2ND	0	9	T	0	0	2	45.668907	-108.769886
0	7566	Class Change	1.00	0	10	B	0	0	2	45.666751	-108.778692
0	7566	Posted Speed	10.00	0	10	B	0	0	2	45.666751	-108.778692
0	7799	Class Change	3.00	0	10	B	0	0	2	45.666576	-108.779565
0	7799	Posted Speed	40.00	0	10	B	0	0	2	45.666576	-108.779565
0	7821	Track Change	0.00	0	10	E	0	0	1	45.666558	-108.779647
16	10267	Up Milepost	16.00	0	37	T	0	0	1	45.664349	-108.788661
17	5141	Up Milepost	17.00	0	32	T	0	0	1	45.659708	-108.807595
17	3968	Track Change	0.00	0	8	T	0	0	5	45.656105	-108.822198
17	3998	Class Change	4.00	0	7	T	0	0	5	45.656076	-108.822307
17	3998	Posted Speed	60.00	0	7	T	0	0	5	45.656076	-108.822307
17	4366	Class Change	3.00	0	7	T	0	0	5	45.656562	-108.820243
17	4366	Posted Speed	40.00	0	7	T	0	0	5	45.656562	-108.820243
17	4371	Track Change	0.00	0	8	T	0	0	2	45.656559	-108.820261
17	4394	Class Change	2.00	0	8	T	0	0	2	45.656537	-108.820345
17	4394	Posted Speed	25.00	0	8	T	0	0	2	45.656537	-108.820345
17	4904	Class Change	4.00	0	18	C	0	0	2	45.656094	-108.822230
17	4904	Posted Speed	60.00	0	18	C	0	0	2	45.656094	-108.822230
17	4963	Track Change	0.00	0	20	E	0	0	5	45.656039	-108.822447
18	6213	Up Milepost	18.00	0	41	T	0	0	5	45.654893	-108.827044
19	5274	Up Milepost	19.00	0	60	T	0	0	5	45.650130	-108.846455
20	5303	Up Milepost	20.00	0	60	T	0	0	5	45.645334	-108.865975
21	5301	Up Milepost	21.00	0	58	T	0	0	5	45.640540	-108.885484
22	5288	Up Milepost	22.00	0	58	T	0	0	5	45.635750	-108.904938
23	5310	Up Milepost	23.00	0	58	T	0	0	5	45.630975	-108.924492
24	5287	Up Milepost	24.00	0	57	T	0	0	5	45.626478	-108.944072
25	5317	Up Milepost	25.00	0	58	T	0	0	5	45.622620	-108.964059
26	5291	Up Milepost	26.00	0	57	C	0	0	5	45.618499	-108.983817
27	5287	Up Milepost	27.00	0	61	T	0	0	5	45.612961	-109.002852
28	5291	Up Milepost	28.00	0	58	T	0	0	5	45.607411	-109.021895
29	5297	Up Milepost	29.00	0	57	T	0	0	5	45.600509	-109.039990
30	5315	Up Milepost	30.00	0	61	B	0	0	5	45.592975	-109.057695
31	5259	Up Milepost	31.00	0	57	T	0	0	5	45.591350	-109.078006

Exception Report
Exception List Section
Milepost 16 to Milepost 237
Laurel, MT to Helena, MT

Page 2 of 7
Run Date: 09/24/2013
Run ID: 2013092401

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
32	5297	Up Milepost	32.00	0	61	T	0	0	5	45.592689	-109.098363
33	5308	Up Milepost	33.00	0	58	T	0	0	5	45.595975	-109.118510
34	5281	Up Milepost	34.00	0	59	T	0	0	5	45.599381	-109.138499
35	5304	Up Milepost	35.00	0	62	T	0	0	5	45.604137	-109.158027
36	5276	Up Milepost	36.00	0	59	T	0	0	5	45.610371	-109.176456
37	5295	Up Milepost	37.00	0	61	T	0	0	5	45.617126	-109.194403
38	5279	Up Milepost	38.00	0	61	T	0	0	5	45.626432	-109.209768
39	5192	Up Milepost	39.00	0	52	T	0	0	5	45.631147	-109.228825
39	6443	Posted Speed	45.00	0	43	T	0	0	5	45.636471	-109.252769
41	10791	Up Milepost	41.00	0	47	T	0	0	5	45.640270	-109.268730
41	4964	Class Change	3.00	0	38	T	0	0	5	45.641320	-109.288019
41	4964	Posted Speed	40.00	0	38	T	0	0	5	45.641320	-109.288019
42	5195	Up Milepost	42.00	0	38	B	0	0	5	45.641339	-109.288923
42	4451	Class Change	4.00	0	40	B	0	0	5	45.640367	-109.305395
42	4451	Posted Speed	60.00	0	40	B	0	0	5	45.640367	-109.305395
43	5414	Up Milepost	43.00	0	41	E	0	0	5	45.641115	-109.308990
44	5303	Up Milepost	44.00	0	62	C	0	0	5	45.647980	-109.326927
45	5257	Up Milepost	45.00	0	58	T	0	0	5	45.659095	-109.339943
46	5318	Up Milepost	46.00	0	60	T	0	0	5	45.670575	-109.352641
49	15891	Up Milepost	49.00	0	58	C	0	0	5	45.699667	-109.393640
50	5290	Up Milepost	50.00	0	55	T	0	0	5	45.693807	-109.411739
50	3717	Class Change	3.00	0	40	T	0	0	5	45.686797	-109.422033
50	3717	Posted Speed	40.00	0	40	T	0	0	5	45.686797	-109.422033
51	5284	Up Milepost	51.00	0	37	E	0	0	5	45.686211	-109.427856
51	4937	Class Change	4.00	0	42	T	0	0	5	45.685831	-109.445926
51	4937	Posted Speed	60.00	0	42	T	0	0	5	45.685831	-109.445926
52	5308	Up Milepost	52.00	0	42	T	0	0	5	45.685970	-109.447363
53	5269	Up Milepost	53.00	0	62	C	0	0	5	45.689344	-109.467254
54	5303	Up Milepost	54.00	0	60	T	0	0	5	45.697888	-109.483967
55	5790	Up Milepost	55.00	0	59	T	0	0	5	45.706783	-109.502667
56	4818	Up Milepost	56.00	0	60	T	0	0	5	45.708931	-109.520949
57	5232	Up Milepost	57.00	0	60	T	0	0	5	45.709819	-109.541338
58	5357	Up Milepost	58.00	0	58	T	0	0	5	45.710724	-109.562213
59	5287	Up Milepost	59.00	0	49	T	0	0	5	45.711614	-109.582815
60	5295	Up Milepost	60.00	0	39	C	0	0	5	45.707514	-109.602177
60	4052	R Runoff*	1.68	31	59	T	3	4	5	45.709381	-109.617614
61	5287	Up Milepost	61.00	0	61	T	0	0	5	45.710363	-109.622232
62	5297	Up Milepost	62.00	0	59	T	0	0	5	45.717495	-109.640115
63	5289	Up Milepost	63.00	0	58	T	0	0	5	45.725457	-109.657360
64	5270	Up Milepost	64.00	0	58	C	0	0	5	45.733323	-109.674602
65	5333	Up Milepost	65.00	0	62	T	0	0	5	45.734456	-109.695143
66	5265	Up Milepost	66.00	0	61	C	0	0	5	45.735716	-109.715626
67	5310	Up Milepost	67.00	0	57	T	0	0	5	45.733960	-109.736160
68	5408	Up Milepost	68.00	0	63	C	0	0	5	45.737256	-109.755512

Exception Report
Exception List Section
Milepost 16 to Milepost 237
Laurel, MT to Helena, MT

Page 3 of 7
Run Date: 09/24/2013
Run ID: 2013092401

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
69	5189	Up Milepost	69.00	0	59	T	0	0	5	45.749192	-109.766233
70	5296	Up Milepost	70.00	0	61	T	0	0	5	45.760249	-109.779605
71	5254	Up Milepost	71.00	0	60	T	0	0	5	45.771215	-109.792878
72	5342	Up Milepost	72.00	0	61	T	0	0	5	45.781716	-109.807247
73	5268	Up Milepost	73.00	0	58	T	0	0	5	45.789790	-109.824309
74	5300	Up Milepost	74.00	0	62	T	0	0	5	45.797908	-109.841480
75	5333	Up Milepost	75.00	0	59	T	0	0	5	45.807593	-109.856937
76	5254	Up Milepost	76.00	0	57	T	0	0	5	45.818088	-109.870974
77	5338	Up Milepost	77.00	0	60	T	0	0	5	45.827342	-109.887046
78	5258	Up Milepost	78.00	0	61	T	0	0	5	45.835831	-109.903651
79	5281	Up Milepost	79.00	0	57	E	0	0	5	45.842646	-109.921575
80	5320	Up Milepost	80.00	0	31	C	0	0	5	45.844111	-109.942186
81	5275	Up Milepost	81.00	0	37	T	0	0	5	45.835163	-109.958272
82	5303	Up Milepost	82.00	0	25	T	0	0	5	45.826749	-109.975119
83	5286	Up Milepost	83.00	0	43	T	0	0	5	45.819016	-109.992597
84	5328	Up Milepost	84.00	0	58	T	0	0	5	45.811222	-110.010203
85	5265	Up Milepost	85.00	0	59	T	0	0	5	45.803665	-110.027730
86	5293	Up Milepost	86.00	0	54	C	0	0	5	45.796545	-110.045752
87	5277	Up Milepost	87.00	0	56	T	0	0	5	45.787876	-110.062245
88	5319	Up Milepost	88.00	0	61	T	0	0	5	45.778628	-110.078261
89	5300	Up Milepost	89.00	0	56	C	0	0	5	45.771437	-110.096054
90	5254	Up Milepost	90.00	0	60	T	0	0	5	45.767109	-110.115637
91	5307	Up Milepost	91.00	0	59	T	0	0	5	45.762754	-110.135433
92	5286	Up Milepost	92.00	0	57	T	0	0	5	45.758409	-110.155141
93	5314	Up Milepost	93.00	0	61	T	0	0	5	45.753602	-110.174668
94	5216	Up Milepost	94.00	0	59	E	0	0	5	45.746033	-110.191198
95	5297	Up Milepost	95.00	0	59	T	0	0	5	45.745344	-110.211870
96	5298	Up Milepost	96.00	0	58	T	0	0	5	45.737235	-110.227876
97	5295	Up Milepost	97.00	0	58	C	0	0	5	45.726303	-110.241410
97	5265	Posted Speed	55.00	0	53	T	0	0	5	45.718515	-110.258702
98	5308	Up Milepost	98.00	0	53	T	0	0	5	45.718451	-110.258847
99	5289	Up Milepost	99.00	0	56	C	0	0	5	45.705767	-110.261762
100	5232	Up Milepost	100.00	0	56	C	0	0	5	45.693779	-110.269658
100	1243	Posted Speed	60.00	0	56	T	0	0	5	45.693669	-110.274473
101	5256	Up Milepost	101.00	0	62	S	0	0	5	45.694592	-110.290085
102	5330	Up Milepost	102.00	0	59	C	0	0	5	45.696869	-110.310623
103	5237	Up Milepost	103.00	0	60	T	0	0	5	45.702357	-110.329501
104	5358	Up Milepost	104.00	0	59	T	0	0	5	45.707045	-110.349224
105	5260	Up Milepost	105.00	0	59	B	0	0	5	45.709683	-110.369415
106	5262	Up Milepost	106.00	0	57	T	0	0	5	45.712106	-110.389352
107	5295	Up Milepost	107.00	0	60	T	0	0	5	45.713920	-110.409546
108	5309	Up Milepost	108.00	0	60	T	0	0	5	45.713413	-110.430261
109	5275	Up Milepost	109.00	0	57	T	0	0	5	45.709953	-110.449873
110	5326	Up Milepost	110.00	0	51	T	0	0	5	45.702778	-110.467968

Exception Report
Exception List Section
Milepost 16 to Milepost 237
Laurel, MT to Helena, MT

Page 4 of 7
Run Date: 09/24/2013
Run ID: 2013092401

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
111	5287	Up Milepost	111.00	0	33	T	0	0	5	45.695652	-110.485927
112	5306	Up Milepost	112.00	0	26	T	0	0	5	45.688503	-110.503938
113	5265	Up Milepost	113.00	0	32	T	0	0	5	45.681402	-110.521813
113	5169	Class Change	3.00	0	21	T	0	0	5	45.674430	-110.539363
113	5169	Posted Speed	30.00	0	21	T	0	0	5	45.674430	-110.539363
114	5296	Up Milepost	114.00	0	20	T	0	0	5	45.674258	-110.539798
115	5293	Up Milepost	115.00	0	20	T	0	0	5	45.665558	-110.556282
115	3331	Posted Speed	35.00	0	19	T	0	0	5	45.659993	-110.566563
116	5493	Up Milepost	116.00	0	18	T	0	0	5	45.657498	-110.574133
117	5089	Up Milepost	117.00	0	20	C	0	0	5	45.653664	-110.593156
118	5565	Up Milepost	118.00	0	36	T	0	0	5	45.656529	-110.614359
119	5114	Up Milepost	119.00	0	35	C	0	0	5	45.659936	-110.633341
120	5237	Up Milepost	120.00	0	34	T	0	0	5	45.662355	-110.652455
121	5389	Up Milepost	121.00	0	35	C	0	0	5	45.665051	-110.672403
122	5195	Up Milepost	122.00	0	35	C	0	0	5	45.666169	-110.692589
123	5309	Up Milepost	123.00	0	31	C	0	0	5	45.664258	-110.712955
124	5514	Up Milepost	124.00	0	34	T	0	0	5	45.664731	-110.734083
125	5336	Up Milepost	125.00	0	30	T	0	0	5	45.661739	-110.754301
126	5244	Up Milepost	126.00	0	30	C	0	0	5	45.656998	-110.773589
127	5059	Up Milepost	127.00	0	21	T	0	0	5	45.662583	-110.791364
127	1304	Posted Speed	30.00	0	13	T	0	0	5	45.664275	-110.795837
129	11114	Up Milepost	129.00	0	24	T	0	0	5	45.662761	-110.832624
130	3512	Up Milepost	130.00	0	30	T	0	0	5	45.658727	-110.844283
131	5292	Up Milepost	131.00	0	30	T	0	0	5	45.649758	-110.860235
131	4046	Gage Wide	57.86	1	31	B	1	3	5	45.646690	-110.874411
132	5230	Up Milepost	132.00	0	28	B	0	0	5	45.645730	-110.878808
133	5350	Up Milepost	133.00	0	18	E	0	0	5	45.643436	-110.898572
134	5288	Up Milepost	134.00	0	18	E	0	0	5	45.640049	-110.917578
135	5358	Up Milepost	135.00	0	26	T	0	0	5	45.647119	-110.935492
135	1525	Posted Speed	40.00	0	32	T	0	0	5	45.650382	-110.939219
136	5301	Up Milepost	136.00	0	38	T	0	0	5	45.658427	-110.948453
137	5280	Up Milepost	138.00	0	38	T	0	0	5	45.666996	-110.964309
139	10857	Up Milepost	139.00	0	39	E	0	0	5	45.675209	-111.004747
140	5008	Up Milepost	140.00	0	34	T	0	0	5	45.684031	-111.019696
140	1659	Posted Speed	35.00	0	32	T	0	0	5	45.687098	-111.024467
140	4909	Class Change	4.00	0	38	T	0	0	5	45.694197	-111.032072
140	4909	Posted Speed	60.00	0	38	T	0	0	5	45.694197	-111.032072
141	5572	Up Milepost	141.00	0	38	C	0	0	5	45.695686	-111.033577
142	5019	Up Milepost	142.00	0	43	T	0	0	5	45.706353	-111.045872
143	5337	Up Milepost	143.00	0	44	T	0	0	5	45.715687	-111.061804
144	5258	Up Milepost	144.00	0	47	T	0	0	5	45.724251	-111.078297
145	5283	Up Milepost	145.00	0	49	T	0	0	5	45.732854	-111.094876
146	5305	Up Milepost	146.00	0	53	T	0	0	5	45.741492	-111.111532
147	5281	Up Milepost	147.00	0	55	T	0	0	5	45.750085	-111.128118

Exception Report
Exception List Section
Milepost 16 to Milepost 237
Laurel, MT to Helena, MT

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Run Date: 09/24/2013
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MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
148	5302	Up Milepost	148.00	0	56	T	0	0	5	45.758711	-111.144775
148	2186	CBV Peak to Peak*	0.65	1	56	T	0	0	5	45.762266	-111.151642
149	5282	Up Milepost	149.00	0	51	T	0	0	5	45.767304	-111.161377
150	5311	Up Milepost	150.00	0	45	T	0	0	5	45.775942	-111.178074
151	5313	Up Milepost	151.00	0	45	T	0	0	5	45.784579	-111.194778
152	5605	Up Milepost	152.00	0	47	T	0	0	5	45.793690	-111.212403
153	4958	Up Milepost	153.00	0	48	T	0	0	5	45.801747	-111.227996
154	5335	Up Milepost	154.00	0	47	T	0	0	5	45.810415	-111.244779
155	5222	Up Milepost	155.00	0	47	T	0	0	5	45.818898	-111.261211
156	5326	Up Milepost	156.00	0	49	T	0	0	5	45.827601	-111.277916
157	5296	Up Milepost	157.00	0	39	T	0	0	5	45.836397	-111.294381
158	5302	Up Milepost	158.00	0	48	T	0	0	5	45.845199	-111.310869
159	5295	Up Milepost	159.00	0	48	T	0	0	5	45.853990	-111.327340
160	5264	Up Milepost	160.00	0	45	T	0	0	5	45.862724	-111.343723
161	5325	Up Milepost	161.00	0	44	T	0	0	5	45.871561	-111.360296
162	5283	Up Milepost	162.00	0	32	T	0	0	5	45.880327	-111.376742
162	2935	Posted Speed	45.00	0	27	T	0	0	5	45.885192	-111.385880
163	5479	Up Milepost	163.00	0	22	E	0	0	5	45.886392	-111.395151
164	5235	Up Milepost	164.00	0	29	T	0	0	5	45.886737	-111.414819
164	3853	Class Change	2.00	0	21	T	0	0	5	45.885908	-111.429617
164	3853	Posted Speed	25.00	0	21	T	0	0	5	45.885908	-111.429617
165	5451	Up Milepost	165.00	0	26	T	0	0	5	45.886545	-111.435674
165	2058	Class Change	4.00	0	26	T	0	0	5	45.889770	-111.441941
165	2058	Posted Speed	45.00	0	26	T	0	0	5	45.889770	-111.441941
166	4899	Up Milepost	166.00	0	36	T	0	0	5	45.896591	-111.447283
166	1145	Posted Speed	60.00	0	35	T	0	0	5	45.899226	-111.449691
167	5345	Up Milepost	167.00	0	36	T	0	0	5	45.908523	-111.459367
168	5298	Up Milepost	168.00	0	34	T	0	0	5	45.919495	-111.472924
169	5293	Up Milepost	169.00	0	33	T	0	0	5	45.930400	-111.486571
169	1245	Class Change	2.00	0	26	T	0	0	5	45.932963	-111.489780
169	1245	Posted Speed	25.00	0	26	T	0	0	5	45.932963	-111.489780
169	3828	Class Change	3.00	0	25	E	0	0	5	45.939365	-111.489384
169	3828	Posted Speed	40.00	0	25	E	0	0	5	45.939365	-111.489384
170	5306	Up Milepost	170.00	0	28	T	0	0	5	45.942056	-111.485055
171	5259	Up Milepost	171.00	0	31	C	0	0	5	45.951820	-111.469951
172	5330	Up Milepost	172.00	0	17	T	0	0	5	45.965322	-111.462394
172	5232	Posted Speed	30.00	0	29	T	0	0	5	45.979350	-111.463747
173	5302	Up Milepost	173.00	0	29	T	0	0	5	45.979541	-111.463795
174	5238	Up Milepost	174.00	0	29	T	0	0	5	45.993145	-111.459611
175	5357	Up Milepost	175.00	0	29	C	0	0	5	45.990510	-111.444327
175	1307	Class Change	4.00	0	30	T	0	0	5	45.990092	-111.439394
175	1307	Posted Speed	45.00	0	30	T	0	0	5	45.990092	-111.439394
176	5268	Up Milepost	176.00	0	45	T	0	0	5	45.992986	-111.424460
176	3928	Posted Speed	60.00	0	44	T	0	0	5	45.999689	-111.413955

Exception Report
Exception List Section
Milepost 16 to Milepost 237
Laurel, MT to Helena, MT

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Run Date: 09/24/2013
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MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
177	5277	Up Milepost	177.00	0	47	T	0	0	5	46.003349	-111.413255
178	5227	Up Milepost	178.00	0	57	T	0	0	5	46.017616	-111.413450
179	5358	Up Milepost	179.00	0	56	T	0	0	5	46.032255	-111.414420
179	4137	Class Change	3.00	0	38	T	0	0	5	46.043558	-111.415168
179	4137	Posted Speed	40.00	0	38	T	0	0	5	46.043558	-111.415168
180	5280	Up Milepost	180.00	0	35	C	0	0	5	46.046654	-111.415686
181	5315	Up Milepost	181.00	0	26	C	0	0	5	46.060280	-111.422070
181	1151	Class Change	2.00	0	26	E	0	0	5	46.063262	-111.420830
181	1151	Posted Speed	25.00	0	26	E	0	0	5	46.063262	-111.420830
182	5287	Up Milepost	182.00	0	24	B	0	0	5	46.073394	-111.413703
183	5272	Up Milepost	183.00	0	24	T	0	0	5	46.083634	-111.399306
184	5476	Up Milepost	184.00	0	25	T	0	0	5	46.095831	-111.391958
185	5056	Up Milepost	185.00	0	24	E	0	0	5	46.107008	-111.401668
186	5371	Up Milepost	186.00	0	21	T	0	0	5	46.108778	-111.421998
187	5276	Up Milepost	187.00	0	22	B	0	0	5	46.115776	-111.439635
188	5285	Up Milepost	188.00	0	25	C	0	0	5	46.123799	-111.427316
189	5282	Up Milepost	189.00	0	24	C	0	0	5	46.120295	-111.411127
190	5319	Up Milepost	190.00	0	25	T	0	0	5	46.123634	-111.393922
190	1782	Class Change	3.00	0	26	T	0	0	5	46.128303	-111.394114
190	1782	Posted Speed	40.00	0	26	T	0	0	5	46.128303	-111.394114
191	5319	Up Milepost	191.00	0	40	T	0	0	5	46.136697	-111.400841
191	607	Class Change	4.00	0	39	T	0	0	5	46.137941	-111.402415
191	607	Posted Speed	60.00	0	39	T	0	0	5	46.137941	-111.402415
192	5221	Up Milepost	192.00	0	42	T	0	0	5	46.146689	-111.415492
193	5327	Up Milepost	193.00	0	44	C	0	0	5	46.156222	-111.431306
194	5297	Up Milepost	194.00	0	49	C	0	0	5	46.169146	-111.440609
195	5275	Up Milepost	195.00	0	47	T	0	0	5	46.183036	-111.446231
196	5340	Up Milepost	196.00	0	50	T	0	0	5	46.197098	-111.451914
197	5285	Up Milepost	197.00	0	50	T	0	0	5	46.211015	-111.457542
198	5265	Up Milepost	198.00	0	48	T	0	0	5	46.224875	-111.463156
199	5295	Up Milepost	199.00	0	48	T	0	0	5	46.238816	-111.468806
200	5311	Up Milepost	200.00	0	47	T	0	0	5	46.252152	-111.477014
201	5395	Up Milepost	201.00	0	47	T	0	0	5	46.265514	-111.486032
202	5226	Up Milepost	202.00	0	43	T	0	0	5	46.278456	-111.494776
203	5273	Up Milepost	203.00	0	43	T	0	0	5	46.291516	-111.503601
204	5292	Up Milepost	204.00	0	45	T	0	0	5	46.304620	-111.512463
205	5283	Up Milepost	205.00	0	46	T	0	0	5	46.317705	-111.521318
206	5285	Up Milepost	206.00	0	43	T	0	0	5	46.330793	-111.530178
207	5288	Up Milepost	207.00	0	30	B	0	0	5	46.344144	-111.538166
208	5323	Up Milepost	208.00	0	21	T	0	0	5	46.355795	-111.549731
209	5277	Up Milepost	209.00	0	19	T	0	0	5	46.363852	-111.566894
210	5285	Up Milepost	210.00	0	19	C	0	0	5	46.373104	-111.582874
211	5307	Up Milepost	211.00	0	18	T	0	0	5	46.385517	-111.593725
212	5292	Up Milepost	212.00	0	28	E	0	0	5	46.398182	-111.603769

Exception Report
Exception List Section
Milepost 16 to Milepost 237
Laurel, MT to Helena, MT

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Run Date: 09/24/2013
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MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
213	5299	Up Milepost	213.00	0	36	C	0	0	5	46.410786	-111.613706
214	5259	Up Milepost	214.00	0	35	T	0	0	5	46.423253	-111.624080
214	614	Posted Speed	45.00	0	34	T	0	0	5	46.424706	-111.625289
215	5367	Up Milepost	215.00	0	33	T	0	0	5	46.435440	-111.634935
215	3606	Posted Speed	60.00	0	31	T	0	0	5	46.443495	-111.641342
216	5482	Up Milepost	216.00	0	28	C	0	0	5	46.448544	-111.640016
216	4586	Class Change	3.00	0	28	E	0	0	5	46.460673	-111.643625
216	4586	Posted Speed	30.00	0	28	E	0	0	5	46.460673	-111.643625
217	5017	Up Milepost	217.00	0	29	T	0	0	5	46.461686	-111.644505
217	3221	Class Change	4.00	0	28	E	0	0	5	46.469308	-111.650859
217	3221	Posted Speed	60.00	0	28	E	0	0	5	46.469308	-111.650859
218	5284	Up Milepost	218.00	0	22	T	0	0	5	46.474287	-111.654598
219	5292	Up Milepost	219.00	0	56	T	0	0	5	46.485313	-111.667991
220	5306	Up Milepost	220.00	0	59	T	0	0	5	46.494166	-111.684477
221	5314	Up Milepost	221.00	0	58	T	0	0	5	46.505911	-111.696870
222	5298	Up Milepost	222.00	0	59	T	0	0	5	46.518059	-111.708161
223	5266	Up Milepost	223.00	0	60	T	0	0	5	46.526662	-111.723924
224	5298	Up Milepost	224.00	0	60	C	0	0	5	46.533710	-111.741957
225	5308	Up Milepost	225.00	0	59	B	0	0	5	46.545618	-111.753611
226	5010	Up Milepost	226.00	0	51	C	0	0	5	46.553037	-111.769787
229	15617	Up Milepost	229.00	0	59	B	0	0	5	46.570865	-111.824759
230	5103	Up Milepost	230.00	0	60	T	0	0	5	46.577966	-111.842176
231	6095	Up Milepost	231.00	0	57	T	0	0	5	46.584501	-111.864196
233	10049	Up Milepost	233.00	0	57	E	0	0	5	46.585262	-111.902874
234	5467	Up Milepost	234.00	0	52	T	0	0	5	46.588139	-111.924155
235	5321	Up Milepost	235.00	0	45	T	0	0	5	46.590941	-111.944867
235	9305	Posted Speed	45.00	0	17	T	0	0	5	46.595827	-111.981089
237	10570	Up Milepost	237.00	0	20	T	0	0	5	46.596492	-111.986020
237	5950	Subdivision	3RD	0	19	T	0	0	5	46.599469	-112.009221

Notes:

* Federal Track Safety Standard Advisory
Cant Exceptions are in degrees. The following fields are irrelevant for Cant Exceptions: LC, PC
Rail Impact Values are in Gs; the threshold is 20g peak to peak

Exception Report
Curve Analysis Section
Milepost 16 to Milepost 237
Laurel, MT to Helena, MT

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Run Date: 09/24/2013
Run ID: 2013092401

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
7	0	1	0	157	78	4	7/16	0.12	79	25	0	155	7/16	0.12	21	-1	25	28	31	34	37	39	42	
7	0	157	0	430	274	5	7/16	0.11	10	25	0	180	7/16	0.1	0	0	25	28	31	34	37	39	42	
7	0	456	0	654	199	7	0/16	-0.05	10	122	0	572	0/16	-0.16	0	0	122	142	160	175	190	203	216	
7	0	666	0	890	155	5	-6/34	-0.35	10	25	0	789	-6/39	-0.01	0	0	25	29	32	35	38	41	43	
7	0	890	0	922	33	6	-2/59	-0.76	10	42	0	921	-2/59	-0.76	0	0	42	47	52	56	60	64	68	
7	0	922	0	1219	298	7	-4/47	-0.6	10	33	0	1055	-4/47	-0.6	0	0	33	37	40	44	47	50	53	
7	0	1219	0	1303	85	0	0/00	0	10	400	0	0	0/00	0	0	0	400	0	0	0	0	0	0	
7	0	1499	0	1876	378	5	8/16	0.7	10	25	0	1709	8/16	0.71	0	0	25	28	31	34	36	38	40	
7	0	2067	0	2276	210	9	0/20	0.26	10	109	0	2205	0/23	0.17	0	0	109	125	139	152	164	175	185	
7	0	2276	0	2637	286	7	-8/18	-0.48	10	24	0	2451	-8/19	-0.45	0	0	24	27	30	33	35	38	40	
7	0	2637	0	2689	53	6	-6/02	0.14	10	26	0	2688	-6/02	0.14	0	0	26	30	33	37	40	43	45	
7	0	2689	0	2931	243	7	-6/22	0.5	10	21	0	2727	-6/22	1.08	0	0	21	25	29	33	36	39	42	
7	0	2931	0	3100	100	4	0/15	-0.11	10	128	0	3040	0/15	-0.11	0	0	128	149	167	183	198	212	225	
2	0	7527	0	7725	199	10	4/05	-0.03	40	31	0	7643	4/11	-0.21	24	-1	31	35	40	44	48	51	54	
1	0	7725	0	7914	190	10	-4/18	0.49	10	28	0	7805	-4/19	0.55	0	0	28	33	38	42	46	49	52	
1	17	3570	17	3792	223	9	-0/58	-0.79	40	72	17	3696	-1/02	-0.79	0	0	72	81	89	96	103	109	115	
2	17	4487	17	4779	293	13	0/50	1.02	25	80	17	4596	0/53	0.98	0	0	80	89	98	106	113	120	127	
5	17	4779	17	5025	247	19	-1/40	-0.03	25	45	17	4897	-1/52	0.32	0	0	45	53	59	66	71	76	81	
5	17	5117	17	5441	325	27	0/29	0.72	60	96	17	5267	0/37	0.96	0	0	96	106	117	126	135	143	151	
5	22	1378	22	1718	341	57	0/29	0.37	60	92	22	1554	0/37	0.63	0	0	92	104	114	124	133	142	150	
5	22	1988	22	2288	301	57	-0/34	-0.65	60	87	22	2148	-0/43	-0.83	0	0	87	97	107	116	124	132	139	
5	23	3011	23	4291	1281	57	0/20	0.36	60	111	23	3189	0/22	0.1	0	0	111	127	142	155	167	179	189	
5	25	3350	26	230	2172	57	-0/20	-0.67	60	106	25	3599	-0/26	-0.46	0	0	106	121	134	146	157	167	177	
5	28	1209	28	2384	1176	58	-1/02	-1.28	60	76	28	1787	-1/05	-1.37	0	0	76	84	91	98	105	111	117	
5	29	4684	30	1168	1800	62	2/07	3.1	60	63	30	19	2/11	3.12	0	0	63	68	72	77	81	85	89	
5	31	1212	31	3286	2075	58	1/00	0.93	60	73	31	2289	1/02	0.93	0	0	73	82	90	97	104	110	116	
5	33	4364	33	5220	857	59	0/54	1.77	60	83	33	4584	0/53	1.25	0	0	83	91	100	107	115	121	128	
5	35	963	35	2803	1841	60	0/59	1.18	60	75	35	2457	1/01	1.07	0	0	75	84	92	99	106	112	118	
5	35	3098	35	4563	1466	59	-1/07	-1.49	60	73	35	3375	-1/08	-1.3	0	0	73	81	88	95	101	107	113	
5	36	2398	36	3326	929	56	0/58	1.45	60	80	36	2913	1/00	1.44	0	0	80	88	95	103	109	116	122	
5	36	3669	36	5282	1614	59	1/58	2.61	60	62	36	4171	1/59	2.4	0	0	62	67	73	77	82	86	90	
5	37	423	37	966	544	61	-1/22	-1.91	60	72	37	808	-1/22	-1.97	0	0	72	78	85	91	96	101	106	
5	37	1239	37	1802	564	61	0/55	1.4	60	77	37	1455	0/59	1.04	0	0	77	85	93	100	107	114	120	
5	37	2158	37	3673	1516	60	-1/59	-3.41	60	65	37	2688	-2/05	-3.18	0	0	65	70	74	79	83	87	91	
5	38	106	38	1480	1375	60	-1/01	-1.19	60	74	38	1002	-1/04	-1.12	0	0	74	82	90	97	104	110	116	
5	39	8215	39	9129	915	44	2/04	1.23	45	52	39	8506	2/06	1	0	0	52	58	63	69	73	78	82	
5	39	9129	39	10623	1495	47	-2/04	-1.42	45	53	39	10299	-2/10	-1.32	0	0	53	59	64	69	74	78	82	
5	41	2859	41	3732	874	41	-0/33	-0.76	45	93	41	3551	-0/36	-0.66	0	0	93	105	116	125	135	143	151	
5	41	5150	42	1350	1396	39	-3/27	-1.71	40	44	42	344	-3/26	-1.59	0	0	44	48	52	56	59	63	66	
5	42	1350	42	2019	670	41	4/47	3.44	40	43	42	1629	4/49	3.33	0	0	43	46	49	52	55	58	60	
5	42	2084	42	3372	1289	41	4/30	3.41	40	44	42	2486	4/35	3.17	0	0	44	47	50	53	56	59	61	
5	42	3372	42	4126	755	40	-2/32	-2.08	40	50	42	3671	-2/41	-1.63	0	0	50	54	59	63	67	71	75	
5	42	4250	43	7	1172	40	1/28	2.2	40	69	42	4648	1/33	2.11	0	0	69	75	80	86	91	96	101	
5	43	2345	43	2756	412	52	0/37	1.52	60	102	43	2755	0/37	1.52	0	0	102	112	122	131	140	148	155	
5	43	2756	44	278	2826	62	0/59	1.34	60	74	43	4858	1/02	0.92	0	0	74	82	90	97	104	111	117	
5	45	3843	45	5001	1159	59	0/58	1.44	60	74	45	4093	1/01	0.94	0	0	74	83	91	98	105	111	117	

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Run Date: 09/24/2013
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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	46	2386	46	3342	957	58	1/01	1.56	60	76	46	2824	1/07	1.52	0	0	76	83	91	97	104	110	115	
5	46	6951	46	9737	2787	59	-1/31	-1.93	60	67	46	7768	-1/34	-1.89	0	0	67	73	79	84	90	95	99	
5	46	12968	49	5277	8201	59	-0/59	-1.31	60	73	46	15358	-1/04	-1.02	0	0	73	81	89	96	103	109	115	
5	50	2051	50	3526	1476	47	2/10	3.85	60	65	50	2983	2/17	3.76	0	0	65	69	74	78	82	85	89	
5	50	3867	51	216	1634	38	4/08	2.32	40	43	50	4545	4/10	2.3	0	0	43	46	49	53	56	59	62	
5	51	1059	51	2770	1712	37	-4/04	-2.25	40	42	51	1862	-4/08	-2.15	0	0	42	46	49	53	56	59	62	
5	51	3215	51	4567	1353	40	4/07	2.31	40	42	51	4127	4/08	2.21	0	0	42	46	49	53	56	59	62	
5	52	2140	52	3026	887	56	1/49	2.5	60	64	52	2523	1/50	2.25	0	0	64	69	75	80	84	89	93	
5	52	4634	53	894	1530	62	1/33	1.44	60	61	52	5019	1/37	1.2	0	0	61	67	74	79	85	90	95	
5	54	472	54	858	387	61	-1/04	-1.12	60	72	54	637	-1/08	-1.14	0	0	72	80	87	94	101	107	112	
5	55	12	55	1919	1908	61	-2/05	-2.68	60	61	55	1293	-2/08	-2.62	0	0	61	66	71	76	80	84	88	
5	59	493	59	2375	1883	46	-2/35	-4.24	60	62	59	1975	-2/32	-3.9	0	0	62	66	70	74	78	81	85	
5	59	2566	60	2583	5313	50	0/59	1.15	60	74	60	17	1/01	0.9	0	0	74	83	91	98	105	112	118	
5	61	243	61	2168	1926	61	1/00	1.3	60	77	61	1129	1/02	1.24	0	0	77	85	93	100	106	113	119	
5	63	4626	63	5086	461	59	-1/10	-2.31	60	79	63	4986	-1/08	-2.03	0	0	79	86	93	100	106	112	117	
5	63	5086	64	2308	2493	58	-1/30	-2.04	60	66	64	519	-1/37	-1.99	0	0	66	72	78	83	89	93	98	
5	64	3297	64	4524	1228	62	1/01	1.5	60	78	64	3782	1/04	1.48	0	0	78	85	93	99	106	112	118	
5	65	4497	66	229	998	61	-0/58	-1.28	60	75	65	5261	-1/02	-1.1	0	0	75	84	92	99	106	112	118	
5	66	1623	66	2784	1162	61	-1/01	-1.07	60	72	66	1996	-1/06	-1.04	0	0	72	80	88	95	102	108	114	
5	67	945	67	4032	3088	62	1/29	1.76	60	64	67	1896	1/33	1.44	0	0	64	70	77	82	88	93	98	
5	67	4032	68	2074	3451	63	0/59	1.39	60	75	67	4716	1/03	1.18	0	0	75	83	91	98	105	111	117	
5	68	3125	68	4537	1413	61	-1/37	-1.81	60	64	68	3635	-1/39	-1.7	0	0	64	70	76	81	86	91	96	
5	71	3507	71	4782	1276	60	-1/32	-1.79	60	62	71	3844	-1/35	-1.32	0	0	62	69	75	81	86	91	96	
5	74	1304	74	2918	1615	62	1/01	1.56	60	76	74	2477	1/07	1.44	0	0	76	83	91	97	104	110	115	
5	76	992	76	2279	1288	59	-1/02	-1.26	60	75	76	1415	-1/04	-1.28	0	0	75	83	91	98	105	111	117	
5	78	2295	78	2584	290	58	-0/41	-0.96	60	90	78	2530	-0/40	-0.78	0	0	90	101	111	121	129	137	145	
5	78	2584	79	121	2819	58	-1/00	-1.3	60	75	78	2697	-1/02	-1.14	0	0	75	84	91	99	105	112	118	
5	79	4109	80	1143	2355	35	-2/34	-4.33	60	63	79	4639	-2/35	-4.21	0	0	63	67	71	75	78	82	85	
5	81	1583	81	2605	1023	37	1/00	1.79	60	80	81	2018	1/03	1.72	0	0	80	88	95	102	108	115	120	
5	84	3751	84	4377	627	58	0/34	1.24	60	93	84	3951	0/38	0.93	0	0	93	104	115	124	133	141	148	
5	85	4876	86	520	938	54	-1/02	-1.18	60	75	86	324	-1/03	-1.14	0	0	75	83	91	98	105	111	117	
5	87	3223	87	4250	1028	60	-1/02	-0.98	60	71	87	3871	-1/05	-0.91	0	0	71	80	88	95	101	108	113	
5	88	405	88	2091	1687	61	1/31	2.59	60	71	88	955	1/34	2.45	0	0	71	76	82	87	93	97	102	
5	88	4619	89	405	1087	56	1/03	1.1	60	71	88	5064	1/08	1.04	0	0	71	79	87	94	100	106	112	
5	92	980	92	1458	479	57	0/22	0.54	60	110	92	1244	0/26	0.61	0	0	110	123	136	148	158	169	178	
5	92	3459	92	4525	1067	59	-1/38	-2.18	60	66	92	3888	-1/43	-2.22	0	0	66	71	77	82	87	92	96	
5	93	184	93	1656	1473	60	-2/08	-3.31	60	64	93	977	-2/12	-3.3	0	0	64	68	73	77	81	85	89	
5	93	2544	94	34	2707	59	2/00	2.72	60	63	93	4337	2/02	2.61	0	0	63	68	73	77	82	86	90	
5	95	179	95	683	505	59	-1/34	-2.97	60	73	95	569	-1/27	-2.51	0	0	73	80	85	91	96	101	106	
5	95	683	95	2755	2073	59	-2/03	-2.77	60	62	95	1217	-2/06	-2.65	0	0	62	67	72	76	81	85	89	
5	95	2755	95	3032	278	58	-0/56	-1.11	60	79	95	2841	-0/58	-1.17	0	0	79	87	95	103	110	116	123	
5	96	4312	97	534	1518	58	1/35	1.69	60	63	97	99	1/38	1.63	0	0	63	70	75	81	86	91	96	
5	98	230	98	2029	1800	52	-3/07	-4.65	55	59	98	1010	-3/11	-4.68	0	0	59	62	65	69	72	75	78	
5	98	2213	98	4145	1933	55	-2/39	-3.67	55	59	98	3260	-2/40	-3.54	0	0	59	63	67	71	75	78	82	
5	98	4662	99	1463	2091	56	1/59	2.66	55	62	98	4960	2/01	2.37	0	0	62	67	72	77	81	85	89	
5	99	1785	99	2698	914	55	1/58	3.56	55	65	99	2148	2/07	3.22	0	0	65	69	74	79	83	87	90	

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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point														
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at								
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0		
5	99	2964	100	1007	3276	57	2/29	3.56	55	60	99	3617	2/35	3.45	0	0	60	64	68	72	76	79	83		
5	101	1	101	580	580	63	0/53	1.55	60	84	101	281	0/55	1.58	0	0	84	93	101	108	115	121	128		
5	101	4449	102	735	1617	59	0/59	1.51	60	76	101	4713	1/02	1.22	0	0	76	84	92	99	106	112	118		
5	103	2811	103	4275	1465	60	-1/00	-1.13	60	74	103	3909	-1/02	-0.99	0	0	74	83	91	98	105	111	117		
5	104	5201	105	1353	1413	59	-1/27	-2.36	60	70	105	660	-1/32	-2.23	0	0	70	76	82	87	92	97	102		
5	105	1593	105	3707	2115	60	1/29	1.66	60	64	105	2027	1/32	1.36	0	0	64	70	77	82	88	93	98		
5	106	1213	106	3102	1890	57	-1/35	-1.75	60	63	106	1737	-1/41	-1.73	0	0	63	69	75	80	85	90	95		
5	108	1457	108	4414	2958	60	-1/00	-1.27	60	73	108	1805	-1/05	-1.08	0	0	73	81	89	96	102	109	114		
5	114	225	114	695	471	18	-2/50	-1.15	30	45	114	460	-2/53	-1.12	0	0	45	50	55	59	63	67	70		
5	115	3555	115	4670	1116	20	2/03	0.88	35	51	115	3767	2/07	0.85	0	0	51	57	62	68	72	77	81		
5	116	3511	117	2114	3693	22	0/57	0.86	35	73	117	2005	0/57	0.55	0	0	73	82	91	99	106	113	119		
5	117	3586	117	4760	1175	30	-0/59	-0.58	35	69	117	4617	-1/02	-0.49	0	0	69	78	86	94	101	107	114		
5	118	2785	119	254	2584	36	1/32	0.85	35	56	118	3043	1/44	0.81	0	0	56	63	69	74	80	85	90		
5	119	515	119	2642	2128	34	-2/31	-0.87	35	45	119	868	-2/34	-0.7	0	0	45	51	56	61	65	69	73		
5	120	2185	120	3765	1581	34	2/32	1.02	35	47	120	2976	2/32	0.92	0	0	47	52	57	62	66	70	74		
5	120	4626	121	401	1165	35	-2/59	-0.99	35	43	121	79	-3/01	-0.94	0	0	43	48	53	57	61	65	68		
5	121	4191	122	802	1807	36	-1/00	-0.44	35	67	121	4421	-1/02	-0.3	0	0	67	76	85	93	100	106	113		
5	122	3822	123	409	1897	34	1/59	1.03	35	53	122	5277	2/01	0.89	0	0	53	58	64	70	74	79	83		
5	123	854	123	2152	1299	29	-2/31	-0.7	35	45	123	1172	-2/30	-0.53	0	0	45	50	56	61	65	69	73		
5	124	2432	124	3396	965	33	-2/01	-0.54	35	49	124	3128	-2/01	-0.46	0	0	49	56	62	67	72	77	81		
5	125	4679	126	1370	1936	30	3/01	0.86	35	42	126	220	3/04	0.7	0	0	42	46	51	55	59	63	67		
5	127	1317	127	1961	645	19	-4/59	-1.02	30	33	127	1655	-5/05	-0.99	0	0	33	37	41	44	47	50	52		
5	127	5589	127	6294	706	28	-3/05	-0.93	30	43	127	6004	-3/08	-0.99	0	0	43	47	52	56	60	64	67		
5	127	8047	127	8834	788	28	-3/03	-0.97	30	43	127	8608	-3/05	-0.93	0	0	43	47	52	56	60	64	67		
5	127	9900	127	10475	576	24	-2/47	-0.62	30	43	127	10291	-2/46	-0.61	0	0	43	48	53	58	62	66	70		
5	129	116	129	1101	986	24	5/02	0.72	30	32	129	492	5/05	0.69	0	0	32	36	39	43	46	49	52		
5	129	1397	129	2668	1272	23	-5/04	-0.9	30	33	129	2082	-5/04	-0.78	0	0	33	36	40	43	46	49	52		
5	130	1720	130	2909	1190	31	2/00	0.78	30	51	130	2108	2/04	0.68	0	0	51	56	62	68	72	77	81		
5	130	3912	130	4341	430	29	-1/53	0.33	30	45	130	4163	-1/55	0.33	0	0	45	52	59	65	70	75	80		
5	131	957	131	2020	1064	27	6/19	1.74	30	32	131	1282	6/19	1.61	0	0	32	35	38	41	44	46	49		
5	131	2277	131	2790	514	32	-3/02	-0.88	30	43	131	2789	-3/02	-0.88	0	0	43	47	52	56	60	64	68		
5	131	2790	131	3661	872	32	-6/06	-1.02	30	30	131	3103	-6/13	-0.99	0	0	30	33	37	40	42	45	47		
5	131	3857	131	4433	577	31	6/40	2.1	30	33	131	4227	6/40	2.1	0	0	33	36	38	41	44	46	48		
5	131	5050	132	558	739	28	5/31	0.92	30	32	132	186	5/36	0.91	0	0	32	35	38	41	44	47	50		
5	132	1816	132	3045	1230	20	-4/08	-1.01	30	37	132	2544	-4/10	-0.97	0	0	37	41	45	48	52	55	58		
5	132	4055	132	4709	655	19	7/46	2.71	30	32	132	4390	7/47	2.7	0	0	32	35	37	39	42	44	46		
5	132	4709	133	137	779	18	-7/34	-2.78	30	33	132	5057	-7/42	-2.76	0	0	33	35	37	40	42	44	46		
5	133	292	133	1157	866	20	5/05	0.69	30	32	133	860	5/05	0.64	0	0	32	36	39	43	46	49	52		
5	133	1312	133	2181	870	21	-2/52	-0.91	30	44	133	1689	-2/52	-0.9	0	0	44	49	54	58	62	66	70		
5	133	3091	134	252	2450	22	2/57	0.98	30	43	133	3507	3/06	0.95	0	0	43	47	52	56	60	64	67		
5	134	252	134	1015	764	20	-1/19	-0.7	30	63	134	804	-1/19	-0.65	0	0	63	70	78	84	90	96	102		
5	134	3293	134	5029	1737	22	1/59	0.84	30	50	134	3587	2/05	0.62	0	0	50	56	61	67	72	76	81		
5	136	1991	136	3872	1882	37	-2/00	-1.11	40	52	136	2393	-2/02	-0.91	0	0	52	58	64	69	74	78	83		
5	136	4491	136	5116	626	38	2/49	1.44	40	46	136	4764	2/51	1.26	0	0	46	51	56	60	64	68	71		
5	137	205	137	726	522	38	-3/04	-1.16	40	44	137	519	-3/07	-1.15	0	0	44	48	53	57	61	64	68		
5	137	1696	137	2577	882	39	-2/55	-0.95	40	43	137	2123	-2/59	-0.83	0	0	43	48	52	57	61	64	68		

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Run Date: 09/24/2013
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							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	137	3158	137	4214	1057	38	1/32	0.68	40	57	137	3488	1/33	0.52	0	0	57	64	71	77	83	88	93	
5	137	7673	137	8098	426	38	-0/22	-0.66	40	112	137	7861	-0/24	-0.6	0	0	112	128	141	153	164	175	185	
5	137	8358	137	8727	370	39	0/23	0.1	40	104	137	8600	0/26	0.31	0	0	104	118	131	143	154	164	173	
5	137	9649	137	10608	960	40	2/08	0.5	40	45	137	10154	2/09	0.11	0	0	45	52	58	63	68	73	77	
5	137	10608	139	356	606	39	2/07	0.79	40	50	137	10765	2/11	0.81	0	0	50	56	61	66	71	75	80	
5	139	4315	139	4725	411	35	0/50	0.8	40	75	139	4473	0/55	0.61	0	0	75	84	93	101	108	115	122	
5	140	1753	140	2173	421	32	3/47	3.15	35	48	140	1967	3/47	3.1	0	0	48	51	55	58	61	64	67	
5	140	3003	140	3245	243	34	1/55	0.42	35	50	140	3148	1/59	0.46	0	0	50	56	62	68	73	78	82	
5	140	5106	141	254	721	39	-0/25	-0.82	60	105	140	5234	-0/28	-0.69	0	0	105	119	131	142	152	162	171	
5	141	3323	141	3929	607	43	-1/02	-0.91	60	70	141	3532	-1/05	-0.72	0	0	70	78	86	94	101	107	113	
5	142	1145	142	2158	1014	43	-1/29	-1.39	60	63	142	1493	-1/31	-1.22	0	0	63	70	76	82	87	93	98	
5	155	3833	155	4080	248	48	0/30	0.54	60	90	155	3972	0/39	0.65	0	0	90	101	111	120	129	137	145	
5	162	3048	163	226	2615	24	-2/44	-2.18	45	50	162	3766	-2/47	-1.96	0	0	50	55	59	63	67	71	75	
5	163	989	163	2700	1712	31	3/04	2.47	45	49	163	2123	3/09	2.36	0	0	49	53	57	61	65	68	71	
5	164	526	164	1458	933	26	-4/04	-3.51	45	47	164	932	-4/07	-3.48	0	0	47	50	54	57	60	63	65	
5	164	4000	164	4835	836	20	4/56	2.18	25	38	164	4285	4/59	2.09	0	0	38	41	45	48	51	53	56	
5	165	325	165	2045	1721	25	3/02	1.13	25	43	165	1409	3/05	1.05	0	0	43	48	52	57	61	64	68	
5	165	3065	165	3565	501	31	1/07	0.32	45	63	165	3371	1/12	0.31	0	0	63	71	79	86	93	99	105	
5	165	3763	165	4195	433	34	-0/52	-1	45	77	165	3915	-0/54	-0.8	0	0	77	87	95	103	111	118	124	
5	166	240	166	857	618	35	-1/57	-1.6	45	58	166	634	-1/58	-1.63	0	0	58	63	69	74	79	83	87	
5	167	44	167	703	660	36	-1/02	-0.62	60	68	167	355	-1/08	-0.75	0	0	68	77	84	91	98	104	110	
5	169	1294	169	2316	1023	24	6/41	0.65	25	28	169	1887	6/52	0.66	0	0	28	31	34	37	39	42	44	
5	169	2692	169	3895	1204	24	5/07	0.79	25	32	169	3021	5/05	0.66	0	0	32	36	39	43	46	49	52	
5	170	4364	170	5175	812	31	-2/08	-0.76	40	49	170	4653	-2/07	-0.52	0	0	49	55	61	66	71	75	80	
5	170	5175	171	735	820	32	-0/32	-0.9	40	97	171	607	-0/34	-0.82	0	0	97	110	121	131	141	149	158	
5	171	735	171	1215	481	32	-1/32	-0.57	40	54	171	914	-1/37	-0.3	0	0	54	61	68	74	80	85	90	
5	171	1215	171	1675	461	32	-0/27	-0.53	40	94	171	1674	-0/32	-0.38	0	0	94	107	119	129	139	148	157	
5	171	1675	171	2139	465	31	-2/29	-0.82	40	43	171	1856	-2/34	-0.31	0	0	43	49	54	59	63	68	72	
5	171	2220	171	2630	411	30	1/50	0.52	40	50	171	2368	1/55	0.36	0	0	50	56	63	68	74	78	83	
5	171	2795	171	3364	570	29	-1/52	-1.01	40	55	171	3084	-1/55	-1.01	0	0	55	61	67	72	77	82	86	
5	171	3538	171	4011	474	29	1/07	0.56	40	67	171	3896	1/10	0.64	0	0	67	75	82	90	96	102	108	
5	172	22	172	3640	3575	25	-1/00	-0.42	40	67	172	1400	-1/02	-0.22	0	0	67	76	85	92	100	106	113	
5	172	4102	172	4783	682	28	1/25	1.06	40	61	172	4353	1/31	0.9	0	0	61	68	74	80	86	91	96	
5	173	57	173	1053	997	29	1/59	0.83	30	51	173	321	2/03	0.72	0	0	51	57	63	68	73	77	82	
5	173	1053	173	1476	424	29	-2/47	-0.24	30	40	173	1254	-2/47	-0.17	0	0	40	46	51	56	60	64	68	
5	173	1615	173	2247	633	29	5/23	1.89	30	36	173	1950	5/26	1.89	0	0	36	39	42	45	48	50	53	
5	173	2961	173	3611	651	31	-2/35	-0.59	30	43	173	3205	-2/35	-0.42	0	0	43	49	54	59	63	68	72	
5	173	3611	173	4776	1166	30	3/24	1.19	30	41	173	4114	3/29	1.04	0	0	41	45	49	53	57	60	64	
5	174	386	174	1017	632	29	2/18	1.01	30	49	174	718	2/19	0.94	0	0	49	55	60	65	69	74	78	
5	174	1300	174	2806	1507	29	8/07	2.4	30	31	174	1842	8/12	2.4	0	0	31	33	35	38	40	42	44	
5	174	4799	175	1302	1861	29	-4/04	-1.28	30	37	175	891	-4/08	-0.91	0	0	37	41	45	48	52	55	58	
5	175	3601	175	4951	1351	45	-1/01	-0.64	45	69	175	4377	-1/02	-0.54	0	0	69	78	87	94	101	108	114	
5	176	1796	176	3577	1782	44	-4/00	-3.8	45	48	176	2227	-4/08	-3.73	0	0	48	51	54	57	60	63	66	
5	177	487	177	1702	1216	51	-1/02	-0.86	60	69	177	785	-1/07	-0.72	0	0	69	77	85	93	99	105	111	
5	179	4591	180	620	1310	36	-3/05	-1.6	40	46	179	5164	-3/09	-1.61	0	0	46	50	54	58	62	66	69	
5	180	1169	180	2448	1280	33	2/59	1.47	40	45	180	2086	3/00	1.3	0	0	45	50	54	58	62	66	70	

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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point														
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at								
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0		
5	180	3015	180	3854	840	30	-2/53	-1.81	40	47	180	3401	-2/55	-1.55	0	0	47	52	56	60	64	68	71		
5	180	4511	181	1193	1998	26	3/02	1.33	40	44	181	90	3/03	1.23	0	0	44	49	54	58	62	65	69		
5	181	2477	181	3207	731	23	-2/22	-0.82	25	48	181	2885	-2/23	-0.83	0	0	48	53	59	64	68	72	76		
5	181	3207	181	3701	495	23	4/28	0.79	25	33	181	3429	4/35	0.52	0	0	33	37	41	45	48	51	54		
5	181	3929	181	4579	651	24	-1/31	-0.45	25	55	181	4167	-1/36	-0.35	0	0	55	62	69	75	81	86	91		
5	181	4700	181	5215	516	24	-3/01	-0.78	25	40	181	4918	-3/06	-0.56	0	0	40	45	50	54	59	62	66		
5	181	5215	182	573	646	25	5/17	1.06	25	33	182	216	5/17	0.96	0	0	33	36	40	43	46	49	51		
5	182	573	182	1291	719	25	1/38	0.51	25	54	182	593	1/43	0.51	0	0	54	61	67	73	79	84	89		
5	183	2382	183	3681	1300	25	-4/01	-1	25	36	183	3432	-4/10	-0.71	0	0	36	40	44	48	51	54	57		
5	183	3940	183	4786	847	25	-6/47	-1.46	25	30	183	4331	-6/46	-1.36	0	0	30	33	36	39	42	44	46		
5	183	4786	183	5325	540	25	6/55	1.04	25	29	183	5053	6/58	1.01	0	0	29	32	35	37	40	42	45		
5	184	95	184	1128	1034	25	-1/05	-0.7	25	68	184	876	-1/08	-0.68	0	0	68	76	84	91	98	104	110		
5	184	3095	184	4523	1429	23	-3/33	-0.86	25	38	184	3762	-3/37	-0.75	0	0	38	43	47	51	55	58	62		
5	184	4523	185	209	743	24	-3/55	-1.06	25	37	184	4632	-3/58	-0.88	0	0	37	41	45	49	53	56	59		
5	185	209	185	1025	817	24	-2/43	-0.76	25	43	185	686	-2/46	-0.58	0	0	43	48	53	58	62	66	70		
5	185	1025	185	1755	731	25	6/31	0.9	25	28	185	1335	6/40	0.68	0	0	28	31	34	37	40	43	45		
5	185	2919	185	3814	896	23	2/22	0.32	25	44	185	3344	2/25	0.29	0	0	44	50	55	60	65	69	74		
5	185	4369	185	5225	857	22	2/17	-0.11	25	42	185	4739	2/19	-0.18	0	0	42	48	54	60	64	69	73		
5	186	248	186	1020	773	23	-1/54	-0.66	25	50	186	627	-1/57	-0.36	0	0	50	56	62	68	73	78	82		
5	186	2367	186	2844	478	27	0/58	0.91	25	76	186	2843	0/59	0.91	0	0	76	84	92	100	107	113	120		
5	186	2844	186	3538	695	25	4/20	0.97	25	36	186	3287	4/22	0.95	0	0	36	40	44	47	51	54	57		
5	186	4100	186	4447	348	23	5/23	1.28	25	34	186	4289	5/26	1.27	0	0	34	37	40	43	46	49	51		
5	186	4447	186	4770	324	22	0/00	0	25	400	0	0	0/00	0	0	0	400	0	0	0	0	0	0		
5	186	4770	186	5134	365	22	-10/13	-2.12	25	27	186	4789	-10/04	-1.96	0	0	27	29	31	33	35	37	39		
5	186	5134	187	1724	1867	25	10/01	1.88	25	26	187	156	10/18	1.79	0	0	26	28	30	32	34	36	38		
5	187	2088	187	2768	681	25	-1/40	-0.77	25	56	187	2566	-1/43	-0.75	0	0	56	63	69	75	80	85	90		
5	187	2882	187	3125	244	25	-3/17	-1.37	25	43	187	3081	-3/18	-1.33	0	0	43	48	52	56	60	63	66		
5	187	3125	187	3172	48	25	-3/11	-1.39	25	44	187	3126	-3/10	-1.31	0	0	44	49	53	57	61	64	68		
5	187	3172	187	3366	195	25	-3/20	-0.77	25	40	187	3231	-3/20	-0.77	0	0	40	45	49	53	57	61	64		
5	187	3582	187	4235	654	25	-4/39	-0.85	25	34	187	3881	-4/45	-0.78	0	0	34	37	41	45	48	51	54		
5	187	4353	188	170	1103	25	1/17	0.52	25	58	187	4577	1/25	0.35	0	0	58	66	73	79	86	91	97		
5	188	254	188	763	510	25	3/50	0.61	25	36	188	501	3/53	0.47	0	0	36	40	44	48	52	55	59		
5	188	1342	188	2118	777	25	6/29	1.05	25	29	188	1680	6/41	0.98	0	0	29	32	35	38	41	43	46		
5	188	2118	188	4314	2197	25	2/29	1	25	45	188	3950	2/33	0.55	0	0	45	50	55	60	65	69	73		
5	188	4788	189	445	940	24	-6/06	-1.24	25	31	188	5177	-6/13	-1.05	0	0	31	34	37	40	43	45	48		
5	189	994	189	1669	676	26	-3/03	-0.54	25	40	189	1524	-3/01	-0.44	0	0	40	45	50	55	59	63	66		
5	189	1669	189	2768	1100	26	-4/06	-0.67	25	35	189	2312	-4/08	-0.61	0	0	35	39	44	47	51	54	57		
5	189	2768	189	3115	348	25	-0/36	-0.81	25	93	189	2874	-0/36	-0.73	0	0	93	106	116	126	135	144	152		
5	189	3115	189	3510	396	25	-4/32	-0.66	25	33	189	3275	-4/39	-0.57	0	0	33	37	41	44	48	51	54		
5	189	3510	189	3911	402	24	3/31	0.53	25	36	189	3719	3/38	0.38	0	0	36	41	45	50	53	57	60		
5	189	4172	189	4956	785	24	-7/19	-0.94	25	28	189	4509	-7/20	-0.9	0	0	28	30	33	36	39	41	43		
5	190	271	190	1197	927	25	-5/52	-1.23	25	32	190	809	-5/53	-1.22	0	0	32	35	38	41	44	47	49		
5	190	1197	190	1723	527	26	-1/20	-1.08	25	66	190	1436	-1/20	-1.06	0	0	66	73	80	86	92	98	103		
5	190	1920	190	2262	343	27	-1/22	-0.44	40	57	190	2057	-1/24	-0.19	0	0	57	65	72	79	85	91	96		
5	190	3597	190	4357	761	38	-2/59	-1.83	40	48	190	3951	-3/02	-1.81	0	0	48	52	56	60	64	67	71		
5	191	65	191	605	541	40	-1/53	-1.48	40	58	191	320	-1/56	-1.55	0	0	58	63	69	74	79	83	88		

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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	191	3799	191	4559	761	42	-1/00	-1.39	60	76	191	4325	-1/04	-1.35	0	0	76	84	92	99	106	112	118	
5	192	4066	193	1501	2763	46	0/59	1.21	60	75	192	4341	1/01	1.01	0	0	75	84	92	99	106	112	119	
5	193	4352	194	194	1140	49	1/00	1.34	60	72	193	4553	1/02	0.72	0	0	72	80	89	96	103	109	116	
5	199	523	199	1691	1169	47	-0/59	-1.18	60	73	199	836	-1/00	-0.76	0	0	73	82	90	98	105	111	118	
5	206	1729	206	2511	783	35	1/01	0.87	60	72	206	2184	1/05	0.95	0	0	72	80	88	95	102	108	114	
5	206	3955	206	4644	690	33	-0/30	-0.36	60	94	206	4513	-0/31	-0.27	0	0	94	109	121	132	142	152	161	
5	206	5216	207	986	1059	29	1/02	1.18	60	73	207	311	1/07	1.09	0	0	73	80	88	95	102	108	113	
5	207	1398	207	2897	1500	25	-3/05	-4.93	60	60	207	1923	-3/08	-5.01	0	0	60	64	67	70	73	76	79	
5	208	496	208	1600	1105	19	-2/04	-2.69	60	62	208	1245	-2/05	-2.69	0	0	62	67	72	77	81	85	89	
5	208	2806	208	3826	1021	20	1/29	2.03	60	68	208	3424	1/33	2.07	0	0	68	74	80	86	91	96	101	
5	209	3775	210	822	2333	21	0/59	0.89	60	72	209	4066	1/02	0.77	0	0	72	80	89	96	103	109	115	
5	211	2581	211	3163	583	30	0/27	0.65	60	98	211	2768	0/32	0.63	0	0	98	110	122	132	142	151	159	
5	211	4452	212	146	987	29	2/00	2.45	60	60	211	4899	2/05	2.32	0	0	60	65	70	75	80	84	88	
5	212	733	212	2382	1650	32	-1/30	-1.54	60	64	212	1593	-1/32	-1.43	0	0	64	71	77	83	88	93	98	
5	212	4830	213	134	604	37	1/01	0.73	60	69	212	5057	1/07	0.66	0	0	69	77	85	92	99	105	111	
5	214	765	214	1744	980	33	2/04	1.18	45	53	214	1502	2/00	0.94	0	0	53	59	65	70	75	79	84	
5	214	2573	214	4008	1436	35	-3/03	-2.14	45	48	214	3625	-3/07	-2.09	0	0	48	52	56	60	64	67	71	
5	215	1193	215	3604	2412	34	2/58	2.16	45	48	215	1688	3/05	2	0	0	48	52	56	60	64	67	71	
5	215	4884	216	560	1159	28	-1/35	-2.12	60	65	215	5302	-1/40	-1.95	0	0	65	71	77	82	87	92	97	
5	216	1153	216	3049	1897	29	-0/59	-1.05	60	74	216	1638	-1/02	-0.94	0	0	74	82	90	98	104	111	117	
5	216	3707	216	4688	982	27	-2/02	-4.34	60	69	216	4186	-2/10	-4.32	0	0	69	74	78	82	86	90	93	
5	217	2437	217	3289	853	28	1/44	3.74	30	73	217	2720	1/44	3.55	0	0	73	78	83	88	93	97	101	
5	217	3818	217	4947	1130	28	-2/07	-3.63	60	65	217	4268	-2/13	-3.51	0	0	65	69	74	78	82	86	89	
5	218	3101	218	5287	2187	56	-0/59	-1.4	60	78	218	4723	-1/00	-1.27	0	0	78	86	94	101	108	115	121	
5	219	3577	219	5144	1568	60	1/32	1.61	60	62	219	3935	1/38	1.42	0	0	62	68	74	80	85	90	95	
5	221	3129	221	4587	1459	57	0/59	1.26	60	76	221	3390	1/02	1.12	0	0	76	84	92	99	106	112	118	
5	222	325	222	2316	1992	60	-2/02	-3.26	60	64	222	1185	-2/10	-3.28	0	0	64	69	73	78	82	86	90	
5	222	3476	222	4713	1238	60	-2/22	-3.95	60	64	222	4095	-2/23	-3.92	0	0	64	68	73	77	80	84	88	
5	223	1234	223	2590	1357	61	2/03	3.39	60	65	223	1650	2/04	3.11	0	0	65	70	74	79	83	87	91	
5	223	4578	224	581	1302	61	0/58	1.46	60	80	224	13	1/00	1.44	0	0	80	88	95	103	109	116	122	
5	224	1819	224	3038	1220	60	2/11	3.54	60	63	224	2284	2/17	3.34	0	0	63	67	72	76	80	84	87	
5	224	5190	225	2288	2407	60	-1/59	-3.32	60	66	225	755	-2/02	-3.25	0	0	66	71	76	80	84	88	92	
5	225	4167	226	512	1356	51	2/10	3.51	60	65	225	5002	2/15	3.6	0	0	65	69	73	78	82	85	89	
5	226	2894	226	5240	2347	56	-2/04	-3.22	60	64	226	4797	-2/04	-2.91	0	0	64	69	73	78	82	86	90	
5	226	5948	226	7103	1156	56	2/08	3.67	60	63	226	6394	2/16	3.34	0	0	63	67	72	76	80	84	88	
5	226	15255	229	840	1203	59	1/04	0.94	60	67	229	67	1/12	0.75	0	0	67	75	82	89	96	102	107	
5	230	2522	230	3634	1113	58	-2/15	-3.94	60	66	230	3130	-2/16	-3.94	0	0	66	70	75	79	83	86	90	
5	231	3618	231	4740	1123	54	-2/26	-3.82	60	60	231	4143	-2/35	-3.47	22	-1	60	64	68	72	75	79	82	
5	231	5905	231	7423	1519	56	-2/08	-3.62	60	65	231	6897	-2/11	-3.53	0	0	65	70	74	78	82	86	90	
5	231	8041	233	59	2068	58	2/04	3.59	60	65	231	9552	2/12	3.5	0	0	65	69	74	78	82	86	90	
5	237	101	237	663	563	20	-1/35	-1.36	45	60	237	334	-1/40	-1.22	0	0	60	66	72	78	83	88	93	
5	237	663	237	1171	509	21	1/31	1.15	45	60	237	865	1/36	1.01	0	0	60	66	73	79	84	89	94	
5	237	8608	237	9148	541	9	1/23	1.23	45	65	237	8921	1/25	1.18	0	0	65	72	78	84	90	96	101	

Exception Report
Exception Summary Section
Milepost 16 to Milepost 237
Laurel, MT to Helena, MT

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Run Date: 09/24/2013
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		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Lim	Pst	
MP	FT	EXC	FT	Drop	EXC	FT	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	Cls	Cls	Trk
60	5295	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	31	-	-	-	-	-	-	-	-	-	-	3	4	5	
131	5292	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	5	
		1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				

Total Miles: 225.20
Exceptions per 100 Miles: 0.89
CY12 National Average Exceptions per 100 miles: 11.3

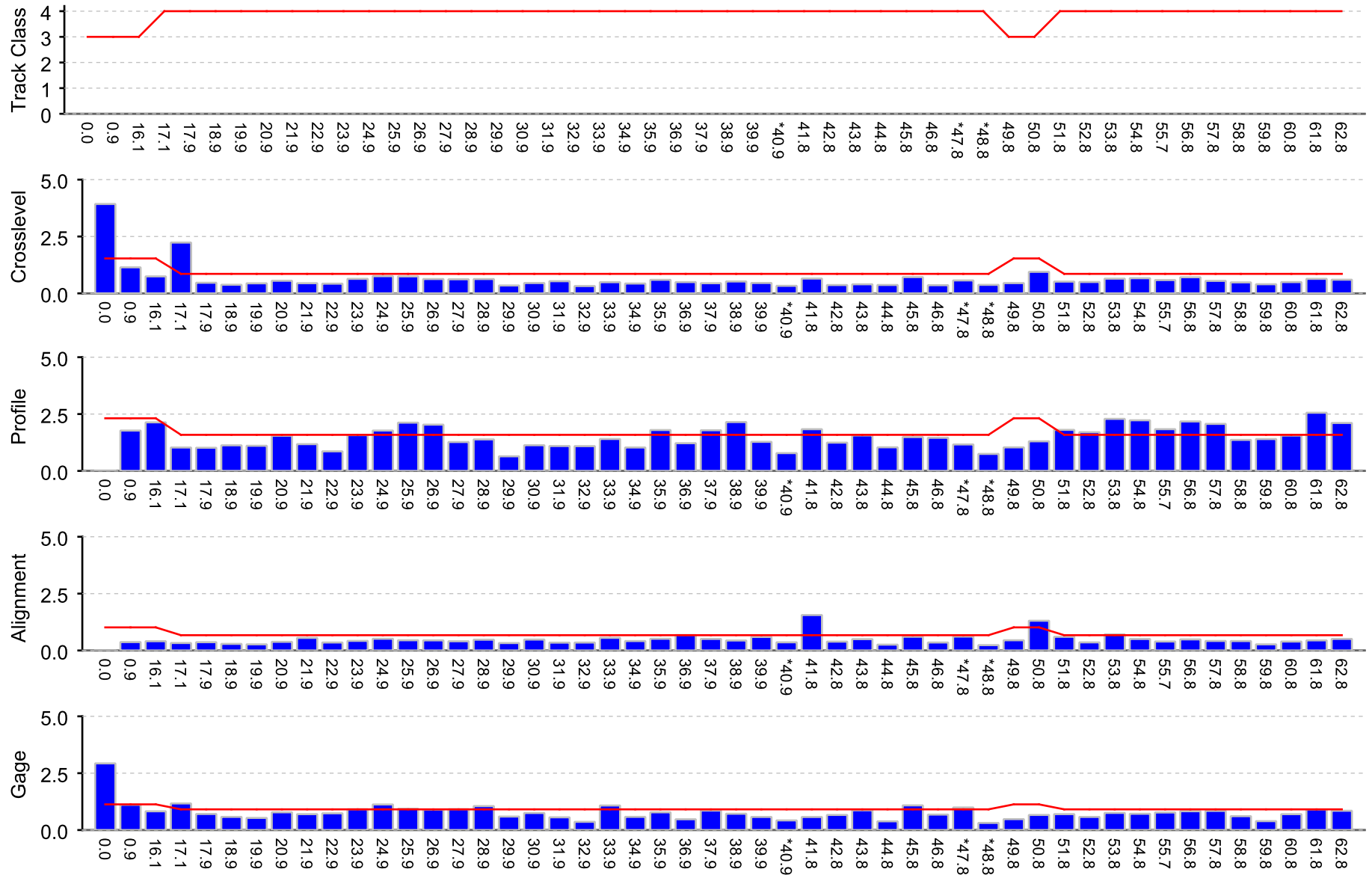
Track Quality Index

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Milepost 16 to Milepost 237

Laurel, MT

- Helena, MT



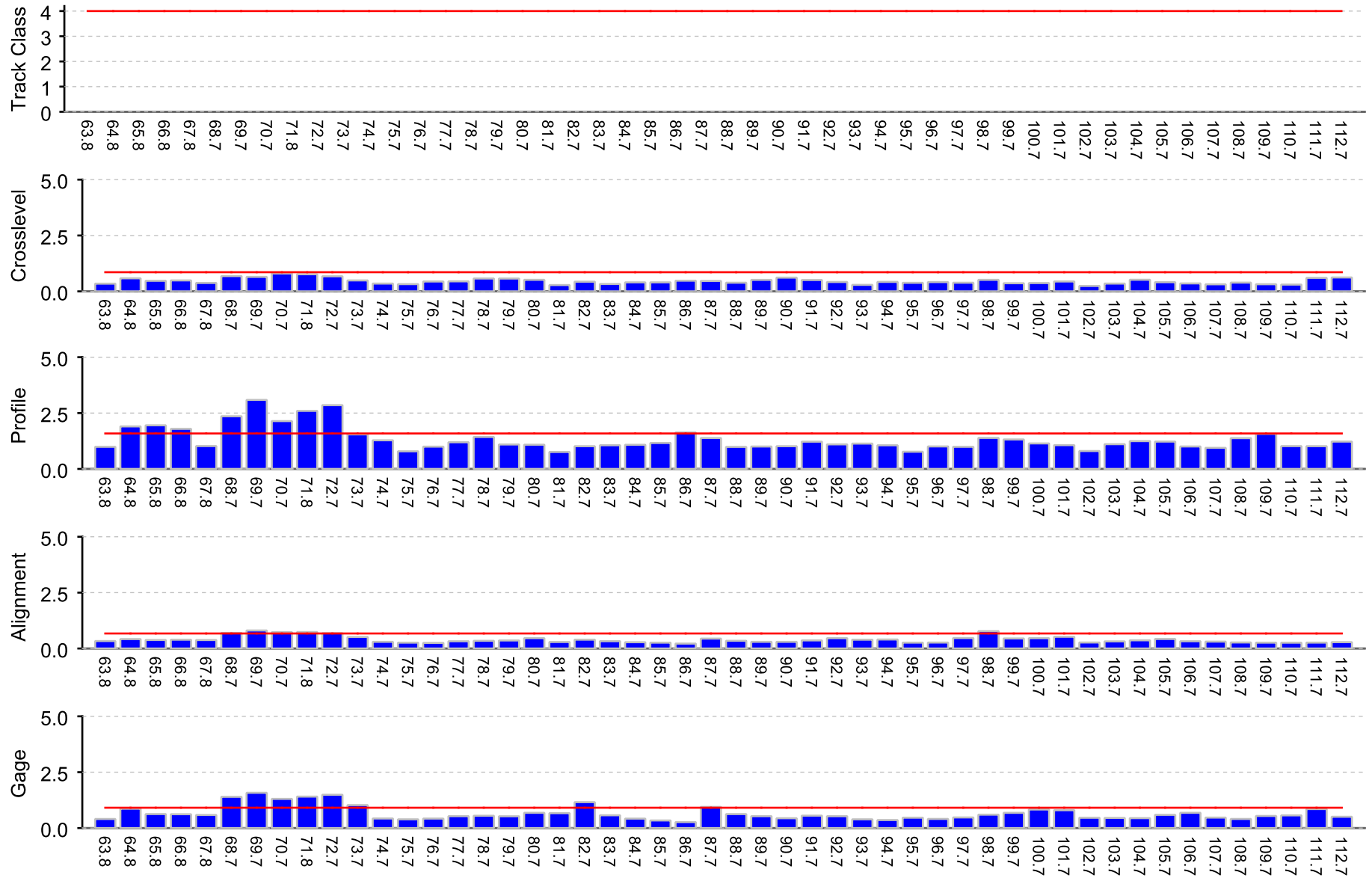
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Milepost 16 to Milepost 237

Laurel, MT

- Helena, MT



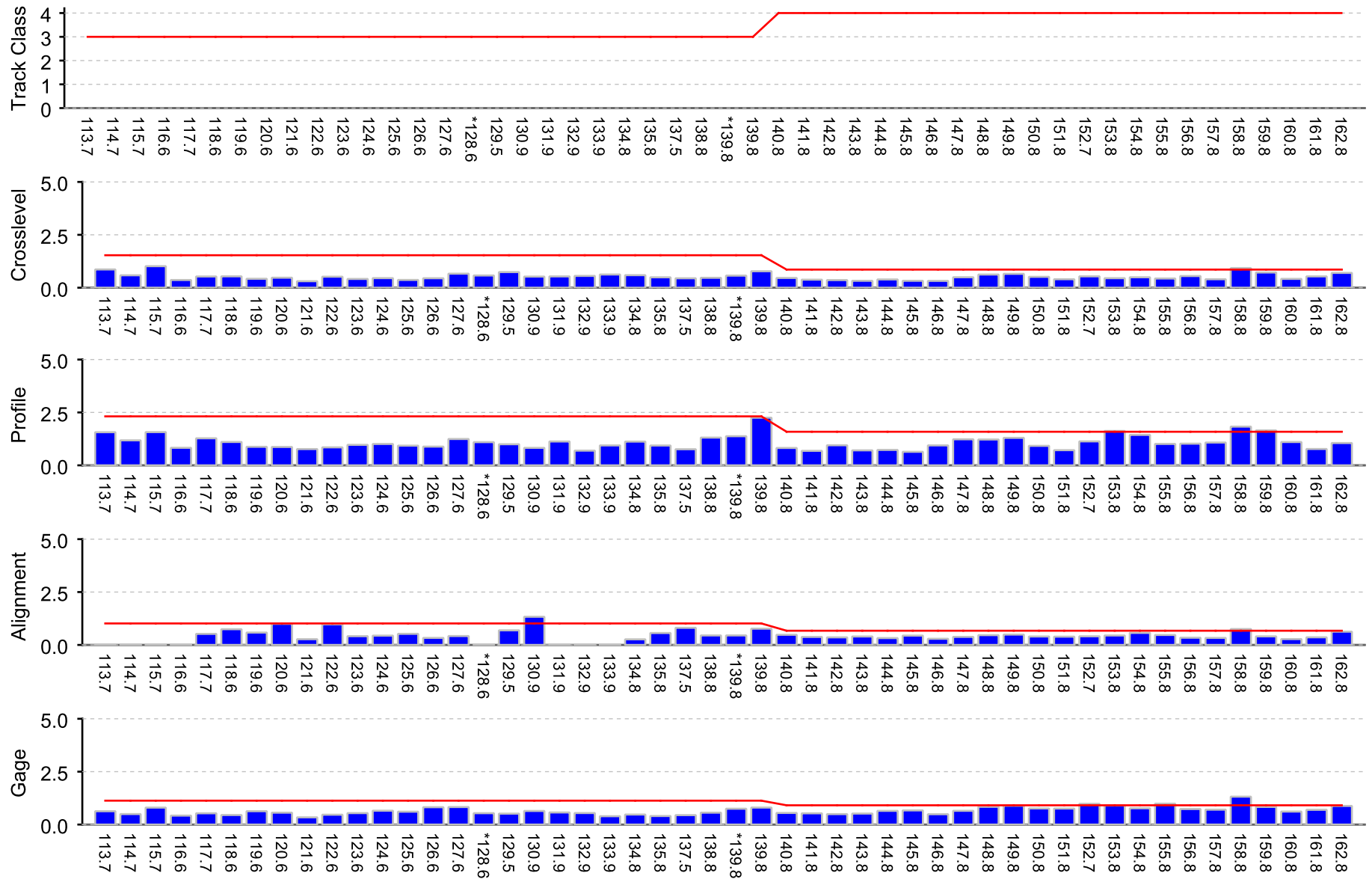
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Milepost 16 to Milepost 237

Laurel, MT

- Helena, MT



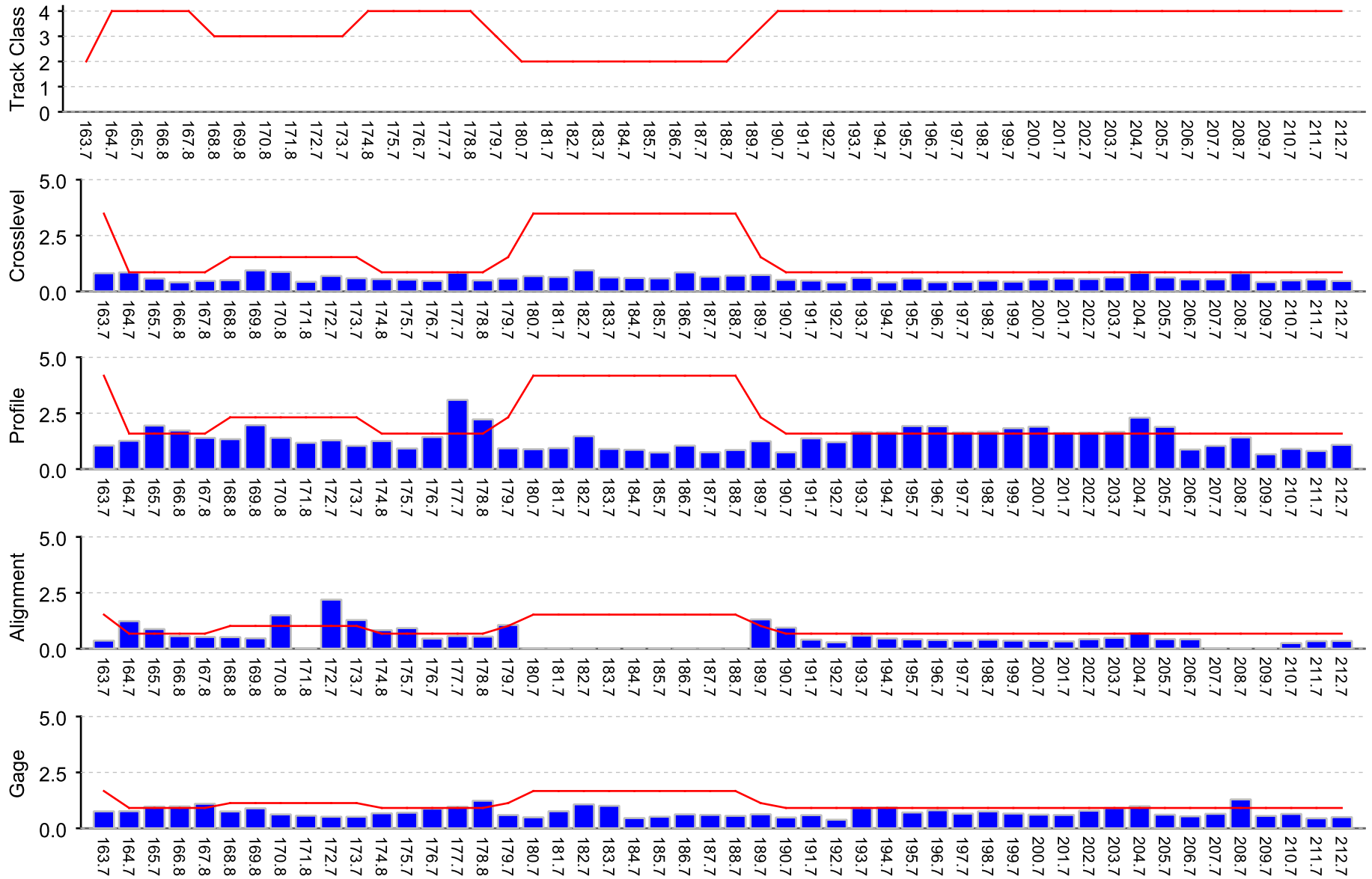
Track Quality Index

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Milepost 16 to Milepost 237

Laurel, MT

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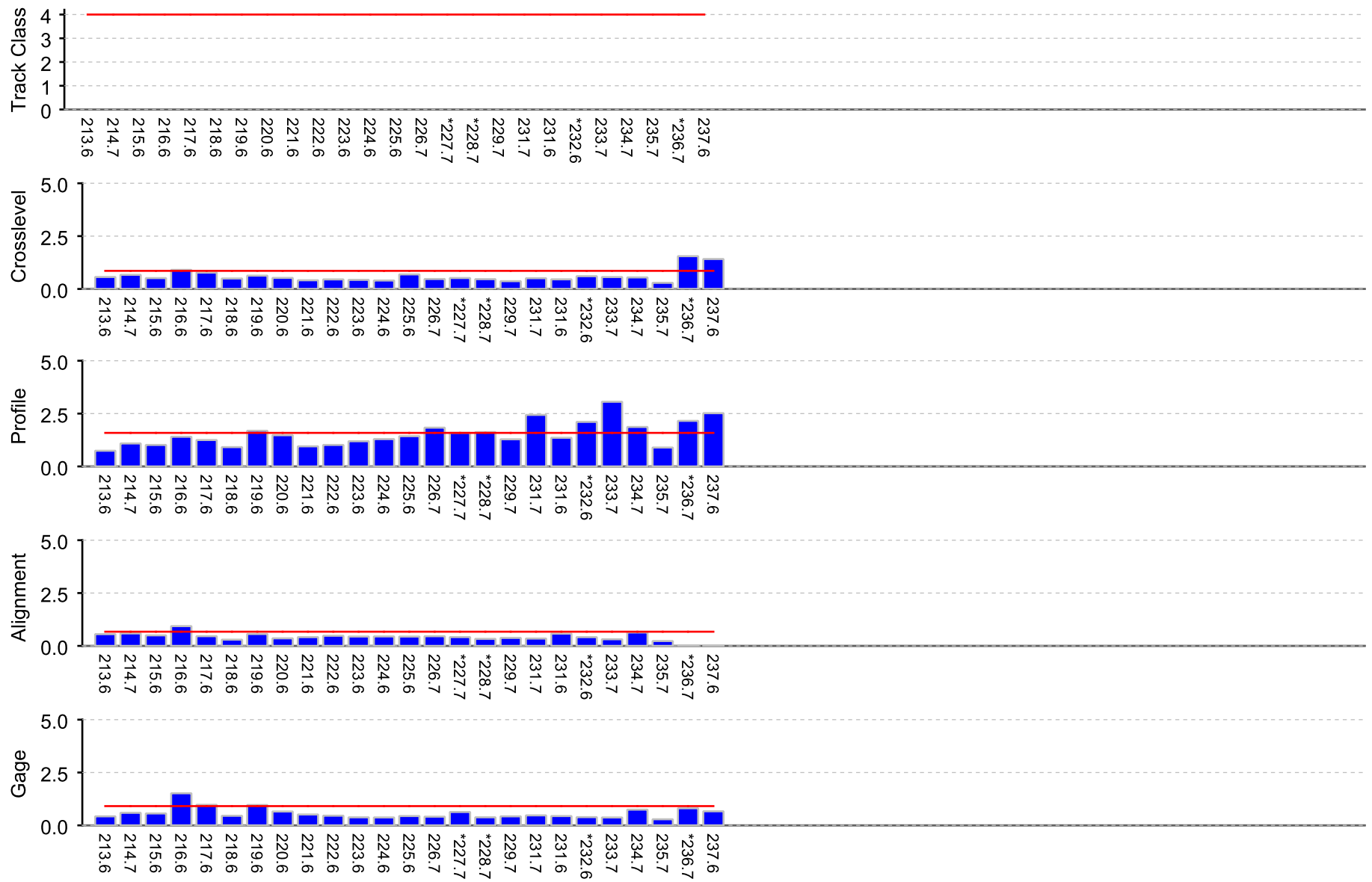
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Milepost 16 to Milepost 237

Laurel, MT

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Exception Report
Class Plus 1 Exception List Section
Milepost 16 to Milepost 237
Laurel, MT to Helena, MT

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Run Date: 09/24/2013
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MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	142	Class Change	1.00	0	4	C	0	0	7	45.669026	-108.754216
0	142	Posted Speed	10.00	0	4	C	0	0	7	45.669026	-108.754216
0	142	State Line	MT	0	4	C	0	0	7	45.669026	-108.754216
0	143	Railroad	MRL -	0	4	C	0	0	7	45.669027	-108.754220
0	143	Track Change	0.00	0	4	C	0	0	7	45.669027	-108.754220
0	144	Subdivision	1ST	0	4	C	0	0	7	45.669027	-108.754224
0	825	Warp 62	2.63	57	5	E	1	2	7	45.669621	-108.756736
0	3114	Class Change	2.00	0	5	T	0	0	7	45.670763	-108.762312
0	3114	Posted Speed	25.00	0	5	T	0	0	7	45.670763	-108.762312
0	3114	Track Change	0.00	0	5	T	0	0	2	45.670763	-108.762312
0	5170	Class Change	3.00	0	9	T	0	0	2	45.668913	-108.769864
0	5170	Posted Speed	40.00	0	9	T	0	0	2	45.668913	-108.769864
0	5176	Subdivision	2ND	0	9	T	0	0	2	45.668907	-108.769886
0	7566	Class Change	1.00	0	10	B	0	0	2	45.666751	-108.778692
0	7566	Posted Speed	10.00	0	10	B	0	0	2	45.666751	-108.778692
0	7799	Class Change	3.00	0	10	B	0	0	2	45.666576	-108.779565
0	7799	Posted Speed	40.00	0	10	B	0	0	2	45.666576	-108.779565
0	7821	Track Change	0.00	0	10	E	0	0	1	45.666558	-108.779647
16	10267	Up Milepost	16.00	0	37	T	0	0	1	45.664349	-108.788661
17	5141	Up Milepost	17.00	0	32	T	0	0	1	45.659708	-108.807595
17	3968	Track Change	0.00	0	8	T	0	0	5	45.656105	-108.822198
17	3998	Class Change	4.00	0	7	T	0	0	5	45.656076	-108.822307
17	3998	Posted Speed	60.00	0	7	T	0	0	5	45.656076	-108.822307
17	4366	Class Change	3.00	0	7	T	0	0	5	45.656562	-108.820243
17	4366	Posted Speed	40.00	0	7	T	0	0	5	45.656562	-108.820243
17	4371	Track Change	0.00	0	8	T	0	0	2	45.656559	-108.820261
17	4394	Class Change	2.00	0	8	T	0	0	2	45.656537	-108.820345
17	4394	Posted Speed	25.00	0	8	T	0	0	2	45.656537	-108.820345
17	4904	Class Change	4.00	0	18	C	0	0	2	45.656094	-108.822230
17	4904	Posted Speed	60.00	0	18	C	0	0	2	45.656094	-108.822230
17	4963	Track Change	0.00	0	20	E	0	0	5	45.656039	-108.822447
18	6213	Up Milepost	18.00	0	41	T	0	0	5	45.654893	-108.827044
19	5274	Up Milepost	19.00	0	60	T	0	0	5	45.650130	-108.846455
20	5303	Up Milepost	20.00	0	60	T	0	0	5	45.645334	-108.865975
21	5301	Up Milepost	21.00	0	58	T	0	0	5	45.640540	-108.885484
22	5288	Up Milepost	22.00	0	58	T	0	0	5	45.635750	-108.904938
23	5310	Up Milepost	23.00	0	58	T	0	0	5	45.630975	-108.924492
24	5287	Up Milepost	24.00	0	57	T	0	0	5	45.626478	-108.944072
25	5317	Up Milepost	25.00	0	58	T	0	0	5	45.622620	-108.964059
26	5291	Up Milepost	26.00	0	57	C	0	0	5	45.618499	-108.983817
27	5287	Up Milepost	27.00	0	61	T	0	0	5	45.612961	-109.002852
28	5291	Up Milepost	28.00	0	58	T	0	0	5	45.607411	-109.021895
29	5297	Up Milepost	29.00	0	57	T	0	0	5	45.600509	-109.039990
30	5315	Up Milepost	30.00	0	61	B	0	0	5	45.592975	-109.057695

Exception Report
Class Plus 1 Exception List Section
Milepost 16 to Milepost 237
Laurel, MT to Helena, MT

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MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
31	5259	Up Milepost	31.00	0	57	T	0	0	5	45.591350	-109.078006
32	5297	Up Milepost	32.00	0	61	T	0	0	5	45.592689	-109.098363
33	5308	Up Milepost	33.00	0	58	T	0	0	5	45.595975	-109.118510
34	5281	Up Milepost	34.00	0	59	T	0	0	5	45.599381	-109.138499
35	5304	Up Milepost	35.00	0	62	T	0	0	5	45.604137	-109.158027
36	5276	Up Milepost	36.00	0	59	T	0	0	5	45.610371	-109.176456
37	5295	Up Milepost	37.00	0	61	T	0	0	5	45.617126	-109.194403
38	5279	Up Milepost	38.00	0	61	T	0	0	5	45.626432	-109.209768
39	5192	Up Milepost	39.00	0	52	T	0	0	5	45.631147	-109.228825
39	6443	Posted Speed	45.00	0	43	T	0	0	5	45.636471	-109.252769
41	10791	Up Milepost	41.00	0	47	T	0	0	5	45.640270	-109.268730
41	4964	Class Change	3.00	0	38	T	0	0	5	45.641320	-109.288019
41	4964	Posted Speed	40.00	0	38	T	0	0	5	45.641320	-109.288019
42	5195	Up Milepost	42.00	0	38	B	0	0	5	45.641339	-109.288923
42	4451	Class Change	4.00	0	40	B	0	0	5	45.640367	-109.305395
42	4451	Posted Speed	60.00	0	40	B	0	0	5	45.640367	-109.305395
43	5414	Up Milepost	43.00	0	41	E	0	0	5	45.641115	-109.308990
44	5303	Up Milepost	44.00	0	62	C	0	0	5	45.647980	-109.326927
45	5257	Up Milepost	45.00	0	58	T	0	0	5	45.659095	-109.339943
46	5318	Up Milepost	46.00	0	60	T	0	0	5	45.670575	-109.352641
49	15891	Up Milepost	49.00	0	58	C	0	0	5	45.699667	-109.393640
50	5290	Up Milepost	50.00	0	55	T	0	0	5	45.693807	-109.411739
50	3717	Class Change	3.00	0	40	T	0	0	5	45.686797	-109.422033
50	3717	Posted Speed	40.00	0	40	T	0	0	5	45.686797	-109.422033
51	5284	Up Milepost	51.00	0	37	E	0	0	5	45.686211	-109.427856
51	4937	Class Change	4.00	0	42	T	0	0	5	45.685831	-109.445926
51	4937	Posted Speed	60.00	0	42	T	0	0	5	45.685831	-109.445926
52	5308	Up Milepost	52.00	0	42	T	0	0	5	45.685970	-109.447363
53	5269	Up Milepost	53.00	0	62	C	0	0	5	45.689344	-109.467254
54	5303	Up Milepost	54.00	0	60	T	0	0	5	45.697888	-109.483967
55	5790	Up Milepost	55.00	0	59	T	0	0	5	45.706783	-109.502667
56	4818	Up Milepost	56.00	0	60	T	0	0	5	45.708931	-109.520949
56	1399	L Prof 62	-1.40	2	59	T	4	5	5	45.709168	-109.526397
57	5232	Up Milepost	57.00	0	60	T	0	0	5	45.709819	-109.541338
58	5357	Up Milepost	58.00	0	58	T	0	0	5	45.710724	-109.562213
59	5287	Up Milepost	59.00	0	49	T	0	0	5	45.711614	-109.582815
60	5295	Up Milepost	60.00	0	39	C	0	0	5	45.707514	-109.602177
60	4052	R Runoff*	1.68	31	59	T	3	5	5	45.709381	-109.617614
61	5287	Up Milepost	61.00	0	61	T	0	0	5	45.710363	-109.622232
62	5297	Up Milepost	62.00	0	59	T	0	0	5	45.717495	-109.640115
63	5289	Up Milepost	63.00	0	58	T	0	0	5	45.725457	-109.657360
64	5270	Up Milepost	64.00	0	58	C	0	0	5	45.733323	-109.674602
64	515	R Align 62	0.76	3	58	C	4	5	5	45.733881	-109.676445
65	5333	Up Milepost	65.00	0	62	T	0	0	5	45.734456	-109.695143

Exception Report
Class Plus 1 Exception List Section
Milepost 16 to Milepost 237
Laurel, MT to Helena, MT

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MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
66	5265	Up Milepost	66.00	0	61	C	0	0	5	45.735716	-109.715626
67	5310	Up Milepost	67.00	0	57	T	0	0	5	45.733960	-109.736160
68	5408	Up Milepost	68.00	0	63	C	0	0	5	45.737256	-109.755512
69	5189	Up Milepost	69.00	0	59	T	0	0	5	45.749192	-109.766233
70	5296	Up Milepost	70.00	0	61	T	0	0	5	45.760249	-109.779605
71	5254	Up Milepost	71.00	0	60	T	0	0	5	45.771215	-109.792878
72	5342	Up Milepost	72.00	0	61	T	0	0	5	45.781716	-109.807247
73	5268	Up Milepost	73.00	0	58	T	0	0	5	45.789790	-109.824309
74	5300	Up Milepost	74.00	0	62	T	0	0	5	45.797908	-109.841480
75	5333	Up Milepost	75.00	0	59	T	0	0	5	45.807593	-109.856937
76	5254	Up Milepost	76.00	0	57	T	0	0	5	45.818088	-109.870974
77	5338	Up Milepost	77.00	0	60	T	0	0	5	45.827342	-109.887046
78	5258	Up Milepost	78.00	0	61	T	0	0	5	45.835831	-109.903651
79	5281	Up Milepost	79.00	0	57	E	0	0	5	45.842646	-109.921575
79	1937	L Runoff*	-1.48	31	55	T	4	5	5	45.843402	-109.929076
79	1937	R Runoff*	-1.60	31	55	T	3	5	5	45.843402	-109.929076
80	5320	Up Milepost	80.00	0	31	C	0	0	5	45.844111	-109.942186
81	5275	Up Milepost	81.00	0	37	T	0	0	5	45.835163	-109.958272
82	5303	Up Milepost	82.00	0	25	T	0	0	5	45.826749	-109.975119
83	5286	Up Milepost	83.00	0	43	T	0	0	5	45.819016	-109.992597
84	5328	Up Milepost	84.00	0	58	T	0	0	5	45.811222	-110.010203
85	5265	Up Milepost	85.00	0	59	T	0	0	5	45.803665	-110.027730
86	5293	Up Milepost	86.00	0	54	C	0	0	5	45.796545	-110.045752
87	5277	Up Milepost	87.00	0	56	T	0	0	5	45.787876	-110.062245
88	5319	Up Milepost	88.00	0	61	T	0	0	5	45.778628	-110.078261
89	5300	Up Milepost	89.00	0	56	C	0	0	5	45.771437	-110.096054
90	5254	Up Milepost	90.00	0	60	T	0	0	5	45.767109	-110.115637
91	5307	Up Milepost	91.00	0	59	T	0	0	5	45.762754	-110.135433
92	5286	Up Milepost	92.00	0	57	T	0	0	5	45.758409	-110.155141
93	5314	Up Milepost	93.00	0	61	T	0	0	5	45.753602	-110.174668
94	5216	Up Milepost	94.00	0	59	E	0	0	5	45.746033	-110.191198
95	5297	Up Milepost	95.00	0	59	T	0	0	5	45.745344	-110.211870
96	5298	Up Milepost	96.00	0	58	T	0	0	5	45.737235	-110.227876
97	5295	Up Milepost	97.00	0	58	C	0	0	5	45.726303	-110.241410
97	5265	Posted Speed	55.00	0	53	T	0	0	5	45.718515	-110.258702
98	5308	Up Milepost	98.00	0	53	T	0	0	5	45.718451	-110.258847
99	5289	Up Milepost	99.00	0	56	C	0	0	5	45.705767	-110.261762
100	5232	Up Milepost	100.00	0	56	C	0	0	5	45.693779	-110.269658
100	1243	Posted Speed	60.00	0	56	T	0	0	5	45.693669	-110.274473
101	5256	Up Milepost	101.00	0	62	S	0	0	5	45.694592	-110.290085
102	5330	Up Milepost	102.00	0	59	C	0	0	5	45.696869	-110.310623
103	5237	Up Milepost	103.00	0	60	T	0	0	5	45.702357	-110.329501
104	5358	Up Milepost	104.00	0	59	T	0	0	5	45.707045	-110.349224
105	5260	Up Milepost	105.00	0	59	B	0	0	5	45.709683	-110.369415

Exception Report
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Milepost 16 to Milepost 237
Laurel, MT to Helena, MT

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Run Date: 09/24/2013
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MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
106	5262	Up Milepost	106.00	0	57	T	0	0	5	45.712106	-110.389352
107	5295	Up Milepost	107.00	0	60	T	0	0	5	45.713920	-110.409546
108	5309	Up Milepost	108.00	0	60	T	0	0	5	45.713413	-110.430261
109	5275	Up Milepost	109.00	0	57	T	0	0	5	45.709953	-110.449873
110	5326	Up Milepost	110.00	0	51	T	0	0	5	45.702778	-110.467968
111	5287	Up Milepost	111.00	0	33	T	0	0	5	45.695652	-110.485927
112	5306	Up Milepost	112.00	0	26	T	0	0	5	45.688503	-110.503938
113	5265	Up Milepost	113.00	0	32	T	0	0	5	45.681402	-110.521813
113	5169	Class Change	3.00	0	21	T	0	0	5	45.674430	-110.539363
113	5169	Posted Speed	30.00	0	21	T	0	0	5	45.674430	-110.539363
114	5296	Up Milepost	114.00	0	20	T	0	0	5	45.674258	-110.539798
115	5293	Up Milepost	115.00	0	20	T	0	0	5	45.665558	-110.556282
115	3331	Posted Speed	35.00	0	19	T	0	0	5	45.659993	-110.566563
116	5493	Up Milepost	116.00	0	18	T	0	0	5	45.657498	-110.574133
117	5089	Up Milepost	117.00	0	20	C	0	0	5	45.653664	-110.593156
118	5565	Up Milepost	118.00	0	36	T	0	0	5	45.656529	-110.614359
119	5114	Up Milepost	119.00	0	35	C	0	0	5	45.659936	-110.633341
120	5237	Up Milepost	120.00	0	34	T	0	0	5	45.662355	-110.652455
121	5389	Up Milepost	121.00	0	35	C	0	0	5	45.665051	-110.672403
122	5195	Up Milepost	122.00	0	35	C	0	0	5	45.666169	-110.692589
123	5309	Up Milepost	123.00	0	31	C	0	0	5	45.664258	-110.712955
124	5514	Up Milepost	124.00	0	34	T	0	0	5	45.664731	-110.734083
125	5336	Up Milepost	125.00	0	30	T	0	0	5	45.661739	-110.754301
126	5244	Up Milepost	126.00	0	30	C	0	0	5	45.656998	-110.773589
127	5059	Up Milepost	127.00	0	21	T	0	0	5	45.662583	-110.791364
127	1304	Posted Speed	30.00	0	13	T	0	0	5	45.664275	-110.795837
129	11114	Up Milepost	129.00	0	24	T	0	0	5	45.662761	-110.832624
130	3512	Up Milepost	130.00	0	30	T	0	0	5	45.658727	-110.844283
131	5292	Up Milepost	131.00	0	30	T	0	0	5	45.649758	-110.860235
131	4046	Gage Wide	57.86	8	31	B	1	4	5	45.646690	-110.874411
132	5230	Up Milepost	132.00	0	28	B	0	0	5	45.645730	-110.878808
133	5350	Up Milepost	133.00	0	18	E	0	0	5	45.643436	-110.898572
134	5288	Up Milepost	134.00	0	18	E	0	0	5	45.640049	-110.917578
135	5358	Up Milepost	135.00	0	26	T	0	0	5	45.647119	-110.935492
135	1525	Posted Speed	40.00	0	32	T	0	0	5	45.650382	-110.939219
136	5301	Up Milepost	136.00	0	38	T	0	0	5	45.658427	-110.948453
137	5280	Up Milepost	138.00	0	38	T	0	0	5	45.666996	-110.964309
139	10857	Up Milepost	139.00	0	39	E	0	0	5	45.675209	-111.004747
140	5008	Up Milepost	140.00	0	34	T	0	0	5	45.684031	-111.019696
140	1659	Posted Speed	35.00	0	32	T	0	0	5	45.687098	-111.024467
140	4909	Class Change	4.00	0	38	T	0	0	5	45.694197	-111.032072
140	4909	Posted Speed	60.00	0	38	T	0	0	5	45.694197	-111.032072
141	5572	Up Milepost	141.00	0	38	C	0	0	5	45.695686	-111.033577
142	5019	Up Milepost	142.00	0	43	T	0	0	5	45.706353	-111.045872

Exception Report
Class Plus 1 Exception List Section
Milepost 16 to Milepost 237
Laurel, MT to Helena, MT

Page 5 of 8
Run Date: 09/24/2013
Run ID: 2013092401

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
143	5337	Up Milepost	143.00	0	44	T	0	0	5	45.715687	-111.061804
144	5258	Up Milepost	144.00	0	47	T	0	0	5	45.724251	-111.078297
145	5283	Up Milepost	145.00	0	49	T	0	0	5	45.732854	-111.094876
146	5305	Up Milepost	146.00	0	53	T	0	0	5	45.741492	-111.111532
147	5281	Up Milepost	147.00	0	55	T	0	0	5	45.750085	-111.128118
148	5302	Up Milepost	148.00	0	56	T	0	0	5	45.758711	-111.144775
149	5282	Up Milepost	149.00	0	51	T	0	0	5	45.767304	-111.161377
150	5311	Up Milepost	150.00	0	45	T	0	0	5	45.775942	-111.178074
151	5313	Up Milepost	151.00	0	45	T	0	0	5	45.784579	-111.194778
152	5605	Up Milepost	152.00	0	47	T	0	0	5	45.793690	-111.212403
153	4958	Up Milepost	153.00	0	48	T	0	0	5	45.801747	-111.227996
154	5335	Up Milepost	154.00	0	47	T	0	0	5	45.810415	-111.244779
155	5222	Up Milepost	155.00	0	47	T	0	0	5	45.818898	-111.261211
156	5326	Up Milepost	156.00	0	49	T	0	0	5	45.827601	-111.277916
157	5296	Up Milepost	157.00	0	39	T	0	0	5	45.836397	-111.294381
158	5302	Up Milepost	158.00	0	48	T	0	0	5	45.845199	-111.310869
159	5295	Up Milepost	159.00	0	48	T	0	0	5	45.853990	-111.327340
160	5264	Up Milepost	160.00	0	45	T	0	0	5	45.862724	-111.343723
161	5325	Up Milepost	161.00	0	44	T	0	0	5	45.871561	-111.360296
162	5283	Up Milepost	162.00	0	32	T	0	0	5	45.880327	-111.376742
162	2935	Posted Speed	45.00	0	27	T	0	0	5	45.885192	-111.385880
163	5479	Up Milepost	163.00	0	22	E	0	0	5	45.886392	-111.395151
164	5235	Up Milepost	164.00	0	29	T	0	0	5	45.886737	-111.414819
164	3853	Class Change	2.00	0	21	T	0	0	5	45.885908	-111.429617
164	3853	Posted Speed	25.00	0	21	T	0	0	5	45.885908	-111.429617
165	5451	Up Milepost	165.00	0	26	T	0	0	5	45.886545	-111.435674
165	2058	Class Change	4.00	0	26	T	0	0	5	45.889770	-111.441941
165	2058	Posted Speed	45.00	0	26	T	0	0	5	45.889770	-111.441941
166	4899	Up Milepost	166.00	0	36	T	0	0	5	45.896591	-111.447283
166	1145	Posted Speed	60.00	0	35	T	0	0	5	45.899226	-111.449691
167	5345	Up Milepost	167.00	0	36	T	0	0	5	45.908523	-111.459367
168	5298	Up Milepost	168.00	0	34	T	0	0	5	45.919495	-111.472924
169	5293	Up Milepost	169.00	0	33	T	0	0	5	45.930400	-111.486571
169	1245	Class Change	2.00	0	26	T	0	0	5	45.932963	-111.489780
169	1245	Posted Speed	25.00	0	26	T	0	0	5	45.932963	-111.489780
169	3828	Class Change	3.00	0	25	E	0	0	5	45.939365	-111.489384
169	3828	Posted Speed	40.00	0	25	E	0	0	5	45.939365	-111.489384
170	5306	Up Milepost	170.00	0	28	T	0	0	5	45.942056	-111.485055
171	5259	Up Milepost	171.00	0	31	C	0	0	5	45.951820	-111.469951
172	5330	Up Milepost	172.00	0	17	T	0	0	5	45.965322	-111.462394
172	5232	Posted Speed	30.00	0	29	T	0	0	5	45.979350	-111.463747
173	5302	Up Milepost	173.00	0	29	T	0	0	5	45.979541	-111.463795
174	5238	Up Milepost	174.00	0	29	T	0	0	5	45.993145	-111.459611
175	5357	Up Milepost	175.00	0	29	C	0	0	5	45.990510	-111.444327

Exception Report
Class Plus 1 Exception List Section
Milepost 16 to Milepost 237
Laurel, MT to Helena, MT

Page 6 of 8
Run Date: 09/24/2013
Run ID: 2013092401

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
175	1307	Class Change	4.00	0	30	T	0	0	5	45.990092	-111.439394
175	1307	Posted Speed	45.00	0	30	T	0	0	5	45.990092	-111.439394
176	5268	Up Milepost	176.00	0	45	T	0	0	5	45.992986	-111.424460
176	3928	Posted Speed	60.00	0	44	T	0	0	5	45.999689	-111.413955
177	5277	Up Milepost	177.00	0	47	T	0	0	5	46.003349	-111.413255
178	5227	Up Milepost	178.00	0	57	T	0	0	5	46.017616	-111.413450
179	5358	Up Milepost	179.00	0	56	T	0	0	5	46.032255	-111.414420
179	4137	Class Change	3.00	0	38	T	0	0	5	46.043558	-111.415168
179	4137	Posted Speed	40.00	0	38	T	0	0	5	46.043558	-111.415168
180	5280	Up Milepost	180.00	0	35	C	0	0	5	46.046654	-111.415686
181	5315	Up Milepost	181.00	0	26	C	0	0	5	46.060280	-111.422070
181	1151	Class Change	2.00	0	26	E	0	0	5	46.063262	-111.420830
181	1151	Posted Speed	25.00	0	26	E	0	0	5	46.063262	-111.420830
182	5287	Up Milepost	182.00	0	24	B	0	0	5	46.073394	-111.413703
183	5272	Up Milepost	183.00	0	24	T	0	0	5	46.083634	-111.399306
184	5476	Up Milepost	184.00	0	25	T	0	0	5	46.095831	-111.391958
185	5056	Up Milepost	185.00	0	24	E	0	0	5	46.107008	-111.401668
186	5371	Up Milepost	186.00	0	21	T	0	0	5	46.108778	-111.421998
187	5276	Up Milepost	187.00	0	22	B	0	0	5	46.115776	-111.439635
188	5285	Up Milepost	188.00	0	25	C	0	0	5	46.123799	-111.427316
189	5282	Up Milepost	189.00	0	24	C	0	0	5	46.120295	-111.411127
190	5319	Up Milepost	190.00	0	25	T	0	0	5	46.123634	-111.393922
190	1782	Class Change	3.00	0	26	T	0	0	5	46.128303	-111.394114
190	1782	Posted Speed	40.00	0	26	T	0	0	5	46.128303	-111.394114
191	5319	Up Milepost	191.00	0	40	T	0	0	5	46.136697	-111.400841
191	607	Class Change	4.00	0	39	T	0	0	5	46.137941	-111.402415
191	607	Posted Speed	60.00	0	39	T	0	0	5	46.137941	-111.402415
192	5221	Up Milepost	192.00	0	42	T	0	0	5	46.146689	-111.415492
193	5327	Up Milepost	193.00	0	44	C	0	0	5	46.156222	-111.431306
194	5297	Up Milepost	194.00	0	49	C	0	0	5	46.169146	-111.440609
195	5275	Up Milepost	195.00	0	47	T	0	0	5	46.183036	-111.446231
196	5340	Up Milepost	196.00	0	50	T	0	0	5	46.197098	-111.451914
197	5285	Up Milepost	197.00	0	50	T	0	0	5	46.211015	-111.457542
198	5265	Up Milepost	198.00	0	48	T	0	0	5	46.224875	-111.463156
199	5295	Up Milepost	199.00	0	48	T	0	0	5	46.238816	-111.468806
200	5311	Up Milepost	200.00	0	47	T	0	0	5	46.252152	-111.477014
201	5395	Up Milepost	201.00	0	47	T	0	0	5	46.265514	-111.486032
202	5226	Up Milepost	202.00	0	43	T	0	0	5	46.278456	-111.494776
203	5273	Up Milepost	203.00	0	43	T	0	0	5	46.291516	-111.503601
204	5292	Up Milepost	204.00	0	45	T	0	0	5	46.304620	-111.512463
205	5283	Up Milepost	205.00	0	46	T	0	0	5	46.317705	-111.521318
206	5285	Up Milepost	206.00	0	43	T	0	0	5	46.330793	-111.530178
206	1284	L Runoff*	1.46	31	39	T	4	5	5	46.333967	-111.532329
206	1290	R Runoff*	1.39	31	39	T	4	5	5	46.333982	-111.532339

Exception Report
Class Plus 1 Exception List Section
Milepost 16 to Milepost 237
Laurel, MT to Helena, MT

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Run Date: 09/24/2013
Run ID: 2013092401

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
206	1788	L Prof 62	-1.47	4	37	B	4	5	5	46.335219	-111.533177
206	1789	R Prof 62	-1.46	5	37	B	4	5	5	46.335222	-111.533178
206	2536	L Runoff*	1.41	31	34	T	4	5	5	46.337110	-111.534298
206	2538	R Runoff*	1.35	31	34	T	4	5	5	46.337116	-111.534300
207	5288	Up Milepost	207.00	0	30	B	0	0	5	46.344144	-111.538166
208	5323	Up Milepost	208.00	0	21	T	0	0	5	46.355795	-111.549731
209	5277	Up Milepost	209.00	0	19	T	0	0	5	46.363852	-111.566894
210	5285	Up Milepost	210.00	0	19	C	0	0	5	46.373104	-111.582874
211	5307	Up Milepost	211.00	0	18	T	0	0	5	46.385517	-111.593725
212	5292	Up Milepost	212.00	0	28	E	0	0	5	46.398182	-111.603769
213	5299	Up Milepost	213.00	0	36	C	0	0	5	46.410786	-111.613706
214	5259	Up Milepost	214.00	0	35	T	0	0	5	46.423253	-111.624080
214	614	Posted Speed	45.00	0	34	T	0	0	5	46.424706	-111.625289
215	5367	Up Milepost	215.00	0	33	T	0	0	5	46.435440	-111.634935
215	3606	Posted Speed	60.00	0	31	T	0	0	5	46.443495	-111.641342
216	5482	Up Milepost	216.00	0	28	C	0	0	5	46.448544	-111.640016
216	4586	Class Change	3.00	0	28	E	0	0	5	46.460673	-111.643625
216	4586	Posted Speed	30.00	0	28	E	0	0	5	46.460673	-111.643625
217	5017	Up Milepost	217.00	0	29	T	0	0	5	46.461686	-111.644505
217	3221	Class Change	4.00	0	28	E	0	0	5	46.469308	-111.650859
217	3221	Posted Speed	60.00	0	28	E	0	0	5	46.469308	-111.650859
218	5284	Up Milepost	218.00	0	22	T	0	0	5	46.474287	-111.654598
219	5292	Up Milepost	219.00	0	56	T	0	0	5	46.485313	-111.667991
219	1385	L Runoff*	1.33	31	56	T	4	5	5	46.487451	-111.672514
219	1385	R Runoff*	1.37	31	56	T	4	5	5	46.487451	-111.672514
220	5306	Up Milepost	220.00	0	59	T	0	0	5	46.494166	-111.684477
221	5314	Up Milepost	221.00	0	58	T	0	0	5	46.505911	-111.696870
222	5298	Up Milepost	222.00	0	59	T	0	0	5	46.518059	-111.708161
223	5266	Up Milepost	223.00	0	60	T	0	0	5	46.526662	-111.723924
224	5298	Up Milepost	224.00	0	60	C	0	0	5	46.533710	-111.741957
225	5308	Up Milepost	225.00	0	59	B	0	0	5	46.545618	-111.753611
226	5010	Up Milepost	226.00	0	51	C	0	0	5	46.553037	-111.769787
229	15617	Up Milepost	229.00	0	59	B	0	0	5	46.570865	-111.824759
230	5103	Up Milepost	230.00	0	60	T	0	0	5	46.577966	-111.842176
231	6095	Up Milepost	231.00	0	57	T	0	0	5	46.584501	-111.864196
231	9742	Twist 31ft*	-0.98	10	57	E	4	5	5	46.585120	-111.901671
233	10049	Up Milepost	233.00	0	57	E	0	0	5	46.585262	-111.902874
234	5467	Up Milepost	234.00	0	52	T	0	0	5	46.588139	-111.924155
235	5321	Up Milepost	235.00	0	45	T	0	0	5	46.590941	-111.944867
235	9305	Posted Speed	45.00	0	17	T	0	0	5	46.595827	-111.981089
237	10570	Up Milepost	237.00	0	20	T	0	0	5	46.596492	-111.986020
237	5950	Subdivision	3RD	0	19	T	0	0	5	46.599469	-112.009221

Exception Report
Class Plus 1 Exception List Section
Milepost 16 to Milepost 237
Laurel, MT to Helena, MT

Page 8 of 8
Run Date: 09/24/2013
Run ID: 2013092401

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude

Notes:

* Federal Track Safety Standard Advisory
Cant Exceptions are in degrees. The following fields are irrelevant for Cant Exceptions: LC, PC
Rail Impact Values are in Gs; the threshold is 20g peak to peak

Exception Report
Class Plus 1 Exception Summary Section
Milepost 16 to Milepost 237
Laurel, MT to Helena, MT

Page 1 of 1
Run Date: 09/24/2013
Run ID: 2013092401

		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot			
MP	FT	Exc	FT	Drop	Exc	FT	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	Cls	Cls	Trk
0	143	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	57	-	-	-	-	-	1	2	7
56	4818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	4	5	5
60	5295	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	31	1	-	-	-	-	-	-	-	3	5	5
64	5270	-	-	-	-	-	-	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5
79	5281	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	62	1	-	-	-	-	-	-	-	3	5	5
131	5292	1	8	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	5
206	5285	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	9	-	4	124	-	-	-	-	-	-	-	-	4	5	5
219	5292	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	62	-	-	-	-	-	-	-	-	4	5	5
231	6095	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	10	-	-	4	5	5
		1	8	1	-	-	1	3	-	-	-	-	-	-	-	3	11	-	9	279	2	1	57	-	1	10	-	-			

Total Miles: 225.20
Exceptions per 100 Miles: 7.10
CY12 National Average Exceptions per 100 miles: 11.3

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Run Date: 09/24/2013

Run ID: 2013092401

Run ID: 2013092401

Laurel, MT to Helena, MT

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
There were no Alignment 62 exceptions detected during this survey.											

DOTX 219 Geometry Car

United States Department of Transportation

AUTOMATED TRACK INSPECTION PROGRAM

TRACK GEOMETRY INSPECTION REPORT

Allentown, PA (CP JU) to Weatherly, PA (M&H Jct)

Railroad: NORFOLK SOUTHERN RAILWAY COMPANY (NS)

Survey Number: 1240

Mile Post 86 to Mile Post 130



Prepared for:

United States Department of Transportation
Federal Railroad Administration
Office of Safety
Washington, D.C.

Prepared by:

ENSCO, Inc.
5400 Port Royal Rd
Springfield, VA 22151



Testing Cert. 2411.01

Approved By:

Survey Director:

MARTIN BROCK

Signature

Date

Under the U.S. Department of Transportation, Federal Railroad Administration (FRA), Office of Safety Assurance and Compliance, Automated Track Inspection Program and in accordance with 49 CFR 213 Federal Track Safety Standards, this Track Geometry Inspection Report provides a list of exceptions that relate only to the time and date the track was inspected and the required remedial action taken. This compliance report is offered only to the track owner and is not to be reproduced to others in whole or part without the expressed written consent of the FRA and the track owner. FRA requests any reprinting be labeled as a copy of the original.

NOTES

During an Automated Track Inspection Program (ATIP) survey, data is collected by the ATIP cars, which generate a Track Geometry Inspection Report (TGIR). These reports make the analysis of the track easier to read and comprehend than attempting to read exceptions from a video strip chart alone. TGIR are generated electronically for printing in near real-time onboard the ATIP cars or can be reprocessed later upon request to the FRA. Copies are transmitted electronically as a Portable Document Format (PDF) using satellite or Internet communications. Copies are distributed as follows:

1. One copy is given to the railroad
2. Two copies are given to the principal FRA Inspector
3. One copy is sent to the FRA Washington headquarters

TGIR consists of five separate sections. Exceptions are not reported for Profile and Alignment when ATIP car speed is less than five (5) and fifteen (15) mile per hour, respectively. The sample interval for track surveyed is one (1) foot.

A complete description of the information provided in the report is available at <http://atip.fra.dot.gov/TGIR>

Exception Report
Exception List Section
Milepost 86 to Milepost 130

Page 1 of 2
Run Date: 06/04/2012
Run ID: 2012060404

Allentown, PA (CP JU) to Weatherly, PA (M&H Jct)

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	188	State Line	SL	0	9	T	0	0	7	40.614173	-75.403565
0	189	Railroad	RR	0	9	T	0	0	7	40.614173	-75.403568
0	190	Subdivision	SUBDIV	0	9	T	0	0	7	40.614172	-75.403572
0	190	Class Change	1.00	0	9	T	0	0	7	40.614172	-75.403572
0	190	Posted Speed	10.00	0	9	T	0	0	7	40.614172	-75.403572
0	191	Track Change	0.00	0	9	T	0	0	7	40.614172	-75.403575
86	3028	Up Milepost	MP	0	9	C	0	0	7	40.617678	-75.411913
86	4302	R Cant NEG*	-3.10	15	8	E	0	1	7	40.613701	-75.425582
86	11234	L Cant NEG*	-2.10	19	6	B	0	1	7	40.600993	-75.443196
86	11703	L Cant NEG*	-2.40	20	8	B	0	1	7	40.600260	-75.444580
86	12183	Track Change	0.00	0	8	B	0	0	5	40.599968	-75.446233
86	12370	Track Change	0.00	0	8	B	0	0	5	40.600004	-75.446903
86	13765	Class Change	3.00	0	8	T	0	0	5	40.602514	-75.450333
86	13765	Posted Speed	30.00	0	8	T	0	0	5	40.602514	-75.450333
86	14253	Class Change	1.00	0	8	T	0	0	5	40.603693	-75.451142
86	14253	Posted Speed	10.00	0	8	T	0	0	5	40.603693	-75.451142
86	16511	Posted Speed	89.00	0	14	T	0	0	5	40.609493	-75.453287
86	16663	Class Change	3.00	0	16	T	0	0	5	40.609911	-75.453257
86	16663	Posted Speed	30.00	0	16	T	0	0	5	40.609911	-75.453257
90	21293	Up Milepost	90.00	0	20	B	0	0	5	40.621570	-75.457061
90	71	Class Change	2.00	0	20	B	0	0	5	40.621759	-75.457105
90	71	Posted Speed	25.00	0	20	B	0	0	5	40.621759	-75.457105
90	2119	Class Change	3.00	0	19	T	0	0	5	40.626748	-75.460215
90	2119	Posted Speed	30.00	0	19	T	0	0	5	40.626748	-75.460215
91	5352	Up Milepost	91.00	0	18	E	0	0	5	40.635180	-75.463367
93	10611	Up Milepost	93.00	0	28	E	0	0	5	40.658199	-75.482414
95	10633	Up Milepost	95.00	0	28	T	0	0	5	40.684279	-75.495962
96	5121	Up Milepost	96.00	0	29	T	0	0	5	40.695504	-75.506983
97	5428	Up Milepost	97.00	0	28	B	0	0	5	40.707829	-75.517766
98	5283	Up Milepost	98.00	0	28	T	0	0	5	40.721729	-75.522978
99	5280	Up Milepost	99.00	0	28	C	0	0	5	40.735431	-75.527670
100	5745	Up Milepost	100.00	0	27	T	0	0	5	40.732574	-75.543269
101	4843	Up Milepost	101.00	0	28	C	0	0	5	40.722577	-75.552738
102	5421	Up Milepost	102.00	0	28	T	0	0	5	40.730426	-75.567561
103	5185	Up Milepost	103.00	0	28	T	0	0	5	40.735836	-75.582928
104	5013	Up Milepost	104.00	0	28	T	0	0	5	40.743175	-75.594945
105	5519	Up Milepost	105.00	0	28	B	0	0	5	40.757392	-75.601640
106	5537	Up Milepost	106.00	0	27	T	0	0	5	40.772439	-75.602461
106	1299	L Cant POS*	4.80	29	28	T	0	3	5	40.775946	-75.603207
106	1744	L Cant POS*	4.90	19	28	T	0	3	5	40.777149	-75.603464
107	5212	Up Milepost	107.00	0	28	T	0	0	5	40.786052	-75.607527
108	5196	Up Milepost	108.00	0	29	B	0	0	5	40.797544	-75.616744
109	5251	Up Milepost	109.00	0	29	T	0	0	5	40.796090	-75.632896
110	5474	Up Milepost	110.00	0	29	C	0	0	5	40.791937	-75.651468

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Milepost 86 to Milepost 130

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Run Date: 06/04/2012
Run ID: 2012060404

Allentown, PA (CP JU) to Weatherly, PA (M&H Jct)

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
111	5185	Up Milepost	111.00	0	28	C	0	0	5	40.800110	-75.666428
112	5273	Up Milepost	112.00	0	28	C	0	0	5	40.813867	-75.670718
112	3658	L Cant POS*	4.70	16	28	B	0	3	5	40.818960	-75.681570
112	4013	Lmt Speed 3	29.00	37	28	C	0	3	5	40.819213	-75.682797
113	5275	Up Milepost	113.00	0	29	T	0	0	5	40.820248	-75.687005
114	5304	Up Milepost	114.00	0	17	T	0	0	5	40.829987	-75.700182
114	3303	Class Change	1.00	0	7	B	0	0	5	40.837094	-75.707439
114	3303	Posted Speed	10.00	0	7	B	0	0	5	40.837094	-75.707439
114	3745	Track Change	0.00	0	9	E	0	0	2	40.838226	-75.707955
114	3878	Class Change	2.00	0	10	E	0	0	2	40.838581	-75.708070
114	3878	Posted Speed	20.00	0	10	E	0	0	2	40.838581	-75.708070
114	4540	L Cant POS*	5.20	16	19	T	0	2	2	40.840370	-75.708466
115	6776	Up Milepost	115.00	0	18	B	0	0	2	40.846405	-75.709788
115	5421	L Cant POS*	5.00	16	14	T	0	2	2	40.860159	-75.716957
121	5705	Up Milepost	121.00	0	12	B	0	0	2	40.860863	-75.717395
121	1409	Posted Speed	25.00	0	20	E	0	0	2	40.863638	-75.720762
121	5098	Class Change	5.00	0	23	B	0	0	2	40.861016	-75.732570
122	5422	Up Milepost	122.00	0	23	B	0	0	2	40.860562	-75.733576
122	137	Class Change	2.00	0	23	C	0	0	2	40.860410	-75.734024
122	945	Gage Wide	57.98	11	22	E	1	2	2	40.861047	-75.736458
122	2872	Class Change	3.00	0	13	C	0	0	2	40.865763	-75.733994
122	2872	Posted Speed	30.00	0	13	C	0	0	2	40.865763	-75.733994
122	5756	Class Change	2.00	0	28	E	0	0	2	40.872611	-75.738903
122	5756	Posted Speed	25.00	0	28	E	0	0	2	40.872611	-75.738903
122	6794	Posted Speed	30.00	0	28	E	0	0	2	40.874186	-75.741985
126	20449	Up Milepost	126.00	0	20	E	0	0	2	40.895705	-75.753162
126	69	Posted Speed	25.00	0	21	E	0	0	2	40.895700	-75.752917
127	5650	Up Milepost	127.00	0	23	C	0	0	2	40.903054	-75.744774
128	5138	Up Milepost	128.00	0	23	B	0	0	2	40.907181	-75.739113
129	5292	Up Milepost	129.00	0	24	E	0	0	2	40.920509	-75.741574
130	5301	Up Milepost	130.00	0	23	B	0	0	2	40.933570	-75.741437

Notes:

* Federal Track Safety Standard Advisory
Cant Exceptions are in degrees. The following fields are irrelevant for Cant Exceptions: LC, PC
Rail Impact Values are in Gs; the threshold is 20g peak to peak

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Run Date: 06/04/2012
Run ID: 2012060404

Allentown, PA (CP JU) to Weatherly, PA (M&H Jct)

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
7	0	1	0	181	165	7	-4/37	-0.47	79	32	0	71	-4/44	-0.4	24	-1	32	36	40	43	47	50	53	
7	0	348	0	1634	1287	9	6/08	0.08	10	26	0	1273	6/20	0.03	0	0	26	30	33	36	39	42	45	
7	0	2005	0	2674	670	10	-6/25	-0.1	10	26	0	2398	-6/25	-0.1	0	0	26	30	33	36	39	42	45	
7	0	2674	86	251	606	10	-3/59	-0.21	10	32	0	2674	-4/04	-0.04	0	0	32	37	42	46	49	53	56	
7	86	446	86	1561	1116	9	-3/04	-0.26	10	36	86	742	-3/01	0.17	0	0	36	42	47	52	56	60	64	
7	86	1735	86	1983	249	9	-0/23	-0.21	10	109	86	1982	-0/23	-0.21	0	0	109	125	139	152	164	175	186	
7	86	1983	86	2364	382	9	-3/25	-0.15	10	34	86	2118	-3/37	0.07	0	0	34	39	44	48	52	56	59	
7	86	2364	86	2729	366	9	-2/50	-0.45	10	41	86	2458	-2/50	-0.45	0	0	41	47	52	56	61	65	68	
7	86	2729	86	3005	277	9	-1/11	-0.22	10	59	86	2995	-1/15	-0.07	0	0	59	68	76	83	89	96	101	
7	86	3005	86	3288	284	9	-1/28	-0.26	10	55	86	3135	-1/33	-0.36	0	0	55	63	70	76	82	87	92	
7	86	3288	86	3959	624	8	-1/14	-0.23	10	56	86	3546	-1/23	-0.11	0	0	56	65	72	79	85	91	97	
7	86	3959	86	4148	190	9	4/49	1.4	10	35	86	4066	4/51	1.31	0	0	35	39	43	46	49	52	55	
7	86	4148	86	4388	241	8	-8/07	0.11	10	22	86	4273	-8/10	0.09	0	0	22	26	29	32	34	37	39	
7	86	4388	86	4410	23	6	-4/44	-0.73	10	32	86	4389	-4/43	-0.54	0	0	32	37	40	44	47	50	53	
7	86	4410	86	4558	105	5	-4/49	-0.19	10	30	86	4444	-4/49	-0.19	0	0	30	35	39	42	46	49	52	
7	86	4558	86	4562	5	4	-3/40	-2.22	10	45	86	4561	-3/40	-2.22	0	0	45	49	53	56	59	63	66	
7	86	4562	86	4763	202	7	-5/46	-0.79	10	30	86	4645	-5/45	-0.79	0	0	30	34	37	41	44	46	49	
7	86	4763	86	4913	151	8	4/23	0.8	10	35	86	4912	4/24	0.8	0	0	35	39	43	47	50	53	56	
7	86	4913	86	5102	190	8	4/28	0.15	10	31	86	4999	4/29	0.12	0	0	31	36	40	44	47	50	53	
7	86	5145	86	5362	218	8	4/25	0.26	10	32	86	5246	4/28	0.27	0	0	32	36	41	44	48	51	54	
7	86	5362	86	5589	228	9	-4/37	-0.55	10	33	86	5496	-4/36	-0.55	0	0	33	37	41	45	48	51	54	
7	86	5589	86	5733	145	9	0/47	-0.02	10	69	86	5625	0/48	-0.3	0	0	69	81	91	100	109	117	124	
7	86	5800	86	6267	410	8	-3/16	0.6	10	31	86	6006	-3/16	0.69	0	0	31	38	43	48	52	56	60	
7	86	6409	86	6541	133	9	-0/19	0.04	10	111	86	6506	-0/20	-0.04	0	0	111	130	145	159	172	183	194	
7	86	6541	86	6966	426	8	9/28	0.26	10	22	86	6797	9/32	0.27	0	0	22	25	28	30	32	35	37	
7	86	6966	86	7014	49	8	-0/18	-0.27	10	121	86	6985	-0/19	-0.29	0	0	121	140	156	170	183	195	206	
7	86	7014	86	7230	217	9	-0/16	-0.23	10	130	86	7116	-0/16	-0.28	0	0	130	150	167	182	196	209	221	
7	86	7230	86	7481	252	9	2/16	-0.13	10	42	86	7348	2/16	-0.16	0	0	42	49	55	60	65	70	74	
7	86	8426	86	8679	254	10	-0/16	-0.41	10	131	86	8534	-0/17	-0.53	0	0	131	152	168	182	196	208	220	
7	86	8679	86	8988	310	8	4/05	-0.15	10	30	86	8836	4/13	-0.26	0	0	30	35	40	44	47	51	54	
7	86	9033	86	9110	78	8	-0/16	-0.44	10	132	86	9081	-0/16	-0.31	0	0	132	153	170	186	200	213	226	
7	86	9110	86	9207	98	8	-0/17	-0.41	10	129	86	9125	-0/18	-0.64	0	0	129	148	163	177	190	202	214	
7	86	9751	86	10028	278	9	-0/15	-0.45	10	135	86	9862	-0/15	-0.4	0	0	135	158	175	191	205	219	231	
7	86	10158	86	10442	285	7	-0/16	-0.08	10	125	86	10346	-0/16	-0.09	0	0	125	147	164	179	193	206	219	
7	86	10442	86	10676	235	6	6/55	-0.08	10	24	86	10587	6/56	-0.09	0	0	24	28	31	34	37	40	42	
7	86	10676	86	10868	193	6	-4/49	-0	10	29	86	10762	-4/49	-0	0	0	29	34	38	42	45	48	51	
7	86	10868	86	10887	20	6	-0/31	-0.3	10	95	86	10886	-0/31	-0.3	0	0	95	109	121	132	142	152	161	
7	86	10887	86	11163	277	7	-7/26	-0.23	10	24	86	11030	-7/26	-0.23	0	0	24	28	31	34	37	39	42	
7	86	11163	86	11376	214	7	3/51	0.13	10	34	86	11272	3/52	0.12	0	0	34	39	43	47	51	54	58	
7	86	11376	86	11571	196	8	-4/50	-0.21	10	30	86	11480	-4/49	-0.21	0	0	30	35	39	42	46	49	52	
7	86	11571	86	12087	517	9	7/56	0.47	10	24	86	11754	8/11	0.35	0	0	24	27	30	33	35	38	40	
7	86	12087	86	12105	19	8	2/02	-0.24	10	43	86	12087	1/58	-0.35	0	0	43	51	58	64	69	74	79	
5	86	12105	86	12333	229	8	4/01	0.23	10	30	86	12249	4/55	0.26	0	0	30	35	39	42	45	49	51	
5	86	12333	86	12579	247	9	5/31	0.97	10	27	86	12449	6/13	0.39	0	0	27	31	35	38	41	43	46	
5	86	12579	86	12956	378	9	6/20	0.87	10	28	86	12685	6/23	0.73	0	0	28	32	35	38	41	44	46	
5	86	12956	86	12992	37	9	3/55	0.96	10	37	86	12991	3/55	0.96	0	0	37	42	46	50	53	57	60	

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Allentown, PA (CP JU) to Weatherly, PA (M&H Jct)

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	86	12992	86	13374	383	9	8/34	0.81	10	25	86	13138	8/41	0.85	0	0	25	28	31	33	35	38	40	
5	86	14742	86	14990	249	9	2/21	0.56	10	45	86	14887	2/23	0.48	0	0	45	51	57	62	66	71	75	
5	86	14990	86	15216	227	9	-3/05	-0.15	10	36	86	15077	-3/14	-0.02	0	0	36	42	47	51	55	59	63	
5	86	15274	86	16115	842	9	4/57	1.04	10	33	86	15820	4/57	0.97	0	0	33	37	41	44	47	50	53	
5	86	16800	86	17096	297	18	4/14	2.16	30	41	86	17064	4/14	2.01	0	0	41	44	48	51	55	58	60	
5	86	17096	86	17356	261	18	4/17	1.95	30	40	86	17193	4/17	1.95	0	0	40	44	48	51	54	57	60	
5	86	17514	86	17848	335	19	-5/44	-1.63	30	33	86	17773	-5/44	-1.54	0	0	33	37	40	43	46	48	51	
5	86	17848	86	18640	793	20	-6/01	-1.64	30	32	86	18219	-6/07	-1.57	0	0	32	36	39	42	44	47	49	
5	86	20063	86	20762	700	21	5/05	1.53	30	35	86	20394	5/10	1.51	0	0	35	39	42	45	48	51	53	
5	86	21267	90	849	876	19	-6/56	-1.52	30	30	90	666	-6/59	-1.52	0	0	30	33	36	39	41	44	46	
5	90	849	90	1381	533	19	7/24	1.87	25	30	90	1152	7/28	1.83	0	0	30	33	36	38	41	43	45	
5	90	3894	91	194	1653	19	1/48	1.02	30	52	90	4260	2/04	0.9	0	0	52	58	63	69	74	78	82	
5	91	1627	91	1921	295	17	-3/20	-0.39	30	35	91	1857	-3/25	-0.08	0	0	35	41	46	50	54	58	61	
5	91	1921	91	2269	349	16	-3/27	-0.45	30	37	91	2035	-3/27	-0.42	0	0	37	42	47	51	55	59	62	
5	91	2269	91	2471	203	16	-2/30	-0.7	30	45	91	2381	-2/30	-0.69	0	0	45	51	57	61	66	70	74	
5	91	2471	91	2674	204	15	-1/55	-0.65	30	52	91	2542	-1/55	-0.66	0	0	52	59	65	70	75	80	85	
5	91	2956	91	3603	648	9	-3/50	-0.79	30	36	91	3196	-3/57	-0.75	0	0	36	41	45	49	52	56	59	
5	91	3603	91	3894	292	6	-2/20	-0.59	30	46	91	3649	-2/20	-0.59	0	0	46	53	58	63	68	72	76	
5	91	3894	91	4474	517	6	-0/55	-0.85	30	75	91	4269	-0/58	-0.85	0	0	75	84	93	100	108	114	121	
5	91	5651	91	6266	616	27	-2/04	-0.73	30	49	91	5868	-2/09	-0.68	0	0	49	55	61	66	71	75	80	
5	91	7412	91	7949	538	28	1/28	1.03	30	61	91	7748	1/29	0.97	0	0	61	69	75	81	87	92	97	
5	91	7949	91	8146	198	28	0/50	0.95	30	80	91	7949	0/53	1.04	0	0	80	89	98	106	113	120	126	
5	91	9091	91	10079	989	29	1/43	1.11	30	48	91	9404	2/28	1.01	0	0	48	53	58	63	68	72	76	
5	91	10079	93	140	673	28	5/59	1.98	30	34	91	10508	6/01	1.97	0	0	34	37	40	43	46	48	51	
5	93	2889	93	3254	366	28	-0/45	-0.87	30	81	93	3066	-0/47	-0.76	0	0	81	92	102	110	118	125	132	
5	93	3254	93	3892	639	28	-1/28	-1.01	30	58	93	3384	-1/39	-0.94	0	0	58	65	71	77	82	87	92	
5	93	4157	93	5215	1059	28	-1/29	-0.93	30	57	93	4945	-1/39	-0.86	0	0	57	64	71	77	82	87	92	
5	93	5215	93	5789	575	28	-2/24	-0.94	30	47	93	5342	-2/22	-0.82	0	0	47	53	59	64	68	73	77	
5	93	5789	93	6326	538	28	-0/34	-0.9	30	88	93	6171	-0/43	-0.92	0	0	88	99	109	117	126	133	141	
5	95	2413	95	2879	467	29	0/23	0.39	30	102	95	2840	0/25	-0.01	0	0	102	117	131	144	156	166	177	
5	95	2879	95	3324	446	29	-0/30	-0.77	30	94	95	2948	-0/38	-1.07	0	0	94	106	116	125	134	142	149	
5	96	3280	96	3901	622	29	1/52	0.91	30	52	96	3555	2/02	0.89	0	0	52	58	64	69	74	78	83	
5	96	5266	97	430	593	28	3/16	0.98	30	41	97	97	3/17	0.96	0	0	41	46	50	55	58	62	65	
5	98	1848	98	2608	761	28	1/29	0.99	30	60	98	2472	1/34	1.01	0	0	60	67	73	79	85	90	95	
5	98	2608	98	3047	440	28	2/49	0.85	30	43	98	2835	2/51	0.77	0	0	43	48	53	58	62	66	69	
5	98	3390	98	4282	893	28	-3/43	-0.97	30	38	98	3990	-3/47	-0.88	0	0	38	42	47	50	54	57	61	
5	98	4282	99	259	1258	28	-1/53	-1.03	30	51	98	4571	-2/10	-0.95	0	0	51	57	62	67	72	76	81	
5	99	259	99	518	260	28	-3/17	-0.96	30	41	99	460	-3/17	-0.92	0	0	41	46	50	54	58	62	65	
5	99	518	99	1262	745	29	-3/17	-0.85	30	40	99	730	-3/19	-0.78	0	0	40	45	49	54	57	61	64	
5	99	1860	99	4331	2472	29	-2/38	-0.84	30	40	99	2336	-3/10	-0.7	0	0	40	46	50	54	58	62	66	
5	99	4331	99	4811	481	28	-6/31	-1.38	30	30	99	4600	-6/40	-1.46	0	0	30	34	37	39	42	45	47	
5	99	4811	99	4855	45	28	-4/06	-1.77	30	40	99	4854	-4/05	-1.77	0	0	40	44	48	52	55	58	61	
5	99	4855	99	5164	310	28	-5/01	-1.88	30	37	99	4981	-5/05	-1.91	0	0	37	40	44	47	50	52	55	
5	99	5438	99	5671	234	28	1/47	0.73	30	54	99	5563	1/49	0.74	0	0	54	61	67	72	78	83	87	
5	100	1543	100	1942	400	29	3/18	1.06	30	41	100	1832	3/19	1.07	0	0	41	46	51	55	58	62	65	
5	100	1942	100	2379	438	29	2/58	1.05	30	43	100	2192	3/00	1.02	0	0	43	48	53	57	61	65	69	

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Allentown, PA (CP JU) to Weatherly, PA (M&H Jct)

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	100	2379	100	3702	1324	29	2/13	1.02	30	49	100	3351	2/20	1	0	0	49	55	60	65	70	74	78	
5	100	4324	101	2864	3384	28	2/28	0.8	30	42	101	2310	2/46	0.5	0	0	42	48	53	57	62	66	69	
5	102	1070	102	2175	1106	28	-1/58	-0.96	30	52	102	1356	-2/02	-0.94	0	0	52	58	64	69	74	79	83	
5	102	2735	102	3963	1229	29	-4/53	-1.34	30	34	102	3140	-4/52	-1.05	0	0	34	38	42	45	48	51	54	
5	103	770	103	1152	383	28	3/50	1.4	30	39	103	1068	3/58	1.35	0	0	39	43	47	51	54	58	61	
5	103	1152	103	2323	1172	29	3/56	1.42	30	38	103	1297	4/08	1.35	0	0	38	42	46	50	53	56	59	
5	103	2323	103	3705	1383	29	1/55	0.87	30	52	103	3438	1/58	0.77	0	0	52	58	64	70	75	79	84	
5	104	5462	105	801	859	28	3/31	1.2	30	40	105	525	3/35	1.13	0	0	40	45	49	53	56	60	63	
5	105	3190	105	3978	789	29	-2/32	-0.93	30	46	105	3574	-2/32	-0.83	0	0	46	52	57	62	66	70	74	
5	106	2568	106	3337	770	29	-3/00	-0.88	30	42	106	3052	-3/05	-0.88	0	0	42	47	52	56	60	64	67	
5	106	4147	106	4454	308	29	1/33	0.98	30	58	106	4293	1/41	0.97	0	0	58	65	71	76	82	87	92	
5	107	68	107	425	358	28	1/01	0.84	30	69	107	235	1/09	0.89	0	0	69	77	85	92	98	105	110	
5	107	1351	107	2844	1494	28	-3/04	-0.81	30	41	107	2274	-3/09	-0.83	0	0	41	46	51	55	59	63	66	
5	107	3925	107	4542	618	29	7/54	3.55	30	34	107	4487	8/00	3.49	0	0	34	36	38	41	43	45	47	
5	107	4542	107	4972	431	29	8/31	3.24	30	32	107	4684	8/31	3.24	0	0	32	34	37	39	41	43	45	
5	107	4972	108	1874	2099	30	-6/43	-2.36	30	32	108	1474	-6/52	-2.22	0	0	32	36	38	41	43	46	48	
5	109	3833	109	4125	293	28	2/46	0.84	30	44	109	4093	2/46	0.77	0	0	44	49	54	59	63	67	70	
5	109	4125	109	5325	1201	29	2/37	0.88	30	45	109	4243	2/42	0.83	0	0	45	50	55	60	64	68	72	
5	109	5325	110	218	368	29	1/11	0.95	30	68	110	49	1/11	0.84	0	0	68	76	84	91	97	103	109	
5	110	218	110	774	557	29	2/17	1.07	30	50	110	496	2/18	1.07	0	0	50	56	61	66	70	75	79	
5	110	1438	110	2338	901	29	2/10	0.82	30	47	110	1711	2/24	0.79	0	0	47	53	58	63	68	72	76	
5	110	4355	111	1213	2044	29	1/30	0.8	30	49	110	4749	2/12	0.74	0	0	49	55	61	66	70	75	79	
5	111	2148	111	2948	801	28	4/59	1.3	30	34	111	2593	5/04	1.23	0	0	34	38	41	45	48	50	53	
5	111	3600	111	3951	352	29	-1/44	-1.12	30	58	111	3932	-1/44	-1.11	0	0	58	64	70	76	81	86	91	
5	111	3951	111	5032	1082	29	-1/35	-1.07	30	58	111	4779	-1/42	-1.03	0	0	58	65	71	76	82	87	91	
5	111	5032	112	762	1004	29	-2/41	-1.05	30	45	111	5242	-2/52	-1.08	0	0	45	50	55	59	63	67	70	
5	112	762	112	803	42	29	-1/30	-2.05	30	67	112	763	-1/23	-1.4	0	0	67	74	81	87	93	98	103	
5	112	803	112	1428	626	29	-3/10	-1.21	30	41	112	1217	-3/20	-1.08	0	0	41	46	51	55	58	62	65	
5	112	1428	112	1862	435	28	-2/33	-1.05	30	47	112	1591	-2/35	-1.01	0	0	47	52	57	62	66	70	74	
5	112	3593	112	4213	621	28	-6/20	-0.92	30	29	112	4013	-6/22	-0.89	37	1	29	33	36	39	42	44	47	
5	112	4213	112	4963	751	28	6/51	2.45	30	33	112	4583	6/53	2.44	0	0	33	36	39	41	44	46	48	
5	113	744	113	1321	578	28	-0/56	-0.87	30	71	113	1016	-1/04	-0.81	0	0	71	80	88	95	102	108	114	
5	113	2493	113	3153	661	26	4/16	1.46	30	38	113	2997	4/22	1.44	0	0	38	42	45	49	52	55	58	
5	113	3153	113	3663	511	25	4/08	1.54	30	38	113	3205	4/16	1.52	0	0	38	43	46	50	53	56	59	
5	114	173	114	987	815	16	-2/11	-1.05	30	51	114	796	-2/13	-1.05	0	0	51	57	62	67	72	76	80	
5	114	987	114	1248	262	16	-1/08	-0.9	30	69	114	1120	-1/08	-0.89	0	0	69	78	86	93	99	106	111	
5	114	1662	114	2060	399	16	-1/01	-1.21	30	72	114	1832	-1/07	-1.18	0	0	72	81	88	95	102	108	113	
5	114	3131	114	3664	534	9	10/34	0.61	30	21	114	3400	10/41	0.59	41	-1	21	24	27	29	31	33	35	
2	114	3664	114	3790	127	9	-5/16	-0.37	10	30	114	3731	-5/15	-0.37	0	0	30	34	38	41	44	47	50	
2	114	3790	114	3957	168	10	5/00	-0.02	10	29	114	3849	5/05	-0	0	0	29	33	37	41	44	47	50	
2	114	6710	115	943	983	17	-1/50	-0.94	20	54	115	417	-1/53	-0.95	0	0	54	61	67	72	77	82	86	
2	115	2906	115	3706	801	19	-0/36	-0.77	20	86	115	3111	-0/44	-0.82	0	0	86	97	106	115	123	131	138	
2	115	5513	121	654	847	10	-2/19	-0.89	20	47	121	653	-2/25	-0.86	0	0	47	53	58	63	68	72	76	
2	121	654	121	814	161	8	-3/44	-0.96	20	38	121	813	-3/43	-0.96	0	0	38	43	47	51	55	58	61	
2	121	814	121	1759	946	19	-3/54	-0.93	20	37	121	908	-3/56	-0.81	0	0	37	41	45	49	53	56	59	
2	121	2163	121	2575	413	19	-7/58	-2.14	25	29	121	2462	-8/28	-2.24	0	0	29	32	34	37	39	41	43	

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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
2	121	2575	121	3072	498	20	-8/56	-1.85	25	27	121	2669	-9/01	-1.84	0	0	27	30	32	35	37	39	41	
2	121	5082	122	138	479	23	3/50	0.89	25	38	122	137	3/50	0.89	0	0	38	42	46	50	54	57	60	
2	122	138	122	470	333	24	12/13	3.82	25	27	122	449	12/12	3.69	0	0	27	30	31	33	35	37	38	
2	122	470	122	1286	817	23	12/50	3.85	25	27	122	913	12/56	3.83	0	0	27	29	31	32	34	36	37	
2	122	1286	122	2073	788	22	5/31	1.25	25	32	122	1689	5/34	1.22	0	0	32	36	39	43	45	48	51	
2	122	2073	122	3671	1574	21	-5/59	-1.81	25	32	122	2959	-6/12	-1.6	0	0	32	35	38	41	44	47	49	
2	122	3815	122	4081	267	28	1/14	0.91	30	65	122	4034	1/16	0.73	0	0	65	73	80	87	93	99	105	
2	122	4081	122	4661	581	28	1/14	0.89	30	66	122	4454	1/17	0.93	0	0	66	73	81	87	93	99	104	
2	122	5111	122	5986	876	28	-4/14	-1.55	30	38	122	5486	-4/17	-1.54	0	0	38	42	46	50	53	56	59	
2	122	6132	122	6587	456	28	-4/22	-1.42	25	36	122	6475	-4/25	-1.23	0	0	36	41	44	48	51	54	57	
2	122	6587	122	7018	432	28	-4/19	-1.31	25	37	122	6655	-4/19	-1.31	0	0	37	41	45	49	52	55	58	
2	122	7018	122	7063	46	28	-0/46	-1.2	30	85	122	7019	-0/48	-1.13	0	0	85	95	104	112	120	127	134	
2	122	7063	122	7408	346	28	-0/50	-1.13	30	82	122	7179	-0/51	-1.14	0	0	82	92	101	109	116	123	130	
2	122	7408	122	7545	138	28	-0/16	-0.25	30	126	122	7422	-0/17	-0.23	0	0	126	146	163	178	192	204	217	
2	122	7545	122	8148	604	28	-4/23	-1.3	30	37	122	7855	-4/25	-1.27	0	0	37	41	45	48	51	54	57	
2	122	9578	122	10226	649	27	2/38	0.78	30	43	122	9875	2/44	0.66	0	0	43	49	54	59	63	67	71	
2	122	10226	122	10522	297	27	1/47	0.96	30	55	122	10268	1/49	0.94	0	0	55	62	68	74	79	84	88	
2	122	10751	122	11082	332	28	1/32	0.9	30	60	122	11081	1/32	0.9	0	0	60	67	73	80	85	90	95	
2	122	11082	122	11996	915	28	2/36	0.82	30	44	122	11614	2/46	0.84	0	0	44	50	55	59	63	67	71	
2	122	12215	122	12684	470	27	2/54	0.76	30	42	122	12444	2/59	0.71	0	0	42	47	52	56	60	64	68	
2	122	12684	122	12801	118	28	0/37	0.95	30	95	122	12800	0/37	0.95	0	0	95	106	117	126	135	143	151	
2	122	12801	122	13829	1029	28	6/43	2.44	30	33	122	13212	6/58	2.41	0	0	33	36	38	41	43	46	48	
2	122	13829	122	13964	136	28	1/14	0.78	30	65	122	13842	1/15	0.75	0	0	65	73	81	87	94	99	105	
2	122	13964	122	15050	1087	28	7/58	3.2	30	33	122	14613	7/58	3.1	0	0	33	35	38	40	42	44	46	
2	122	15489	122	15920	432	27	0/00	0	30	400	0	0	0/00	0	0	0	400	0	0	0	0	0	0	
2	122	15920	122	16285	366	27	-8/01	-3.44	30	33	122	15928	-8/04	-3.44	0	0	33	36	38	40	43	45	46	
2	122	16827	122	17440	614	27	-3/22	-0.97	30	40	122	17132	-3/23	-0.97	0	0	40	45	50	54	57	61	64	
2	122	18922	122	19564	643	18	4/12	1.28	30	38	122	19365	4/08	1.19	0	0	38	42	46	49	53	56	59	
2	122	19564	122	19668	105	18	4/00	1.32	30	39	122	19667	4/00	1.32	0	0	39	43	47	51	54	57	60	
2	122	19668	126	259	1041	19	8/13	3.16	30	32	122	20317	8/15	3.12	0	0	32	35	37	39	41	43	45	
2	126	425	126	1191	767	24	-0/53	-0.99	25	75	126	1190	-1/01	-1.09	0	0	75	84	92	100	107	113	119	
2	126	1191	126	1874	684	23	-4/57	-1.03	25	33	126	1508	-5/04	-0.98	0	0	33	37	41	44	47	50	53	
2	126	1874	126	2685	812	23	-1/25	-1.1	25	63	126	2209	-1/27	-1.11	0	0	63	70	77	83	89	94	99	
2	126	2685	126	2971	287	23	-3/47	-1.03	25	39	126	2871	-3/47	-1.03	0	0	39	43	47	51	55	58	61	
2	126	2971	126	3454	484	23	-3/16	-1	25	39	126	2974	-3/31	-0.87	0	0	39	44	48	52	56	60	63	
2	126	3454	126	3835	382	22	-6/48	-1.54	25	30	126	3794	-6/48	-1.52	0	0	30	34	37	39	42	44	47	
2	126	3835	126	4868	1034	23	-7/02	-1.69	25	30	126	4357	-7/19	-1.73	0	0	30	33	36	38	41	43	45	
2	126	4868	126	5121	254	23	-2/28	-1.01	25	47	126	4868	-2/34	-0.99	0	0	47	52	57	62	66	70	74	
2	126	5121	127	147	677	23	-0/37	-0.66	25	84	126	5577	-0/43	-0.54	0	0	84	95	105	114	123	131	138	
2	127	440	127	671	232	23	0/17	0.24	25	123	127	620	0/18	0.22	0	0	123	141	157	172	185	197	209	
2	127	671	127	1434	764	24	3/40	0.93	25	38	127	1241	3/49	0.87	0	0	38	42	46	50	54	57	60	
2	127	1434	127	2498	1065	24	9/20	2.18	25	27	127	1883	9/55	2.12	0	0	27	29	32	34	36	38	40	
2	127	2498	127	2790	293	24	9/16	2.12	25	28	127	2623	9/17	2.12	0	0	28	30	33	35	37	39	41	
2	127	2790	127	3162	373	24	6/10	1.4	25	31	127	2900	6/10	1.4	0	0	31	35	38	41	44	46	49	
2	127	3162	127	3912	751	23	2/47	0.85	25	43	127	3290	2/52	0.85	0	0	43	49	54	58	62	66	70	
2	127	3912	127	4394	483	24	-2/36	-0.95	25	45	127	4179	-2/44	-0.91	0	0	45	50	55	60	64	68	71	

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						Average				Limiting Point													
Track	Starting	Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0
2	127	4394	127	4791	398	24	-1/01	-1.03	25	70	127	4790	-1/08	-1.04	0	0	70	79	86	93	100	106	112
2	127	4791	128	308	656	23	-10/39	-2.84	25	27	128	222	-10/40	-2.84	0	0	27	30	32	34	36	38	39
2	128	308	128	1060	753	24	-10/29	-2.97	25	28	128	452	-10/29	-2.97	0	0	28	30	32	34	36	38	40
2	128	1060	128	1390	331	24	-2/26	-1.14	25	48	128	1266	-2/27	-1.11	0	0	48	54	59	64	68	72	76
2	128	1390	128	2026	637	23	-5/04	-0.79	25	32	128	1634	-5/11	-0.76	0	0	32	36	39	43	46	49	51
2	128	2026	128	2755	730	24	3/30	0.87	25	38	128	2369	3/37	0.7	0	0	38	43	47	51	55	58	61
2	128	2849	128	3280	432	23	-2/19	-1.11	25	49	128	3096	-2/20	-1.08	0	0	49	55	61	65	70	74	78
2	128	3533	128	4132	600	23	-1/55	-0.9	25	53	128	3965	-1/55	-0.91	0	0	53	60	66	71	76	81	85
2	128	4647	129	172	818	24	-4/03	-1.09	25	37	128	5122	-4/07	-1.02	0	0	37	41	45	49	52	56	59
2	129	409	129	902	494	24	2/56	0.97	25	42	129	632	3/04	0.91	0	0	42	47	52	56	60	64	68
2	129	1413	129	1985	573	23	3/56	0.78	25	36	129	1753	4/01	0.77	0	0	36	41	45	49	52	55	58
2	129	1985	129	2100	116	23	2/57	0.96	25	43	129	2099	2/58	0.96	0	0	43	48	53	57	61	65	69
2	129	2100	129	2845	746	23	4/24	1.06	25	35	129	2511	4/28	1.01	0	0	35	40	43	47	50	53	56
2	129	2973	129	3332	360	23	0/48	0.9	25	82	129	3186	0/49	0.91	0	0	82	93	102	110	118	125	132
2	129	3658	129	4298	641	24	3/33	0.79	25	37	129	4003	3/41	0.72	0	0	37	42	47	51	54	58	61
2	129	4391	129	5278	888	24	-1/02	-1.04	25	72	129	4946	-1/05	-1.02	0	0	72	81	89	96	103	109	115
2	129	5278	130	1148	1172	23	-5/02	-0.93	25	32	130	465	-5/10	-0.85	0	0	32	36	40	43	46	49	52
2	130	1307	130	1913	607	22	-4/05	-0.86	25	35	130	1632	-4/14	-0.8	0	0	35	40	44	47	51	54	57

Exception Report
Exception Summary Section
Milepost 86 to Milepost 130

Page 1 of 1
Run Date: 06/04/2012
Run ID: 2012060404

Allentown, PA (CP JU) to Weatherly, PA (M&H Jct)

		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Lim	Pst				
MP	FT	EXC	FT	Drop	EXC	FT	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	Cls	Cls	Trk			
112	5273	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	3	5			
122	137	1	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	2			
		1	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1						

Total Miles: 40.60
Exceptions per 100 Miles: 4.93
CY09 National Average Exceptions per 100 Miles: 21.1

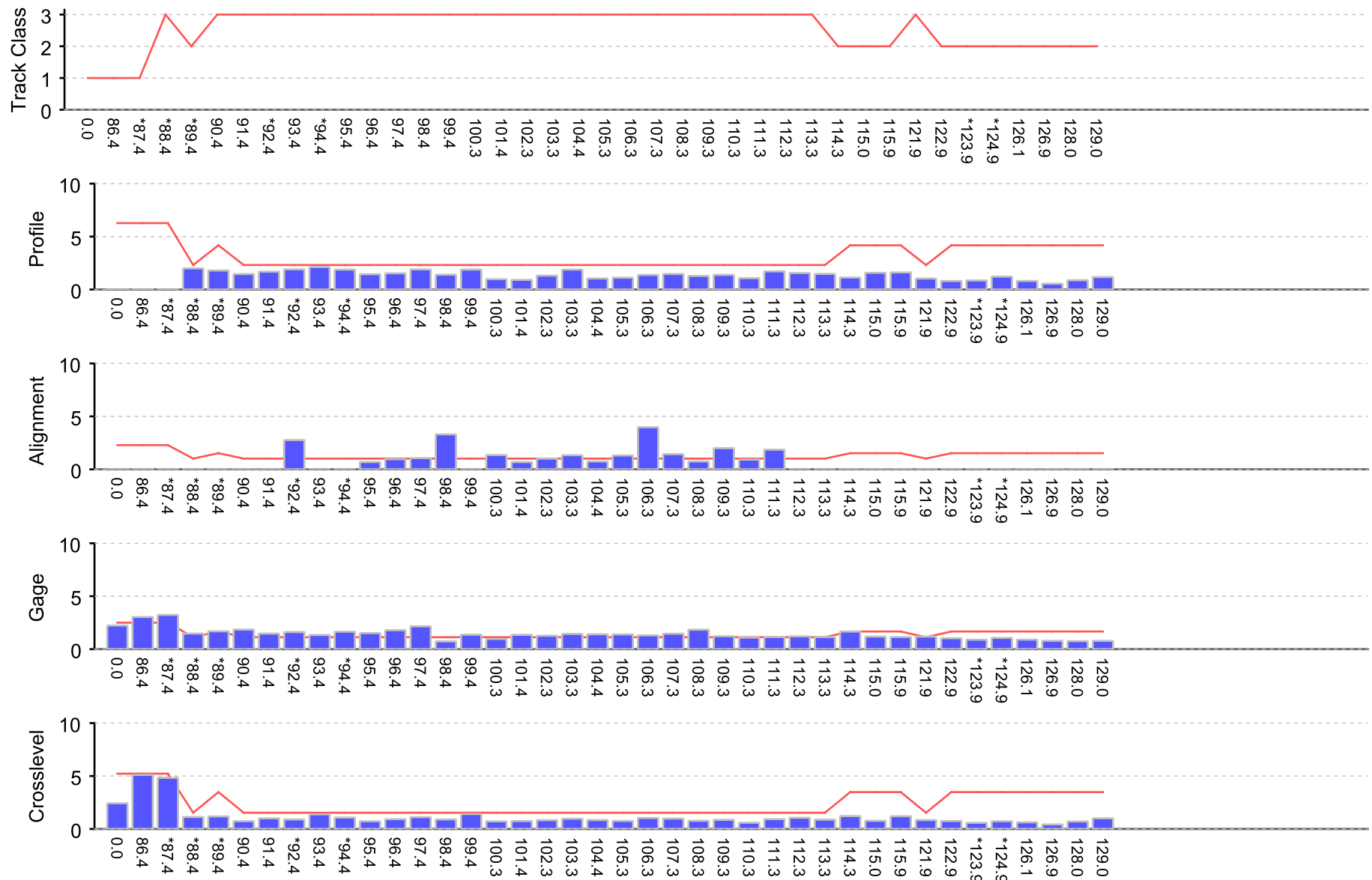
Track Quality Index

Page 1 of 1
Run Date: 2012-06-04
Run ID: 2012060404

Milepost 86 to Milepost 130

Allentown, PA (CP JU)

- Weatherly, PA (M&H Jct)



DOTX 220 Geometry Car

United States Department of Transportation

AUTOMATED TRACK INSPECTION PROGRAM

TRACK GEOMETRY INSPECTION REPORT

Ashtabula, OH (CP-NP) to Shenango, PA

Railroad: NORFOLK SOUTHERN RAILWAY COMPANY (NS)

Survey Number: 1235

Mile Post 2 to Mile Post 131



Prepared for:

United States Department of Transportation
Federal Railroad Administration
Office of Safety
Washington, D.C.

Prepared by:

ENSCO, Inc.
5400 Port Royal Rd
Springfield, VA 22151



Testing Cert. 2411.01

Approved By:

Survey Director:

CARLOS ALFARO

Signature

Date

Under the U.S. Department of Transportation, Federal Railroad Administration (FRA), Office of Safety Assurance and Compliance, Automated Track Inspection Program and in accordance with 49 CFR 213 Federal Track Safety Standards, this Track Geometry Inspection Report provides a list of exceptions that relate only to the time and date the track was inspected and the required remedial action taken. This compliance report is offered only to the track owner and is not to be reproduced to others in whole or part without the expressed written consent of the FRA and the track owner. FRA requests any reprinting be labeled as a copy of the original.

NOTES

During an Automated Track Inspection Program (ATIP) survey, data is collected by the ATIP cars, which generate a Track Geometry Inspection Report (TGIR). These reports make the analysis of the track easier to read and comprehend than attempting to read exceptions from a video strip chart alone. TGIR are generated electronically for printing in near real-time onboard the ATIP cars or can be reprocessed later upon request to the FRA. Copies are transmitted electronically as a Portable Document Format (PDF) using satellite or Internet communications. Copies are distributed as follows:

1. One copy is given to the railroad
2. Two copies are given to the principal FRA Inspector
3. One copy is sent to the FRA Washington headquarters

TGIR consists of five separate sections. Exceptions are not reported for Profile and Alignment when ATIP car speed is less than five (5) and fifteen (15) mile per hour, respectively. The sample interval for track surveyed is one (1) foot.

A complete description of the information provided in the report is available at <http://atip.fra.dot.gov/TGIR>

Exception Report
Exception List Section
Milepost 2 to Milepost 131
Ashtabula, OH (CP-NP) to Shenango, PA

Page 1 of 3
Run Date: 07/02/2012
Run ID: 2012070202

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	1	Class Change	4.00	0	16	T	0	0	1		
0	1	Posted Speed	79.00	0	16	T	0	0	1		
0	1	Track Change	0.00	0	16	T	0	0	7		
0	154	Class Change	1.00	0	5	T	0	0	7	41.860573	-80.794222
0	154	Posted Speed	10.00	0	5	T	0	0	7	41.860573	-80.794222
0	154	Track Change	0.00	0	5	T	0	0	6	41.860573	-80.794222
0	154	State Line	SL	0	5	T	0	0	6	41.860573	-80.794222
0	155	Railroad	RR	0	5	T	0	0	6	41.860575	-80.794219
0	156	Subdivision	SUBDIV	0	5	T	0	0	6	41.860577	-80.794216
0	958	Track Change	0.00	0	8	B	0	0	7	41.861694	-80.791713
0	2001	Track Change	0.00	0	9	B	0	0	1	41.860815	-80.788793
0	2083	Class Change	2.00	0	10	C	0	0	1	41.860605	-80.788691
0	2083	Posted Speed	25.00	0	10	C	0	0	1	41.860605	-80.788691
0	2208	Subdivision	SUBDIV	0	11	C	0	0	1	41.860290	-80.788523
0	2984	Class Change	3.00	0	18	C	0	0	1	41.858473	-80.787088
0	2984	Posted Speed	30.00	0	18	C	0	0	1	41.858473	-80.787088
2	7138	Up Milepost	MP	0	24	T	0	0	1	41.849966	-80.777153
3	5495	Up Milepost	3.00	0	22	T	0	0	1	41.844649	-80.759338
4	4471	Up Milepost	4.00	0	19	C	0	0	1	41.837223	-80.748370
4	2946	Class Change	2.00	0	13	B	0	0	1	41.829222	-80.748415
4	2946	Posted Speed	15.00	0	13	B	0	0	1	41.829222	-80.748415
4	3305	Class Change	4.00	0	12	E	0	0	1	41.828252	-80.748340
4	3305	Posted Speed	50.00	0	12	E	0	0	1	41.828252	-80.748340
4	3329	Track Change	0.00	0	12	E	0	0	5	41.828187	-80.748341
5	5524	Up Milepost	5.00	0	15	T	0	0	5	41.822235	-80.748041
6	4967	Up Milepost	6.00	0	13	T	0	0	5	41.809060	-80.745502
7	5272	Up Milepost	7.00	0	45	T	0	0	5	41.796362	-80.736634
7	4021	CBV Peak to Peak*	0.61	1	49	T	0	0	5	41.786676	-80.729870
8	5499	Up Milepost	8.00	0	48	T	0	0	5	41.783115	-80.727384
9	5595	Up Milepost	9.00	0	48	T	0	0	5	41.769638	-80.717981
9	7790	CBV Peak to Peak*	0.72	1	49	T	0	0	5	41.750865	-80.704894
11	10066	Up Milepost	11.00	0	49	T	0	0	5	41.745385	-80.701072
11	3799	CBV Peak to Peak*	0.65	1	49	T	0	0	5	41.736230	-80.694690
12	5559	Up Milepost	12.00	0	48	T	0	0	5	41.731992	-80.691735
13	5004	Up Milepost	13.00	0	32	T	0	0	5	41.719276	-80.685420
14	5667	Up Milepost	14.00	0	18	T	0	0	5	41.704427	-80.679945
15	5178	Up Milepost	15.00	0	37	T	0	0	5	41.690861	-80.674946
16	5418	Up Milepost	16.00	0	47	C	0	0	5	41.676733	-80.669460
16	3441	CBV Peak to Peak*	0.65	1	48	T	0	0	5	41.668387	-80.663823
16	4090	CBV Peak to Peak*	0.72	1	49	T	0	0	5	41.666817	-80.662743
16	4942	CBV Peak to Peak*	0.62	1	49	T	0	0	5	41.664761	-80.661328
17	5624	Up Milepost	17.00	0	48	T	0	0	5	41.663113	-80.660195
18	5523	Up Milepost	18.00	0	47	T	0	0	5	41.649770	-80.651024
19	5328	Up Milepost	19.00	0	49	T	0	0	5	41.636899	-80.642172

Exception Report
Exception List Section
Milepost 2 to Milepost 131
Ashtabula, OH (CP-NP) to Shenango, PA

Page 2 of 3
Run Date: 07/02/2012
Run ID: 2012070202

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
20	4478	Up Milepost	20.00	0	48	C	0	0	5	41.625465	-80.636867
20	4658	CBV Peak to Peak*	0.79	1	48	T	0	0	5	41.612830	-80.637029
21	5728	Up Milepost	21.00	0	47	T	0	0	5	41.609929	-80.637275
22	5338	Up Milepost	22.00	0	43	T	0	0	5	41.595446	-80.638507
22	119	Posted Speed	45.00	0	43	T	0	0	5	41.595126	-80.638534
23	5285	Up Milepost	23.00	0	29	T	0	0	5	41.581109	-80.639730
24	5607	Up Milepost	24.00	0	27	T	0	0	5	41.565898	-80.641033
24	408	Posted Speed	50.00	0	27	T	0	0	5	41.564794	-80.641126
25	5059	Up Milepost	25.00	0	26	T	0	0	5	41.552173	-80.642200
26	5967	Up Milepost	26.00	0	18	T	0	0	5	41.535986	-80.643569
27	4657	Up Milepost	27.00	0	28	T	0	0	5	41.523342	-80.643127
29	10672	Up Milepost	29.00	0	28	T	0	0	5	41.494433	-80.639859
30	5110	Up Milepost	30.00	0	28	T	0	0	5	41.480594	-80.638277
31	5517	Up Milepost	31.00	0	29	T	0	0	5	41.465651	-80.636573
32	5361	Up Milepost	32.00	0	29	T	0	0	5	41.451130	-80.634919
33	5107	Up Milepost	33.00	0	22	T	0	0	5	41.437297	-80.633346
33	2341	Class Change	2.00	0	18	T	0	0	5	41.430959	-80.632622
33	2341	Posted Speed	25.00	0	18	T	0	0	5	41.430959	-80.632622
33	3173	Class Change	4.00	0	11	T	0	0	5	41.428703	-80.632365
33	3173	Posted Speed	50.00	0	11	T	0	0	5	41.428703	-80.632365
35	10579	Up Milepost	35.00	0	41	T	0	0	5	41.408645	-80.630083
36	5920	Up Milepost	36.00	0	24	T	0	0	5	41.392613	-80.628217
37	5780	Up Milepost	37.00	0	42	T	0	0	5	41.376957	-80.626441
38	4206	Up Milepost	38.00	0	42	T	0	0	5	41.365565	-80.625147
39	5058	Up Milepost	39.00	0	38	T	0	0	5	41.351864	-80.623595
40	6357	Up Milepost	40.00	0	39	T	0	0	5	41.334644	-80.621640
41	5057	Up Milepost	41.00	0	37	T	0	0	5	41.320946	-80.620083
42	5233	Up Milepost	42.00	0	40	T	0	0	5	41.306915	-80.616996
43	5300	Up Milepost	43.00	0	38	T	0	0	5	41.292859	-80.612842
43	5171	CBV Peak to Peak*	0.63	1	48	T	0	0	5	41.279561	-80.606785
43	7974	CBV Peak to Peak*	0.62	1	48	T	0	0	5	41.272360	-80.603512
45	10426	Up Milepost	45.00	0	47	C	0	0	5	41.265981	-80.601064
46	5689	Up Milepost	46.00	0	43	T	0	0	5	41.250981	-80.605211
47	4934	Up Milepost	47.00	0	24	C	0	0	5	41.237808	-80.607224
48	5603	Up Milepost	48.00	0	45	T	0	0	5	41.223224	-80.601488
49	5380	Up Milepost	49.00	0	49	T	0	0	5	41.209542	-80.594668
50	5316	Up Milepost	50.00	0	27	T	0	0	5	41.196165	-80.587423
50	1250	Lmt Speed 3	46.00	58	26	C	0	4	5	41.192991	-80.585827
51	5354	Up Milepost	51.00	0	22	T	0	0	5	41.181868	-80.586150
51	3134	Track Change	0.00	0	7	B	0	0	7	41.173372	-80.586834
51	3163	Class Change	1.00	0	8	B	0	0	7	41.173293	-80.586840
51	3163	Posted Speed	10.00	0	8	B	0	0	7	41.173293	-80.586840
51	3329	Subdivision	SUBDIV	0	9	B	0	0	7	41.172841	-80.586844
51	5306	L Cant NEG*	-2.90	15	9	C	0	1	7	41.167618	-80.585507

Exception Report
Exception List Section
Milepost 2 to Milepost 131
Ashtabula, OH (CP-NP) to Shenango, PA

Page 3 of 3
Run Date: 07/02/2012
Run ID: 2012070202

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
150	6954	Down Milepost	150.00	0	8	T	0	0	7	41.165775	-80.580421
150	46	Track Change	0.00	0	9	T	0	0	5	41.165775	-80.580260
149	5060	Down Milepost	149.00	0	9	C	0	0	5	41.167918	-80.563037
148	5656	Down Milepost	148.00	0	9	E	0	0	5	41.172871	-80.545012
147	5513	Down Milepost	147.00	0	10	C	0	0	5	41.185115	-80.535218
147	4867	Track Change	0.00	0	10	E	0	0	2	41.197757	-80.531583
146	5311	Down Milepost	146.00	0	9	T	0	0	2	41.198962	-80.531438
145	5257	Down Milepost	145.00	0	9	E	0	0	2	41.212510	-80.525900
145	2856	State Line	SL	0	9	C	0	0	2	41.218442	-80.519280
144	4944	Down Milepost	144.00	0	8	T	0	0	2	41.223246	-80.515719
144	3516	Track Change	0.00	0	9	C	0	0	5	41.232491	-80.512550
144	4994	Track Change	0.00	0	9	C	0	0	2	41.236447	-80.511819
143	5663	Down Milepost	143.00	0	10	T	0	0	2	41.238185	-80.511098
142	5182	Down Milepost	142.00	0	9	T	0	0	2	41.251406	-80.504986
141	5372	Down Milepost	141.00	0	9	C	0	0	2	41.262534	-80.492742
141	4458	Class Change	2.00	0	10	B	0	0	2	41.268562	-80.479040
141	4458	Posted Speed	25.00	0	10	B	0	0	2	41.268562	-80.479040
141	4730	Track Change	0.00	0	9	B	0	0	5	41.269059	-80.478325
140	5321	Down Milepost	140.00	0	9	B	0	0	5	41.270098	-80.476689
139	5067	Down Milepost	139.00	0	10	T	0	0	5	41.277006	-80.461112
138	5470	Down Milepost	138.00	0	9	E	0	0	5	41.284018	-80.444109
137	5236	Down Milepost	137.00	0	9	T	0	0	5	41.297776	-80.440137
137	4460	Class Change	1.00	0	10	T	0	0	5	41.309727	-80.437473
137	4460	Posted Speed	10.00	0	10	T	0	0	5	41.309727	-80.437473
135	5376	Down Milepost	135.00	0	9	T	0	0	5	41.326446	-80.433360
134	5361	Down Milepost	134.00	0	10	B	0	0	5	41.340774	-80.429816
134	1132	Class Change	2.00	0	21	C	0	0	5	41.343478	-80.427964
134	1132	Posted Speed	25.00	0	21	C	0	0	5	41.343478	-80.427964
133	5308	Down Milepost	133.00	0	10	T	0	0	5	41.351336	-80.417088
133	91	Class Change	1.00	0	10	T	0	0	5	41.351504	-80.416853
133	91	Posted Speed	10.00	0	10	T	0	0	5	41.351504	-80.416853
132	5346	Down Milepost	132.00	0	10	C	0	0	5	41.361846	-80.403892
131	5342	Down Milepost	131.00	0	5	E	0	0	5	41.375513	-80.397382
131	466	Track Change	0.00	0	6	B	0	0	7	41.376702	-80.396825

Notes:

* Federal Track Safety Standard Advisory
Cant Exceptions are in degrees. The following fields are irrelevant for Cant Exceptions: LC, PC
Rail Impact Values are in Gs; the threshold is 20g peak to peak

Exception Report
Curve Analysis Section
Milepost 2 to Milepost 131

Page 1 of 3
Run Date: 07/02/2012
Run ID: 2012070202

Ashtabula, OH (CP-NP) to Shenango, PA

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
6	0	425	0	661	237	8	2/26	0.52	10	43	0	557	2/32	0.4	0	0	43	49	55	60	64	68	72	
6	0	661	0	894	234	8	-2/28	-0.2	10	40	0	762	-2/32	0.11	0	0	40	46	52	57	62	66	70	
7	0	894	0	1310	417	9	11/43	1.51	10	22	0	1193	12/11	1.38	0	0	22	25	27	29	31	33	34	
7	0	1310	0	1996	687	7	12/01	1.66	10	23	0	1375	12/01	1.5	0	0	23	25	27	29	31	33	35	
1	0	1996	0	2081	86	10	-2/18	-0.7	10	47	0	2064	-2/19	-0.61	0	0	47	53	58	63	68	72	77	
1	0	2081	0	3236	1156	18	-1/55	-0.51	10	48	0	2772	-2/05	-0.44	0	0	48	55	61	66	71	76	80	
1	2	391	2	2477	2087	24	-1/49	-1.3	30	54	2	2000	-2/03	-1.31	0	0	54	60	66	71	76	80	84	
1	2	2477	2	2966	490	23	-2/26	-1.33	30	50	2	2586	-2/29	-1.38	0	0	50	55	60	65	69	73	77	
1	3	467	4	288	4293	22	1/58	0.2	30	44	3	778	2/06	-0.05	0	0	44	51	58	63	68	73	78	
1	4	2894	4	3133	240	13	-2/53	-0.13	30	38	4	3021	-2/55	0.03	0	0	38	44	49	54	58	62	66	
5	4	3133	4	3341	209	12	2/55	-0.11	15	36	4	3241	2/58	-0.18	0	0	36	42	48	52	57	61	65	
5	4	3571	4	3974	357	14	-0/44	-1.31	50	89	4	3882	-0/44	-1.24	0	0	89	100	109	118	126	133	140	
5	4	3974	4	4459	410	6	-1/22	-0.98	50	58	4	4086	-1/38	-0.95	0	0	58	65	72	78	83	88	93	
5	4	4539	4	5166	628	16	1/35	1.2	50	60	4	4774	1/38	1.12	0	0	60	66	73	78	84	89	94	
5	5	1811	5	2196	386	15	-0/31	-1.09	50	100	5	2195	-0/35	-1.27	0	0	100	112	123	132	141	149	157	
5	5	2196	5	4891	2696	15	-1/00	-1.62	50	77	5	2567	-1/02	-1.36	0	0	77	86	93	101	107	113	119	
5	12	482	12	1618	1137	48	0/25	1.34	50	109	12	705	0/28	0.91	0	0	109	122	134	144	155	164	173	
5	12	1618	12	1780	163	48	0/16	1.3	50	147	12	1701	0/17	1.28	0	0	147	164	179	192	205	217	229	
5	12	1780	12	2033	254	48	0/19	0.75	50	123	12	1910	0/20	0.64	0	0	123	139	153	167	179	190	201	
5	12	2083	12	3103	1021	48	0/19	1.3	50	129	12	3017	0/21	1.07	0	0	129	143	157	169	181	192	202	
5	12	3103	12	3807	705	46	0/22	1.11	50	98	12	3202	0/35	1.01	0	0	98	110	120	130	139	147	155	
5	15	4137	16	695	1977	47	-0/38	-1.51	50	86	15	5028	-0/49	-1.25	0	0	86	96	105	113	120	127	134	
5	19	635	20	2418	6262	49	0/29	0.91	50	93	19	753	0/34	0.45	0	0	93	106	117	128	137	146	155	
5	26	653	26	1043	391	27	-0/16	-1.47	50	153	26	907	-0/16	-1.5	0	0	153	173	188	202	216	228	240	
5	26	1467	26	1740	274	29	-0/17	-1	50	139	26	1550	-0/17	-0.99	0	0	139	159	174	188	201	214	225	
5	26	1866	26	2555	690	29	-0/19	-0.73	50	119	26	2434	-0/19	-0.16	0	0	119	138	154	168	181	193	205	
5	26	2555	26	3151	597	28	-0/16	-1.3	50	140	26	2744	-0/17	-1.13	0	0	140	158	173	187	200	212	223	
5	26	3291	26	3377	87	28	-0/13	-1.39	50	158	26	3291	-0/14	-1.42	0	0	158	179	195	210	223	236	249	
5	35	4499	35	4840	342	30	-0/19	-0.33	50	121	35	4714	-0/19	-0.38	0	0	121	139	154	168	181	193	204	
5	35	4840	35	5047	208	29	0/30	0.77	50	93	35	4928	0/37	0.7	0	0	93	104	115	125	134	142	150	
5	41	157	41	1254	1098	37	-0/20	-0.96	50	117	41	1216	-0/24	-0.96	0	0	117	133	145	157	168	178	188	
5	41	1254	41	1553	300	36	-0/15	-0.48	50	134	41	1425	-0/17	-0.72	0	0	134	155	170	185	198	210	222	
5	42	2867	42	4811	1904	34	-0/29	-0.91	50	97	42	3511	-0/32	-0.67	0	0	97	111	122	132	142	151	159	
5	43	9138	45	2487	3776	48	0/58	1.22	50	74	43	9820	1/03	1.05	0	0	74	82	90	97	104	110	116	
5	45	2487	45	2629	143	43	0/16	0.18	50	128	45	2564	0/17	0.22	0	0	128	146	163	178	191	204	216	
5	46	1280	46	3084	1805	39	-0/58	-1.42	50	76	46	2345	-1/01	-1.17	0	0	76	85	93	100	107	113	119	
5	46	3084	47	2201	4052	29	-0/29	-1.45	50	102	47	181	-0/33	-1.08	0	0	102	114	125	135	144	153	161	
5	48	1865	48	2631	767	49	-0/29	-1.53	50	108	48	2490	-0/32	-1.48	0	0	108	120	130	140	149	158	166	
5	48	2631	48	2778	148	49	-0/16	-0.34	50	133	48	2720	-0/16	-0.34	0	0	133	154	171	186	200	214	226	
5	50	659	50	1122	464	27	1/37	0.63	50	56	50	1121	1/37	0.63	0	0	56	63	70	76	82	87	92	
5	50	1122	50	1391	270	27	2/31	0.88	50	46	50	1250	2/37	0.93	58	1	46	51	56	61	65	69	73	
5	50	1391	50	2436	1046	26	1/37	0.78	50	56	50	1391	1/40	0.68	0	0	56	63	69	75	81	86	90	
7	51	3067	51	3290	224	9	-2/50	0.45	50	35	51	3200	-2/51	0.47	21	-1	35	42	47	52	57	61	65	
7	51	3290	51	3494	205	9	2/22	0.04	10	41	51	3371	2/24	-0.04	0	0	41	48	54	59	64	68	73	
7	51	3494	51	3865	372	9	-4/50	-1.77	10	37	51	3653	-4/50	-1.77	0	0	37	41	44	47	50	53	56	
7	51	4407	51	4853	447	12	-3/26	-0.93	10	38	51	4654	-3/30	-0.69	0	0	38	43	48	52	56	59	62	

Exception Report
Curve Analysis Section
Milepost 2 to Milepost 131

Page 2 of 3
Run Date: 07/02/2012
Run ID: 2012070202

Ashtabula, OH (CP-NP) to Shenango, PA

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point														
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at								
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0		
7	51	4853	51	4896	44	10	-1/05	-0.36	10	63	51	4864	-1/01	0.1	0	0	63	74	83	91	98	105	112		
7	51	4896	51	6159	1264	10	-4/00	-1.53	10	37	51	6066	-4/12	-1.12	0	0	37	41	45	49	52	55	58		
7	51	6159	51	6606	399	7	-3/50	-1.29	10	38	51	6556	-4/12	-1.32	0	0	38	42	46	49	53	56	59		
7	51	6606	51	6856	194	6	-4/32	0.08	10	28	51	6698	-4/36	0.38	0	0	28	33	37	41	45	48	51		
5	150	916	150	1476	561	9	2/20	1.1	10	49	150	1179	2/21	1.11	0	0	49	55	60	65	70	74	78		
5	150	1476	150	1940	465	10	-2/35	-1.31	10	48	150	1743	-2/42	-1.37	0	0	48	53	58	62	66	70	74		
5	150	2870	150	3291	422	8	-2/44	-1.44	10	43	150	3063	-3/02	-1.05	0	0	43	48	53	57	61	65	68		
5	150	3291	150	3989	699	9	-4/34	-3.18	10	43	150	3525	-4/38	-3.09	0	0	43	46	49	52	55	58	61		
5	150	4700	149	285	646	10	-1/05	-1.15	10	71	149	63	-1/07	-1.11	0	0	71	80	88	95	101	107	113		
5	149	566	149	1658	1093	10	3/58	2.35	10	43	149	971	4/01	2.25	0	0	43	47	50	54	57	60	63		
5	149	2595	149	2815	221	9	0/30	0.64	10	97	149	2674	0/26	-0.16	0	0	97	113	126	139	150	161	171		
5	149	2815	149	3261	447	10	1/03	0.97	10	66	149	2941	1/11	0.64	0	0	66	74	82	89	96	102	108		
5	149	4077	149	4524	448	8	-5/43	-2.36	10	36	149	4512	-5/42	-2.31	0	0	36	39	42	45	48	50	53		
5	149	4524	149	5078	555	10	-6/41	-2.18	10	32	149	4880	-6/56	-2.15	0	0	32	35	38	40	43	45	47		
5	149	5078	149	5110	33	10	-4/43	-2.26	10	39	149	5078	-4/41	-2.18	0	0	39	43	46	49	52	55	58		
5	149	5110	149	5268	159	9	-4/46	-1.85	10	38	149	5147	-4/46	-1.85	0	0	38	41	45	48	51	54	57		
5	149	5268	148	211	600	9	-3/31	-1.64	10	40	149	5273	-3/40	-1.25	0	0	40	45	49	53	56	60	63		
5	148	2387	148	4092	1706	10	2/59	2.04	10	48	148	2835	3/00	1.89	0	0	48	52	57	61	65	68	72		
5	148	4952	147	753	1315	10	-2/13	-2.44	10	57	147	752	-2/26	-2.66	0	0	57	62	66	71	75	79	82		
5	147	753	147	1751	999	10	-3/03	-3.32	10	52	147	935	-3/13	-3.15	0	0	52	56	60	63	67	70	73		
5	147	4406	147	4677	272	11	1/36	0.48	10	55	147	4560	1/42	0.6	0	0	55	62	68	74	79	85	89		
2	147	4677	147	5007	331	10	-1/34	-0.42	10	51	147	4764	-1/41	-0.17	0	0	51	59	66	72	78	83	88		
2	146	773	146	1341	569	9	2/19	0.6	10	45	146	1182	2/20	0.44	0	0	45	52	57	62	67	71	75		
2	146	1341	146	1704	364	9	1/53	0.5	10	50	146	1341	1/57	0.45	0	0	50	57	63	68	73	78	83		
2	146	4288	146	4493	206	10	0/39	0.61	10	83	146	4395	0/42	0.44	0	0	83	95	105	114	123	131	138		
2	146	4493	145	200	965	9	2/37	0.95	10	43	146	5146	2/53	0.91	0	0	43	49	54	58	62	66	69		
2	145	2230	145	3199	970	9	1/27	1.1	10	61	145	2683	1/34	1.09	0	0	61	68	74	80	85	90	95		
2	145	3199	145	4105	907	10	-6/22	-1.78	10	32	145	3631	-6/23	-1.77	0	0	32	35	38	41	44	46	49		
2	144	1884	144	2458	575	9	-1/55	-1.19	10	54	144	2157	-1/58	-1.05	0	0	54	60	66	71	76	81	85		
5	144	3150	144	4056	907	10	-1/13	-0.7	10	53	144	3344	-1/31	-0.07	0	0	53	62	69	75	81	87	92		
5	144	4244	144	4639	396	9	5/22	0.45	10	30	144	4457	5/23	0.43	0	0	30	34	37	41	44	47	50		
2	144	4854	144	5127	274	9	1/59	-0.03	10	42	144	4974	2/04	-0.35	0	0	42	50	56	62	67	72	77		
2	144	5127	144	5584	458	10	-0/25	-0.31	10	86	144	5226	-0/37	-0.3	0	0	86	99	110	120	129	138	146		
2	143	6	143	621	616	10	2/28	0.88	10	46	143	343	2/30	0.83	0	0	46	52	57	62	66	71	74		
2	143	1765	143	2106	342	6	-3/14	-0.23	10	36	143	2099	-3/14	-0.01	0	0	36	42	47	51	55	59	63		
2	143	2106	143	2753	648	8	-3/00	-0.97	10	37	143	2116	-3/16	-0.16	0	0	37	42	47	51	55	59	63		
2	143	3075	143	4883	1809	11	1/28	1.04	10	60	143	3371	1/31	0.88	0	0	60	67	74	80	86	91	96		
2	142	1118	142	3088	1971	10	1/04	1.18	10	65	142	2429	1/19	0.93	0	0	65	73	80	86	92	98	103		
2	142	4138	142	4738	601	10	-2/48	-1.65	10	47	142	4417	-2/49	-1.5	0	0	47	52	57	61	65	69	73		
2	142	4868	141	305	810	10	4/00	1.24	10	38	142	5310	4/02	1.2	0	0	38	42	46	50	53	57	60		
2	141	759	141	1169	411	10	3/50	1.47	10	39	141	1057	3/52	1.28	0	0	39	44	48	51	55	58	61		
2	141	1169	141	1195	27	10	3/13	1.83	10	46	141	1194	3/13	1.83	0	0	46	50	55	58	62	66	69		
2	141	1195	141	1405	211	10	3/18	1.26	10	42	141	1243	3/18	1.26	0	0	42	47	52	56	59	63	66		
2	141	1809	141	3414	1606	10	-1/57	-1.18	10	53	141	2956	-1/59	-1	0	0	53	60	65	71	75	80	84		
2	141	4369	141	4713	345	9	-2/08	-0.44	10	46	141	4636	-2/14	-0.4	0	0	46	53	58	64	68	73	77		
5	141	4713	141	4919	207	8	2/52	0.31	25	38	141	4796	2/53	0.05	0	0	38	44	49	54	59	63	66		

Exception Report
Curve Analysis Section
Milepost 2 to Milepost 131

Page 3 of 3
Run Date: 07/02/2012
Run ID: 2012070202

Ashtabula, OH (CP-NP) to Shenango, PA

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

						Average				Limiting Point													
Track	Starting	Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0
5	141	4986	141	5265	280	9	1/25	1.02	25	63	141	5264	1/26	1.02	0	0	63	70	77	83	89	94	100
5	141	5265	140	401	458	15	2/23	1.15	25	49	140	129	2/18	0.87	0	0	49	54	60	65	69	74	78
5	140	401	140	739	339	18	1/34	0.87	25	54	140	401	1/44	0.64	0	0	54	61	68	73	79	84	88
5	140	982	140	1212	231	25	-0/39	-1.03	25	93	140	1135	-0/39	-1.01	0	0	93	104	114	124	132	140	148
5	140	1212	140	1376	165	26	-1/46	-1.43	25	57	140	1326	-1/46	-1.07	0	0	57	64	70	75	80	85	90
5	140	1376	140	1402	27	26	-1/44	-1.38	25	60	140	1401	-1/43	-1.38	0	0	60	66	72	78	83	88	92
5	140	1402	140	2330	929	26	-2/29	-1.07	25	47	140	1647	-2/32	-1	0	0	47	53	58	62	67	71	75
5	140	2622	140	4008	1387	26	2/26	0.99	25	47	140	3212	2/32	0.92	0	0	47	52	57	62	66	70	74
5	139	2995	138	91	2567	10	-1/29	-1.25	25	61	139	4679	-1/32	-1.08	0	0	61	68	75	81	86	92	96
5	138	91	138	228	138	10	-0/37	-1.13	25	93	138	91	-0/38	-1.01	0	0	93	105	115	125	133	141	149
5	138	228	138	1028	801	10	-1/56	-1.25	25	52	138	445	-2/04	-1.06	0	0	52	59	64	69	74	79	83
5	138	1028	138	2058	1031	10	-1/38	-1.17	25	54	138	1606	-2/01	-1.15	0	0	54	60	66	71	76	80	84
5	138	2193	138	2707	515	10	0/26	0.87	25	94	138	2402	0/38	0.95	0	0	94	105	116	125	134	142	150
5	137	6607	137	7336	730	10	0/22	0.93	25	116	137	7142	0/25	0.96	0	0	116	131	144	155	166	176	186
5	135	4982	134	361	741	10	2/46	0.89	10	44	134	234	2/47	0.8	0	0	44	49	54	59	63	67	70
5	134	361	134	1523	1163	22	2/29	1.07	10	46	134	934	2/36	0.97	0	0	46	52	57	61	66	70	74
5	133	3621	132	678	2404	12	-1/15	-1.21	10	66	132	379	-1/21	-1.16	0	0	66	73	80	87	92	98	103
5	132	4246	132	4727	482	9	-0/20	-1.15	10	122	132	4510	-0/23	-1.11	0	0	122	138	151	163	174	185	194
5	132	4960	132	5123	164	9	0/19	0.72	10	121	132	5062	0/21	0.6	0	0	121	136	151	164	176	187	197
5	132	5123	131	56	276	7	0/16	0.76	10	138	132	5268	0/17	0.77	0	0	138	156	171	185	199	211	223
7	131	380	131	601	222	7	-3/59	0.77	10	27	131	503	-4/04	0.92	0	0	27	32	37	42	46	49	53
7	131	601	131	673	73	7	0/29	-0.06	10	87	131	635	0/34	-0.03	0	0	87	100	112	123	133	142	151
7	131	673	131	1087	415	7	-6/43	0.79	10	16	131	929	-7/46	1.59	0	0	16	21	25	28	31	34	36
7	131	1087	131	1421	335	7	9/51	2.28	10	27	131	1268	9/53	2.27	0	0	27	30	32	34	36	38	40
7	131	1421	131	1611	191	7	-6/01	2.2	10	12	131	1495	-6/06	2.3	0	0	12	19	25	29	33	36	39
7	131	1775	131	1902	128	4	-0/16	2.3	10	55	131	1845	-0/16	2.4	0	0	55	91	117	137	155	172	186

Exception Report
Exception Summary Section
Milepost 2 to Milepost 131

Ashtabula, OH (CP-NP) to Shenango, PA

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Run Date: 07/02/2012

Run ID: 2012070202

		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Lim	Pst	
MP	FT	EXC	FT	Drop	EXC	FT	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	Cls	Cls	Trk
50	5316	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	4	5
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1			

Total Miles: 71.50

Exceptions per 100 Miles: 1.40

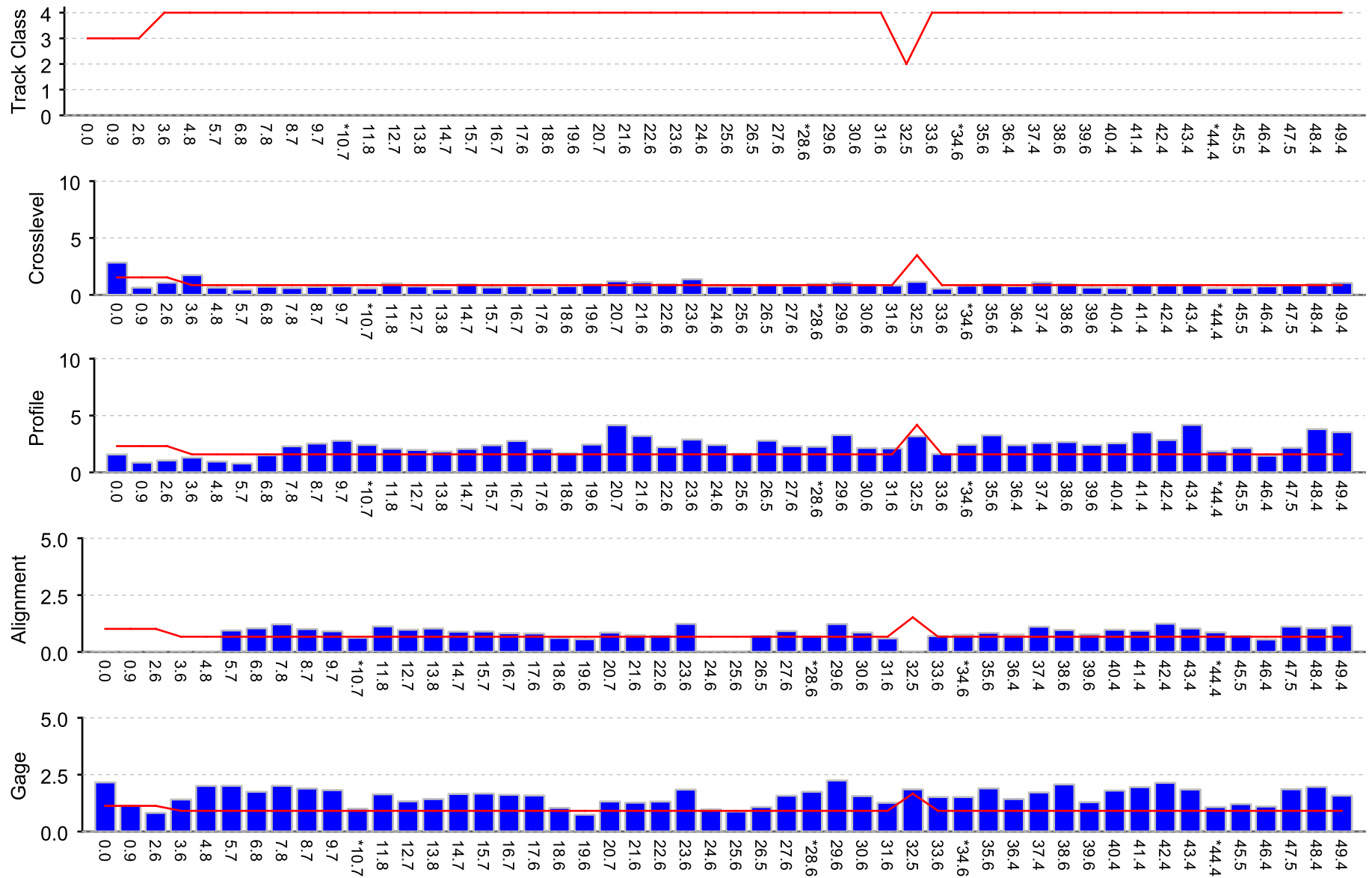
CY09 National Average Exceptions per 100 Miles: 21.1

Track Quality Index

Page 1 of 2
Run Date: 2012-07-02
Run ID: 2012070202

Milepost 2 to Milepost 131

Ashtabula, OH (CP-NP) - Shenango, PA

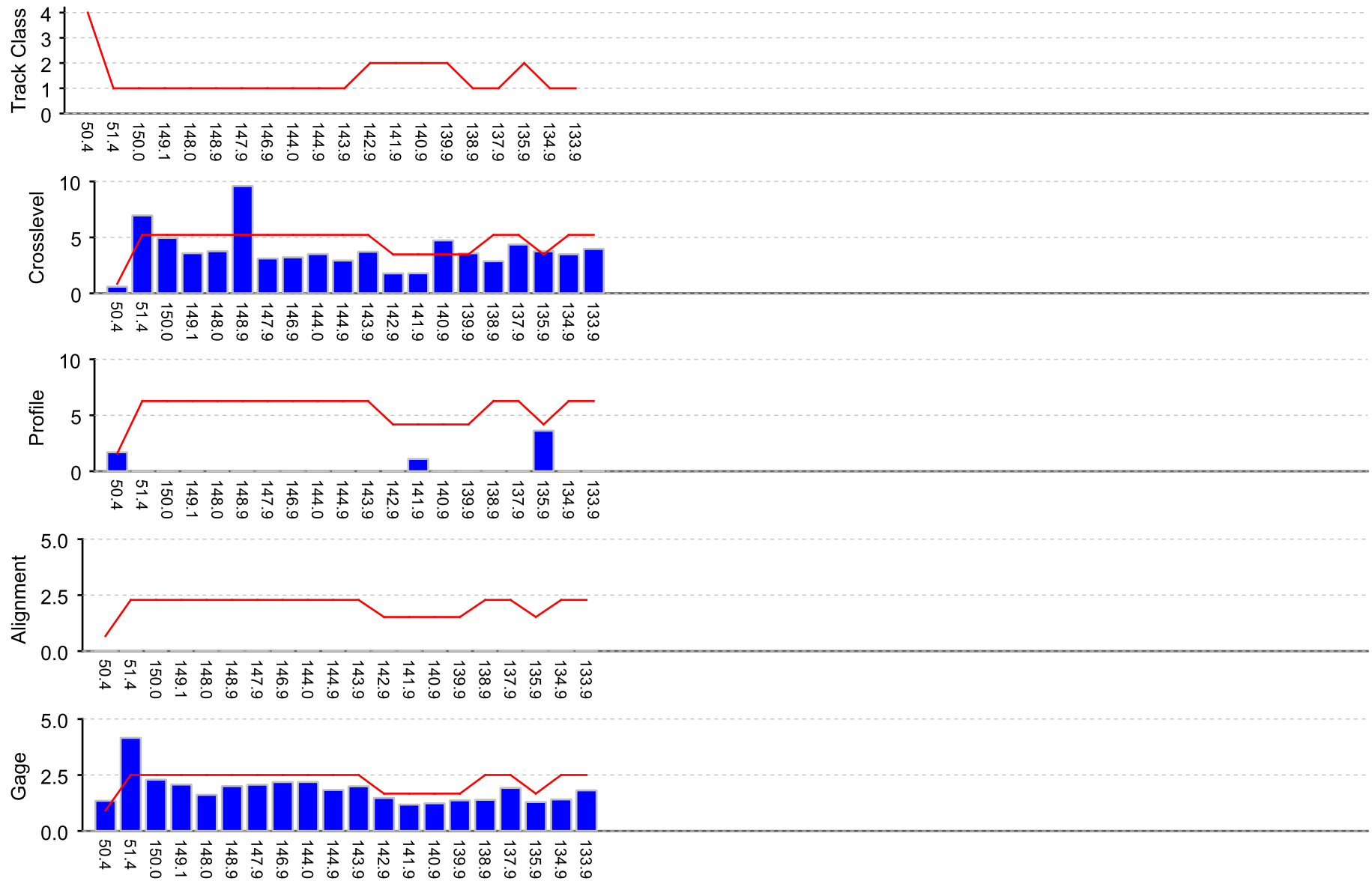


Track Quality Index

Page 2 of 2
Run Date: 2012-07-02
Run ID: 2012070202

Milepost 2 to Milepost 131

Ashtabula, OH (CP-NP) - Shenango, PA



DOTX 220 Geometry Car

United States Department of Transportation

AUTOMATED TRACK INSPECTION PROGRAM

TRACK GEOMETRY INSPECTION REPORT

Ithaca, NY to Binghamton, NY

Railroad: NORFOLK SOUTHERN RAILWAY COMPANY (NS)

Survey Number: 1343

Mile Post 306 to Mile Post 214



Prepared for:

United States Department of Transportation
Federal Railroad Administration
Office of Safety
Washington, D.C.

Prepared by:

ENSCO, Inc.
5400 Port Royal Rd
Springfield, VA 22151



Testing Cert. 2411.01

Approved By:

Survey Director:

CARLOS ALFARO

Signature

Date

Under the U.S. Department of Transportation, Federal Railroad Administration (FRA), Office of Safety Assurance and Compliance, Automated Track Inspection Program and in accordance with 49 CFR 213 Federal Track Safety Standards, this Track Geometry Inspection Report provides a list of exceptions that relate only to the time and date the track was inspected and the required remedial action taken. This compliance report is offered only to the track owner and is not to be reproduced to others in whole or part without the expressed written consent of the FRA and the track owner. FRA requests any reprinting be labeled as a copy of the original.

NOTES

During an Automated Track Inspection Program (ATIP) survey, data is collected by the ATIP cars, which generate a Track Geometry Inspection Report (TGIR). These reports make the analysis of the track easier to read and comprehend than attempting to read exceptions from a video strip chart alone. TGIR are generated electronically for printing in near real-time onboard the ATIP cars or can be reprocessed later upon request to the FRA. Copies are transmitted electronically as a Portable Document Format (PDF) using satellite or Internet communications. Copies are distributed as follows:

1. One copy is given to the railroad
2. Two copies are given to the principal FRA Inspector
3. One copy is sent to the FRA Washington headquarters

TGIR consists of five separate sections. Exceptions are not reported for Profile and Alignment when ATIP car speed is less than five (5) and fifteen (15) mile per hour, respectively. The sample interval for track surveyed is one (1) foot.

A complete description of the information provided in the report is available at <http://atip.fra.dot.gov/TGIR>

Exception Report
Exception List Section
Milepost 306 to Milepost 214
Ithaca, NY to Binghamton, NY

Page 1 of 4
Run Date: 05/28/2013
Run ID: 2013052802

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	207	Class Change	2.00	0	9	T	0	0	7	42.429748	-76.519892
0	207	Posted Speed	25.00	0	9	T	0	0	7	42.429748	-76.519892
0	207	Track Change	0.00	0	9	T	0	0	5	42.429748	-76.519892
0	207	State Line	NY	0	9	T	0	0	5	42.429748	-76.519892
0	208	Railroad	NS -	0	9	T	0	0	5	42.429746	-76.519895
0	209	Subdivision	ITHACA	0	9	T	0	0	5	42.429743	-76.519897
306	1133	Down Milepost	306.00	0	20	T	0	0	5	42.427650	-76.521844
305	5559	Down Milepost	305.00	0	23	T	0	0	5	42.414139	-76.530969
304	5200	Down Milepost	304.00	0	24	T	0	0	5	42.401590	-76.540071
303	5153	Down Milepost	303.00	0	24	T	0	0	5	42.389618	-76.549983
302	5249	Down Milepost	302.00	0	24	C	0	0	5	42.377624	-76.556013
301	5302	Down Milepost	301.00	0	23	B	0	0	5	42.363700	-76.557079
300	5294	Down Milepost	300.00	0	23	T	0	0	5	42.352710	-76.544956
299	5326	Down Milepost	299.00	0	23	C	0	0	5	42.341176	-76.534495
299	3346	Class Change	1.00	0	11	T	0	0	5	42.334738	-76.525733
299	3346	Posted Speed	10.00	0	11	T	0	0	5	42.334738	-76.525733
299	4525	Class Change	2.00	0	13	T	0	0	5	42.332529	-76.522566
299	4525	Posted Speed	25.00	0	13	T	0	0	5	42.332529	-76.522566
298	5505	Down Milepost	298.00	0	22	C	0	0	5	42.330525	-76.520167
297	5114	Down Milepost	297.00	0	23	B	0	0	5	42.317619	-76.515112
296	5328	Down Milepost	296.00	0	24	E	0	0	5	42.303640	-76.515705
295	5250	Down Milepost	295.00	0	24	T	0	0	5	42.289381	-76.516073
294	5288	Down Milepost	294.00	0	24	T	0	0	5	42.275469	-76.511788
293	5263	Down Milepost	293.00	0	24	E	0	0	5	42.261680	-76.510171
292	5321	Down Milepost	292.00	0	24	C	0	0	5	42.247188	-76.510714
291	5378	Down Milepost	291.00	0	24	T	0	0	5	42.233116	-76.504917
290	5252	Down Milepost	290.00	0	24	T	0	0	5	42.219112	-76.501559
289	5191	Down Milepost	289.00	0	24	T	0	0	5	42.206145	-76.506414
288	5320	Down Milepost	288.00	0	24	T	0	0	5	42.201748	-76.524811
287	5208	Down Milepost	287.00	0	23	E	0	0	5	42.200093	-76.543824
286	5360	Down Milepost	286.00	0	23	B	0	0	5	42.190747	-76.557670
285	5257	Down Milepost	285.00	0	22	T	0	0	5	42.176568	-76.560094
284	5277	Down Milepost	284.00	0	24	T	0	0	5	42.162164	-76.561334
283	5311	Down Milepost	283.00	0	23	T	0	0	5	42.147897	-76.558666
282	5303	Down Milepost	282.00	0	24	T	0	0	5	42.133891	-76.553500
281	5406	Down Milepost	281.00	0	22	T	0	0	5	42.119470	-76.549079
280	5263	Down Milepost	280.00	0	22	C	0	0	5	42.105355	-76.550821
280	2275	Class Change	1.00	0	10	T	0	0	5	42.099160	-76.551120
280	2275	Posted Speed	10.00	0	10	T	0	0	5	42.099160	-76.551120
280	4025	Class Change	2.00	0	10	E	0	0	5	42.094423	-76.550406
280	4025	Posted Speed	25.00	0	10	E	0	0	5	42.094423	-76.550406
279	5216	Down Milepost	279.00	0	23	C	0	0	5	42.091315	-76.548956
278	5270	Down Milepost	278.00	0	23	T	0	0	5	42.076929	-76.548127
278	3997	Class Change	1.00	0	10	T	0	0	5	42.066551	-76.544129

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MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
278	3997	Posted Speed	10.00	0	10	T	0	0	5	42.066551	-76.544129
277	5248	Down Milepost	277.00	0	9	T	0	0	5	42.063522	-76.541965
277	4131	Class Change	2.00	0	10	T	0	0	5	42.052758	-76.537590
277	4131	Posted Speed	25.00	0	10	T	0	0	5	42.052758	-76.537590
276	5382	Down Milepost	276.00	0	22	T	0	0	5	42.049420	-76.536590
276	1442	Warp 62	2.39	20	24	T	1	2	5	42.045669	-76.534995
275	5334	Down Milepost	275.00	0	25	C	0	0	5	42.035936	-76.529127
274	5250	Down Milepost	274.00	0	24	T	0	0	5	42.022780	-76.522018
273	5337	Down Milepost	273.00	0	21	E	0	0	5	42.008287	-76.523294
273	3635	State Line	PA	0	14	T	0	0	5	41.998460	-76.521222
272	5182	Down Milepost	272.00	0	9	T	0	0	5	41.994243	-76.520596
272	2092	State Line	NY	0	12	T	0	0	5	42.000671	-76.539025
272	2093	Subdivision	SOUTHE	0	12	T	0	0	5	42.000671	-76.539021
272	2097	Class Change	4.00	0	12	T	0	0	5	42.000672	-76.539007
272	2097	Posted Speed	50.00	0	12	T	0	0	5	42.000672	-76.539007
272	2101	Track Change	0.00	0	12	T	0	0	5	42.000672	-76.538992
255	2408	Down Milepost	255.00	0	19	T	0	0	5	42.000735	-76.537865
254	5214	Down Milepost	254.00	0	48	C	0	0	5	42.003302	-76.519068
254	3402	CBV Peak to Peak*	0.64	1	48	T	0	0	5	42.005292	-76.506867
253	5435	Down Milepost	253.00	0	48	E	0	0	5	42.006474	-76.499567
252	5216	Down Milepost	252.00	0	48	T	0	0	5	42.007724	-76.480530
251	5329	Down Milepost	251.00	0	48	C	0	0	5	42.014228	-76.465183
250	5233	Down Milepost	250.00	0	48	C	0	0	5	42.027841	-76.470947
249	5288	Down Milepost	249.00	0	47	T	0	0	5	42.039555	-76.460271
248	5300	Down Milepost	248.00	0	48	B	0	0	5	42.042817	-76.441988
247	5300	Down Milepost	247.00	0	48	S	0	0	5	42.035020	-76.425751
246	5077	Down Milepost	246.00	0	48	T	0	0	5	42.033172	-76.407814
245	5551	Down Milepost	245.00	0	48	T	0	0	5	42.030112	-76.387867
244	5222	Down Milepost	244.00	0	48	T	0	0	5	42.031501	-76.369342
243	5269	Down Milepost	243.00	0	48	T	0	0	5	42.041885	-76.357331
242	5304	Down Milepost	242.00	0	48	T	0	0	5	42.054222	-76.347130
242	3130	CBV Peak to Peak*	0.65	1	48	T	0	0	5	42.061303	-76.340648
241	5198	Down Milepost	241.00	0	49	C	0	0	5	42.066236	-76.336985
240	5336	Down Milepost	240.00	0	49	T	0	0	5	42.079844	-76.330104
239	5328	Down Milepost	239.00	0	49	T	0	0	5	42.087757	-76.314168
239	3602	Lmt Speed 3	45.00	443	48	C	0	4	5	42.092092	-76.302297
238	5281	Down Milepost	238.00	0	49	B	0	0	5	42.095606	-76.298329
238	3689	CBV Peak to Peak*	0.64	1	49	T	0	0	5	42.101573	-76.287427
237	5313	Down Milepost	237.00	0	48	C	0	0	5	42.103945	-76.282385
236	5245	Down Milepost	236.00	0	47	T	0	0	5	42.107822	-76.263802
234	10592	Down Milepost	234.00	0	49	T	0	0	5	42.097344	-76.229206
234	3054	CBV Peak to Peak*	0.76	1	49	T	0	0	5	42.092960	-76.219641
234	3760	CBV Peak to Peak*	0.65	1	49	T	0	0	5	42.091952	-76.217424
233	5284	Down Milepost	233.00	0	49	C	0	0	5	42.090085	-76.212452

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MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
233	4289	CBV Peak to Peak*	0.67	1	49	E	0	0	5	42.091587	-76.197252
232	5287	Down Milepost	232.00	0	48	T	0	0	5	42.093140	-76.194237
231	5314	Down Milepost	231.00	0	48	C	0	0	5	42.100669	-76.177623
230	5287	Down Milepost	230.00	0	48	C	0	0	5	42.097561	-76.158983
230	4363	CBV Peak to Peak*	0.63	1	49	T	0	0	5	42.087404	-76.150974
229	5298	Down Milepost	229.00	0	48	T	0	0	5	42.084923	-76.150122
228	5268	Down Milepost	228.00	0	49	C	0	0	5	42.071064	-76.144835
227	5298	Down Milepost	227.00	0	49	E	0	0	5	42.064401	-76.130700
226	5307	Down Milepost	226.00	0	48	C	0	0	5	42.071182	-76.113501
225	5222	Down Milepost	225.00	0	48	C	0	0	5	42.081028	-76.099670
225	2033	Twist 31ft*	1.15	3	48	E	3	4	5	42.084573	-76.094176
224	5109	Down Milepost	224.00	0	49	T	0	0	5	42.091148	-76.087289
224	4120	CBV Peak to Peak*	0.71	1	47	T	0	0	5	42.096578	-76.074312
224	4566	CBV Peak to Peak*	0.75	1	48	T	0	0	5	42.096988	-76.072757
223	5236	Down Milepost	223.00	0	47	T	0	0	5	42.097598	-76.070437
222	5378	Down Milepost	222.00	0	49	B	0	0	5	42.104758	-76.053394
222	4079	CBV Peak to Peak*	0.70	1	49	T	0	0	5	42.107679	-76.039074
221	5267	Down Milepost	221.00	0	48	C	0	0	5	42.108199	-76.034765
221	3753	CBV Peak to Peak*	0.99	1	48	T	0	0	5	42.108082	-76.020955
221	4133	CBV Peak to Peak*	0.72	1	48	T	0	0	5	42.108052	-76.019562
220	5083	Down Milepost	220.00	0	46	B	0	0	5	42.107996	-76.016072
219	5490	Down Milepost	219.00	0	41	T	0	0	5	42.115822	-75.999155
218	5250	Down Milepost	218.00	0	23	T	0	0	5	42.118408	-75.980788
218	1683	Track Change	0.00	0	22	B	0	0	6	42.117966	-75.974628
218	1979	Class Change	2.00	0	22	E	0	0	6	42.117924	-75.973539
218	1979	Posted Speed	25.00	0	22	E	0	0	6	42.117924	-75.973539
218	2786	Track Change	0.00	0	23	T	0	0	1	42.117708	-75.970586
218	2854	Class Change	4.00	0	23	T	0	0	1	42.117691	-75.970336
218	2854	Posted Speed	50.00	0	23	T	0	0	1	42.117691	-75.970336
218	5048	Class Change	2.00	0	23	T	0	0	1	42.117110	-75.962302
218	5048	Posted Speed	25.00	0	23	T	0	0	1	42.117110	-75.962302
217	5319	Down Milepost	217.00	0	22	T	0	0	1	42.117040	-75.961306
216	5305	Down Milepost	216.00	0	13	T	0	0	1	42.112468	-75.943235
216	3528	Class Change	3.00	0	13	T	0	0	1	42.107008	-75.932536
216	3528	Posted Speed	30.00	0	13	T	0	0	1	42.107008	-75.932536
214	9809	Down Milepost	214.00	0	6	T	0	0	1	42.104092	-75.910468
214	453	Class Change	1.00	0	7	B	0	0	1	42.104084	-75.908804
214	453	Posted Speed	10.00	0	7	B	0	0	1	42.104084	-75.908804
214	453	Track Change	0.00	0	7	B	0	0	7	42.104084	-75.908804
214	470	Track Change	0.00	0	7	B	0	0	7	42.104084	-75.908741
214	807	Down Milepost	214.00	0	7	E	0	0	7	42.104115	-75.907510

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MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude

Notes:

* Federal Track Safety Standard Advisory
Cant Exceptions are in degrees. The following fields are irrelevant for Cant Exceptions: LC, PC
Rail Impact Values are in Gs; the threshold is 20g peak to peak

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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	306	1848	306	2509	662	24	-3/59	-0.88	25	37	306	2166	-4/02	-0.88	0	0	37	41	45	49	52	56	59	
5	306	3881	306	4636	756	23	1/17	0.99	25	63	306	4203	1/19	0.63	0	0	63	70	78	84	90	96	102	
5	306	4956	306	5453	498	23	1/16	1.07	25	67	306	5185	1/17	1.01	0	0	67	74	81	88	94	100	105	
5	304	3069	304	3879	811	24	2/52	0.95	25	44	304	3451	2/56	0.94	0	0	44	49	53	58	62	66	69	
5	304	4389	304	4989	601	24	-2/05	-0.76	25	50	304	4643	-2/07	-0.73	0	0	50	56	62	67	72	76	80	
5	303	969	303	1699	731	24	4/49	1.53	25	36	303	1295	4/50	1.42	0	0	36	40	43	46	49	52	55	
5	303	2611	303	3855	1245	23	-9/02	-1.21	25	26	303	3346	-9/05	-1.19	0	0	26	28	31	33	35	37	40	
5	303	4934	302	209	525	24	1/26	1.07	25	62	303	5205	1/31	1.07	0	0	62	69	75	81	87	92	97	
5	302	2438	302	3417	980	24	6/50	1.28	25	29	302	3000	6/51	1.15	0	0	29	32	35	38	41	43	46	
5	302	3800	302	4656	857	23	-2/53	-0.7	25	43	302	4456	-2/53	-0.67	0	0	43	48	53	57	61	65	69	
5	302	5075	301	1075	1303	24	-6/10	-1.37	25	31	301	226	-6/14	-1.31	0	0	31	34	38	40	43	46	48	
5	300	957	300	1704	748	24	3/45	1.04	25	39	300	1357	3/46	1.02	0	0	39	43	47	51	55	58	61	
5	300	1704	300	2370	667	24	3/00	0.92	25	42	300	1704	3/02	0.8	0	0	42	47	52	56	60	64	67	
5	300	2783	300	3413	631	24	-2/22	-1.23	25	49	300	3051	-2/17	-0.9	0	0	49	55	60	65	70	74	78	
5	300	3413	300	4026	614	24	-4/49	-1.09	25	34	300	3597	-4/51	-1.02	0	0	34	38	42	45	48	51	54	
5	300	4026	300	4859	834	24	-2/14	-1.13	25	51	300	4575	-2/18	-1.13	0	0	51	56	61	66	71	75	79	
5	300	4977	299	475	825	24	2/01	0.77	25	51	300	5322	1/59	0.54	0	0	51	57	63	68	73	78	82	
5	299	940	299	1489	550	20	1/37	0.93	25	55	299	1197	1/45	0.68	0	0	55	61	68	73	79	84	88	
5	299	2386	299	3086	701	13	-1/05	-0.63	25	67	299	2782	-1/13	-0.78	0	0	67	75	82	89	95	101	107	
5	299	4892	298	302	916	23	4/02	0.83	25	37	299	5423	4/05	0.86	0	0	37	41	45	48	52	55	58	
5	298	1143	298	2305	1163	24	2/50	1.22	25	45	298	1904	2/52	1.07	0	0	45	50	55	59	63	67	70	
5	298	3272	298	4616	1345	24	-5/03	-1.63	25	36	298	3645	-5/02	-1.46	0	0	36	39	42	45	48	51	54	
5	298	4932	297	1250	1433	24	4/04	1.1	25	37	297	887	4/05	1	0	0	37	41	45	49	52	56	59	
5	297	2939	297	4747	1809	25	1/46	1	25	54	297	3207	1/51	0.78	0	0	54	60	66	72	77	82	86	
5	297	4747	296	55	637	23	-3/51	-0.72	25	37	297	5052	-3/52	-0.7	0	0	37	41	45	49	53	56	59	
5	296	1200	296	2037	838	23	-3/37	-0.98	25	39	296	1557	-3/42	-0.92	0	0	39	43	47	51	55	58	61	
5	295	1242	295	1974	733	24	-0/56	-0.82	25	71	295	1435	-0/57	-0.43	0	0	71	81	90	98	105	112	119	
5	295	3454	295	4291	838	23	-3/58	-0.67	25	36	295	3949	-3/58	-0.62	0	0	36	40	44	48	52	55	58	
5	294	618	294	1894	1277	24	5/04	1.37	25	33	294	972	5/08	1.01	0	0	33	37	40	44	47	50	52	
5	294	1894	294	2914	1021	24	-5/34	-1.39	25	33	294	2201	-5/37	-1.33	0	0	33	36	40	43	46	48	51	
5	294	3408	294	4651	1244	23	4/08	0.81	25	35	294	3740	4/08	0.64	0	0	35	40	44	47	51	54	57	
5	294	4651	293	77	690	24	-1/31	-0.94	25	58	294	4847	-1/33	-0.69	0	0	58	65	72	78	84	89	94	
5	293	2103	292	1725	4944	25	-0/31	-1.06	25	95	293	4744	-0/35	-0.76	0	0	95	107	118	127	137	145	153	
5	291	2192	291	3791	1600	24	1/29	0.91	25	59	291	2596	1/31	0.66	0	0	59	66	72	79	84	90	95	
5	290	936	290	2080	1145	23	0/57	1.03	25	72	290	1278	1/06	0.95	0	0	72	80	87	95	101	107	113	
5	290	3621	290	5036	1416	24	5/07	1.51	25	35	290	4010	5/13	1.42	0	0	35	38	41	45	48	50	53	
5	289	2324	289	3105	782	22	1/59	0.96	25	52	289	2794	2/04	0.96	0	0	52	58	64	69	74	78	83	
5	289	3105	289	4424	1320	23	0/59	0.89	25	71	289	4174	1/04	0.79	0	0	71	80	88	95	102	108	114	
5	288	3051	288	3759	709	23	-2/15	-1.04	25	50	288	3447	-2/15	-0.98	0	0	50	56	61	66	71	75	79	
5	288	4769	287	46	486	23	-0/45	-0.85	25	84	288	5004	-0/45	-0.74	0	0	84	94	104	113	121	128	136	
5	287	958	287	2144	1187	24	-3/05	-1.11	25	42	287	1295	-3/05	-0.82	0	0	42	47	51	56	60	63	67	
5	287	2788	287	3529	742	25	-4/17	-1.13	25	37	287	3244	-4/18	-1.11	0	0	37	41	45	48	51	55	57	
5	287	4816	287	5343	528	23	2/46	0.84	25	44	287	5080	2/47	0.83	0	0	44	49	54	59	63	67	71	
5	287	5343	286	735	753	24	-5/09	-1.75	25	36	286	448	-5/11	-1.6	0	0	36	39	42	45	48	51	54	
5	286	735	286	1264	530	23	-0/54	-1.29	25	80	286	904	-0/57	-1.27	0	0	80	89	97	104	111	118	124	
5	286	1264	286	1835	572	23	1/19	0.99	25	65	286	1582	1/21	1.03	0	0	65	72	79	86	92	97	103	

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							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	286	3389	286	4363	975	24	-0/59	-0.8	25	72	286	3771	-1/01	-0.7	0	0	72	81	89	97	104	110	117	
5	285	1672	285	2363	692	23	0/57	1.23	25	76	285	1991	1/00	1.02	0	0	76	84	92	100	107	113	119	
5	284	863	284	2059	1197	23	-1/58	-1.03	25	53	284	1545	-1/59	-0.94	0	0	53	59	65	70	75	80	84	
5	284	3357	284	4324	968	23	-0/26	-0.93	25	111	284	4011	-0/28	-0.99	0	0	111	124	136	147	157	167	176	
5	282	2821	282	3452	632	24	1/04	0.93	25	66	282	3001	1/07	0.4	0	0	66	74	83	90	97	103	109	
5	281	584	281	1594	1011	23	4/16	1.09	25	36	281	991	4/14	0.79	0	0	36	40	44	47	51	54	57	
5	281	2706	281	4186	1481	23	-2/01	-0.9	25	51	281	3151	-2/02	-0.66	0	0	51	57	63	68	73	78	82	
5	281	4949	280	1346	1661	22	0/26	0.86	25	103	280	1155	0/30	0.68	0	0	103	115	127	138	148	157	166	
5	280	2356	280	4148	1793	10	-1/41	-0.85	10	56	280	2737	-1/41	-0.68	0	0	56	63	69	75	80	85	90	
5	280	4814	279	848	1251	23	1/59	0.99	25	52	279	358	2/04	0.94	0	0	52	58	64	69	74	78	83	
5	279	3776	279	4638	863	24	-1/00	-0.97	25	74	279	4030	-0/59	-0.78	0	0	74	83	91	99	106	113	119	
5	278	1519	278	3133	1615	21	-1/38	-1.05	25	58	278	1890	-1/38	-0.84	0	0	58	64	71	77	82	87	92	
5	277	577	277	1779	1203	9	1/40	1.05	10	56	277	912	1/40	0.65	0	0	56	63	69	75	80	85	90	
5	276	214	276	469	256	23	-0/27	-0.39	25	103	276	468	-0/26	-0.39	0	0	103	119	132	144	154	165	174	
5	276	469	276	1268	800	24	-1/38	-1.07	25	57	276	742	-1/44	-0.96	0	0	57	64	70	75	81	86	90	
5	276	4292	275	687	1730	25	-0/29	-1.26	25	106	275	396	-0/32	-1.25	0	0	106	117	128	138	147	156	164	
5	275	1860	275	4653	2794	24	0/58	0.96	25	74	275	2294	1/00	0.79	0	0	74	82	90	98	105	112	118	
5	274	772	274	2163	1392	24	1/36	1.41	25	59	274	1142	1/47	1.32	0	0	59	65	71	76	81	86	90	
5	274	3153	273	70	2255	23	-0/59	-0.99	25	71	274	4343	-1/05	-0.81	0	0	71	79	87	94	101	107	113	
5	273	70	273	531	462	21	-0/28	-0.23	25	90	273	70	-0/37	-0.58	0	0	90	102	113	123	132	140	148	
5	273	1996	273	2303	308	18	1/26	0.84	25	57	273	2138	1/31	0.44	0	0	57	64	71	77	83	89	94	
5	273	2721	273	3135	415	18	-1/01	-0.83	25	67	273	2912	-1/08	-0.56	0	0	67	75	83	90	97	103	109	
5	273	4172	273	4774	603	10	1/32	1.32	25	61	273	4449	1/39	1.36	0	0	61	68	74	79	85	90	94	
5	272	1434	272	1761	328	8	-6/47	-0.26	25	26	272	1623	-6/47	-0.2	0	0	26	29	33	36	38	41	43	
5	272	1761	272	1776	16	6	-1/41	-0.16	25	50	272	1761	-1/40	0.05	0	0	50	58	65	71	77	82	87	
5	272	1776	272	1942	104	5	-1/53	0.28	25	45	272	1813	-1/56	0.31	0	0	45	52	58	64	70	75	80	
5	255	857	255	1934	1078	39	-1/00	-1.03	50	73	255	1439	-1/05	-1.04	0	0	73	81	89	96	103	109	115	
5	255	4369	255	4992	624	48	-0/23	-0.81	50	111	255	4791	-0/26	-0.88	0	0	111	125	138	149	159	169	179	
5	255	4992	254	180	403	48	0/22	0.47	50	111	255	5053	0/26	0.8	0	0	111	124	137	148	159	169	178	
5	254	4972	253	142	606	48	0/47	0.87	50	83	254	5239	0/49	0.95	0	0	83	92	101	110	117	124	131	
5	253	1877	253	2946	1070	48	1/16	0.3	50	61	253	2544	1/16	0.3	0	0	61	69	77	84	90	96	102	
5	252	863	252	2123	1261	48	-2/07	-1.2	50	53	252	1649	-2/10	-1.19	0	0	53	58	64	68	73	77	82	
5	252	2626	252	4287	1662	48	-3/32	-3.89	50	52	252	3170	-3/36	-3.87	0	0	52	55	59	62	65	68	71	
5	252	4360	251	821	1791	48	-3/38	-3.77	50	51	252	5114	-3/38	-3.67	0	0	51	54	58	61	64	67	70	
5	251	1818	251	2328	511	48	-0/49	-1.05	50	82	251	2017	-0/51	-1.02	0	0	82	91	100	108	116	123	129	
5	251	4308	250	946	1872	48	2/58	3.28	50	54	250	333	3/02	3.21	0	0	54	58	62	65	69	72	75	
5	250	1277	250	1812	536	49	2/52	3.22	50	56	250	1538	2/55	3.29	0	0	56	59	63	67	71	74	77	
5	250	1812	250	2158	347	49	1/27	1	50	60	250	1812	1/32	0.87	0	0	60	67	74	80	85	90	95	
5	250	2158	250	4198	2041	49	0/29	0.97	50	100	250	2169	0/34	0.98	0	0	100	111	122	132	141	149	158	
5	249	420	249	2196	1777	48	2/59	3.44	50	55	249	1052	3/03	3.41	0	0	55	58	62	66	69	73	76	
5	249	4814	248	1282	1769	48	3/07	3.3	50	52	248	22	3/08	3.02	0	0	52	56	60	64	67	70	74	
5	248	4736	247	422	987	48	-1/56	-1.62	50	57	248	5179	-2/01	-1.56	0	0	57	62	68	73	77	82	86	
5	247	1192	247	3249	2058	49	-2/31	-2.4	50	54	247	2195	-2/46	-2.59	0	0	54	58	62	66	70	74	77	
5	247	3678	247	4909	1232	48	2/38	2.34	50	53	247	4296	2/43	2.37	0	0	53	57	62	66	70	73	77	
5	246	4091	246	5394	1304	48	0/57	0.88	50	72	246	4501	1/01	0.72	0	0	72	81	89	97	103	110	116	
5	245	611	245	2336	1726	48	-2/45	-2.97	50	55	245	1092	-2/44	-2.82	0	0	55	59	63	67	71	75	78	

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Milepost 306 to Milepost 214
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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point														
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at								
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0		
5	244	295	244	2767	2473	48	-2/28	-2.6	50	56	244	1098	-2/29	-2.48	0	0	56	61	65	69	73	77	81		
5	244	3925	244	4571	647	48	-0/24	-0.96	50	112	244	4334	-0/26	-1.01	0	0	112	127	139	150	161	171	180		
5	243	1156	243	2063	908	48	1/32	1.22	50	60	243	1598	1/43	1.35	0	0	60	66	72	78	83	88	92		
5	242	3622	241	521	2098	50	-1/02	-0.9	50	68	242	4034	-1/14	-1.01	0	0	68	75	83	89	96	101	107		
5	241	2343	241	2741	399	49	0/38	1.08	50	92	241	2635	0/38	0.82	0	0	92	103	113	123	132	140	148		
5	241	2741	241	3331	591	49	1/00	0.85	50	70	241	2873	1/07	0.85	0	0	70	78	86	93	100	106	112		
5	241	3922	241	5168	1247	49	1/17	0.92	50	64	241	4857	1/19	0.81	0	0	64	72	79	86	92	98	103		
5	240	590	240	2538	1949	49	2/01	0.9	50	52	240	2051	2/07	0.94	0	0	52	57	63	68	73	77	81		
5	239	2727	239	3515	789	48	-1/59	-1.08	50	53	239	3514	-2/04	-1.01	0	0	53	58	64	69	74	78	83		
5	239	3515	239	3958	444	48	-2/21	-0.89	50	45	239	3602	-2/26	-0.46	230	1	45	51	56	61	66	70	74		
5	239	3958	239	4592	635	48	-1/52	-0.79	50	53	239	4014	-1/53	-0.76	0	0	53	60	66	71	76	81	86		
5	239	4955	238	1011	1338	49	2/02	0.81	50	50	238	442	2/07	0.76	0	0	50	56	62	67	72	77	81		
5	238	4448	237	879	1745	48	1/21	0.98	50	63	237	232	1/23	0.89	0	0	63	71	78	84	90	95	101		
5	236	742	236	3613	2872	49	1/54	1.1	50	52	236	2593	2/01	0.75	0	0	52	58	63	69	74	78	83		
5	234	3991	234	4505	515	49	-1/13	-1.17	50	68	234	4463	-1/11	-0.9	0	0	68	76	84	91	97	103	109		
5	234	4505	233	1379	2159	49	-1/29	-0.76	50	59	234	4843	-1/34	-0.82	0	0	59	66	72	78	84	89	94		
5	233	1744	233	4483	2740	50	-1/28	-0.73	50	56	233	3148	-1/31	-0.3	0	0	56	63	70	77	83	88	93		
5	232	3126	232	4516	1391	49	0/48	1.21	50	81	232	3901	0/53	1.06	0	0	81	90	98	106	113	120	127		
5	232	4516	232	4778	263	49	0/37	1.12	50	97	232	4777	0/38	1.19	0	0	97	107	117	126	135	143	150		
5	232	4778	231	2556	3093	48	1/29	1.02	50	58	232	5040	1/38	0.8	0	0	58	64	71	76	82	87	92		
5	231	4551	230	829	1566	49	2/58	2.87	50	52	231	4988	3/02	2.66	0	0	52	56	60	63	67	70	74		
5	230	1789	230	4155	2367	49	0/58	0.99	50	73	230	3286	1/03	0.91	0	0	73	81	89	96	103	110	116		
5	230	4155	230	4281	127	49	0/18	0.02	50	115	230	4172	0/20	0.14	0	0	115	131	146	160	173	184	195		
5	229	3730	228	351	1890	49	-0/52	-0.83	50	73	229	5066	-1/00	-0.79	0	0	73	82	90	98	105	112	118		
5	228	1572	228	2166	595	49	-1/37	-1.74	50	64	228	2077	-1/31	-1.39	0	0	64	71	77	83	89	94	99		
5	228	2166	227	26	3159	49	-2/52	-3.41	50	54	228	3812	-3/01	-3.28	0	0	54	58	62	66	69	73	76		
5	227	3939	226	756	2125	48	-1/13	-0.95	50	65	226	37	-1/20	-0.97	0	0	65	73	80	86	92	98	103		
5	226	798	226	1443	646	48	-1/02	-1.17	50	74	226	1176	-1/06	-1.24	0	0	74	82	90	96	103	109	115		
5	226	1443	226	2553	1111	48	2/22	1.78	50	52	226	1832	2/25	1.57	0	0	52	57	62	66	71	75	79		
5	226	2553	226	3195	643	48	-1/32	-0.99	50	60	226	2806	-1/38	-1.09	0	0	60	66	73	78	84	89	94		
5	226	4451	225	491	1263	48	1/55	1.92	50	59	226	4887	1/56	1.69	0	0	59	64	70	75	79	84	88		
5	225	491	225	2304	1814	48	-2/52	-3.05	50	53	225	981	-2/53	-2.75	0	0	53	57	61	65	69	72	76		
5	225	2304	225	3420	1117	48	2/55	3.15	50	53	225	2680	2/58	2.79	0	0	53	57	61	65	68	72	75		
5	224	349	224	2633	2285	48	1/29	0.77	50	58	224	1879	1/30	0.57	0	0	58	65	72	79	84	90	95		
5	223	1454	223	3763	2310	49	-0/58	-0.92	50	73	223	2556	-1/02	-0.91	0	0	73	82	90	97	104	110	116		
5	223	4930	222	2029	2478	49	1/28	0.98	50	60	222	1000	1/36	1.09	0	0	60	67	73	79	85	90	94		
5	222	4827	221	1009	1450	48	0/55	0.88	50	74	222	5190	1/01	0.92	0	0	74	83	91	98	105	111	117		
5	221	4786	220	1334	1632	46	-3/54	-4.12	50	51	220	557	-3/55	-4.06	0	0	51	54	57	60	63	66	69		
5	220	2573	220	3660	1088	45	1/51	2.51	50	63	220	3129	1/55	2.3	0	0	63	68	73	78	83	87	91		
5	219	1610	219	3644	2035	38	2/01	2.2	50	57	219	3114	2/10	1.99	0	0	57	62	68	72	77	81	85		
6	218	1593	218	1825	233	22	-2/29	0.11	50	40	218	1726	-2/33	0.09	33	1	40	46	52	57	62	66	70		
6	218	1825	218	2076	252	22	2/20	0.56	50	46	218	1925	2/22	0.57	20	-1	46	52	58	63	67	72	76		
1	217	1609	217	2471	863	23	1/27	1.06	25	59	217	2097	1/34	0.83	0	0	59	66	72	78	84	89	94		
1	217	2471	217	3004	534	23	1/04	1.13	25	70	217	2471	1/11	1.09	0	0	70	78	85	92	98	104	110		
1	217	3004	217	4004	1001	22	1/52	1.07	25	55	217	3488	1/53	1.05	0	0	55	61	67	72	77	82	87		
1	216	4512	216	6303	1792	17	-2/39	-1.1	30	46	216	5408	-2/42	-1.04	0	0	46	51	56	61	65	69	72		

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Curve Analysis Section
Milepost 306 to Milepost 214
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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

						Average				Limiting Point														
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
1	216	7434	216	8020	587	17	-0/22	-1.04	30	115	216	7644	-0/26	-1.06	0	0	115	129	141	153	163	173	182	
1	216	8020	216	8342	323	17	0/29	0.59	30	99	216	8238	0/34	0.84	0	0	99	111	122	132	141	150	158	
7	214	386	214	580	195	7	-4/17	-0.2	30	33	214	509	-4/17	-0.19	0	0	33	37	41	45	49	52	55	
7	214	580	214	715	136	5	3/31	0.44	10	36	214	647	3/37	0.21	0	0	36	40	45	49	53	56	60	
7	214	715	214	95	188	7	-4/50	0.5	10	27	214	802	-4/50	0.51	0	0	27	32	36	40	43	47	50	
7	214	95	214	283	153	4	5/59	0.37	10	28	214	183	6/05	0.24	0	0	28	31	35	38	41	44	46	

Exception Report
Exception Summary Section
Milepost 306 to Milepost 214
Ithaca, NY to Binghamton, NY

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MP		FT		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
				Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Lim	Pst	
				Exc	FT	Drop	Exc	FT	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	Cls	Cls	Trk
276	5382	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	20	-	-	-	-	-	1	2	5		
239	5328	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	4	5			
225	5222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	3	4	5		
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	20	-	1	3	-	1					

Total Miles: 75.80
Exceptions per 100 Miles: 3.96
CY12 National Average Exceptions per 100 miles: 11.3

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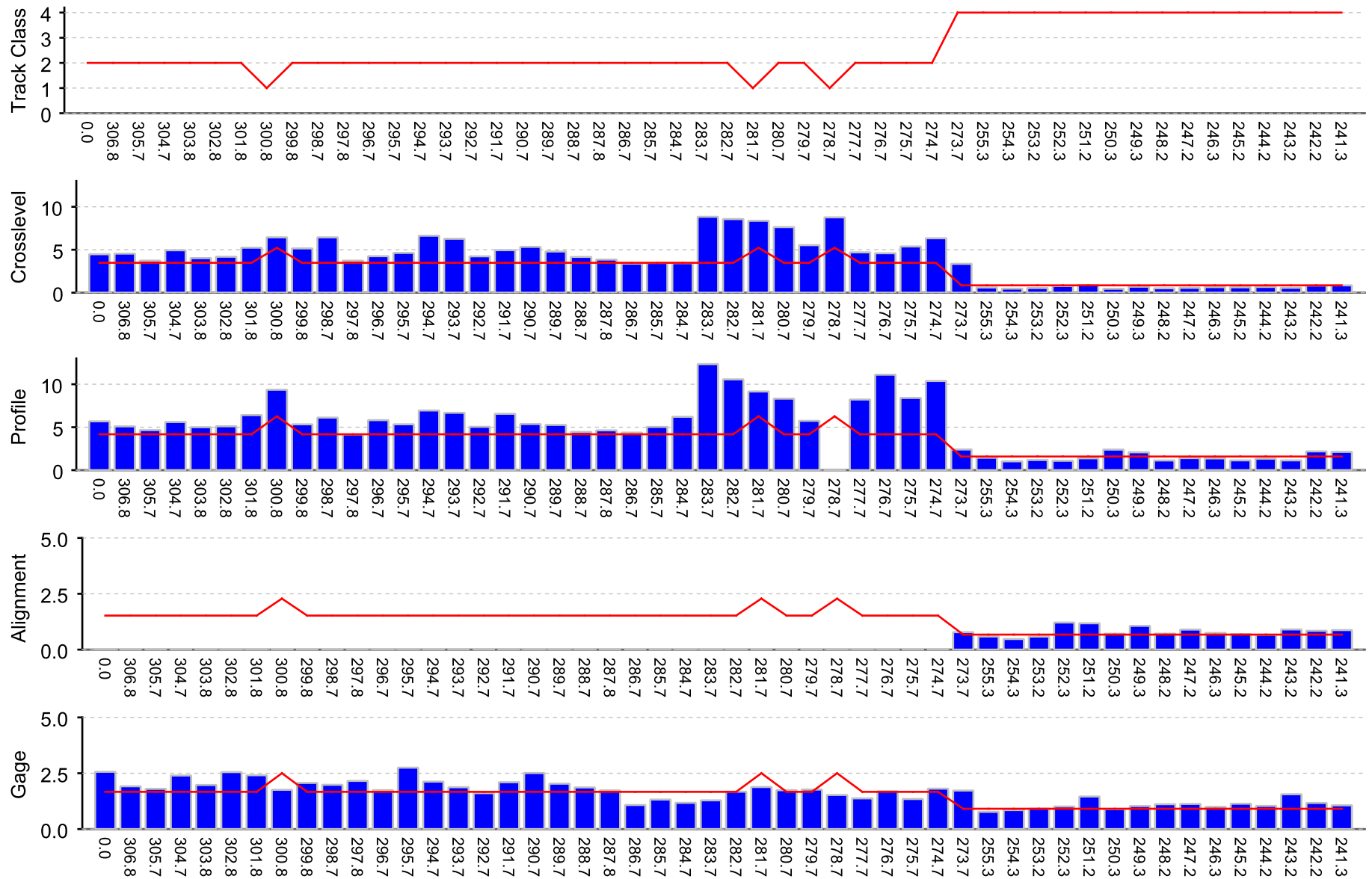
Run Date: 2013-05-28

Run ID: 2013052802

Milepost 306 to Milepost 214

Ithaca, NY

- Binghamton, NY



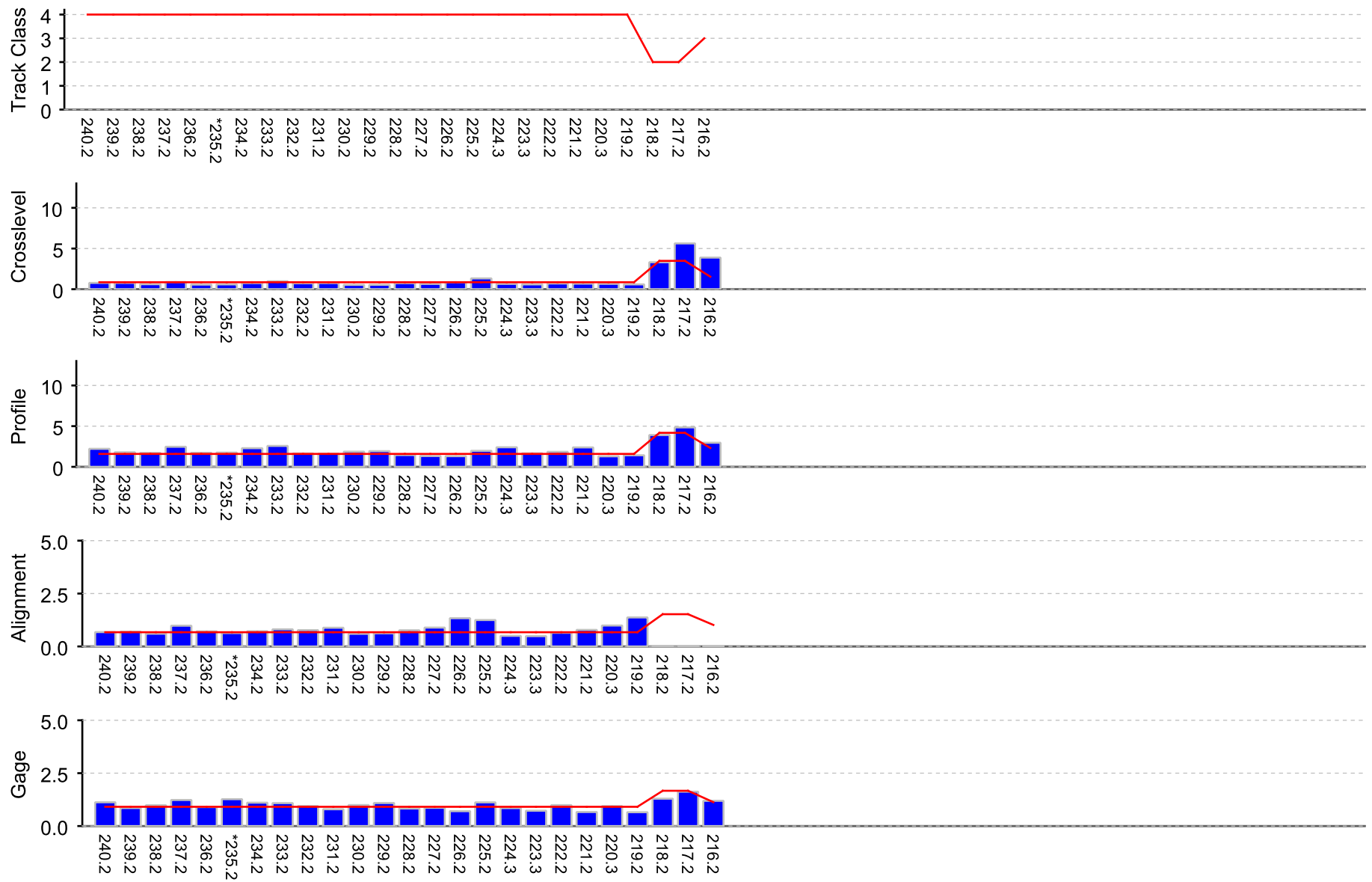
Track Quality Index

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Milepost 306 to Milepost 214

Ithaca, NY

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Exception Report
Class Plus 1 Exception List Section
Milepost 306 to Milepost 214
Ithaca, NY to Binghamton, NY

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Run Date: 05/28/2013
Run ID: 2013052802

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	207	Class Change	2.00	0	9	T	0	0	7	42.429748	-76.519892
0	207	Posted Speed	25.00	0	9	T	0	0	7	42.429748	-76.519892
0	207	Track Change	0.00	0	9	T	0	0	5	42.429748	-76.519892
0	207	State Line	NY	0	9	T	0	0	5	42.429748	-76.519892
0	208	Railroad	NS -	0	9	T	0	0	5	42.429746	-76.519895
0	209	Subdivision	ITHACA	0	9	T	0	0	5	42.429743	-76.519897
306	1133	Down Milepost	306.00	0	20	T	0	0	5	42.427650	-76.521844
305	5559	Down Milepost	305.00	0	23	T	0	0	5	42.414139	-76.530969
304	5200	Down Milepost	304.00	0	24	T	0	0	5	42.401590	-76.540071
303	5153	Down Milepost	303.00	0	24	T	0	0	5	42.389618	-76.549983
302	5249	Down Milepost	302.00	0	24	C	0	0	5	42.377624	-76.556013
301	5302	Down Milepost	301.00	0	23	B	0	0	5	42.363700	-76.557079
300	5294	Down Milepost	300.00	0	23	T	0	0	5	42.352710	-76.544956
299	5326	Down Milepost	299.00	0	23	C	0	0	5	42.341176	-76.534495
299	3346	Class Change	1.00	0	11	T	0	0	5	42.334738	-76.525733
299	3346	Posted Speed	10.00	0	11	T	0	0	5	42.334738	-76.525733
299	4525	Class Change	2.00	0	13	T	0	0	5	42.332529	-76.522566
299	4525	Posted Speed	25.00	0	13	T	0	0	5	42.332529	-76.522566
298	5505	Down Milepost	298.00	0	22	C	0	0	5	42.330525	-76.520167
298	4401	Twist 31ft*	1.66	5	24	E	2	3	5	42.319007	-76.516965
297	5114	Down Milepost	297.00	0	23	B	0	0	5	42.317619	-76.515112
296	5328	Down Milepost	296.00	0	24	E	0	0	5	42.303640	-76.515705
295	5250	Down Milepost	295.00	0	24	T	0	0	5	42.289381	-76.516073
294	5288	Down Milepost	294.00	0	24	T	0	0	5	42.275469	-76.511788
293	5263	Down Milepost	293.00	0	24	E	0	0	5	42.261680	-76.510171
292	5321	Down Milepost	292.00	0	24	C	0	0	5	42.247188	-76.510714
291	5378	Down Milepost	291.00	0	24	T	0	0	5	42.233116	-76.504917
290	5252	Down Milepost	290.00	0	24	T	0	0	5	42.219112	-76.501559
289	5191	Down Milepost	289.00	0	24	T	0	0	5	42.206145	-76.506414
288	5320	Down Milepost	288.00	0	24	T	0	0	5	42.201748	-76.524811
287	5208	Down Milepost	287.00	0	23	E	0	0	5	42.200093	-76.543824
286	5360	Down Milepost	286.00	0	23	B	0	0	5	42.190747	-76.557670
285	5257	Down Milepost	285.00	0	22	T	0	0	5	42.176568	-76.560094
284	5277	Down Milepost	284.00	0	24	T	0	0	5	42.162164	-76.561334
283	5311	Down Milepost	283.00	0	23	T	0	0	5	42.147897	-76.558666
282	5303	Down Milepost	282.00	0	24	T	0	0	5	42.133891	-76.553500
281	5406	Down Milepost	281.00	0	22	T	0	0	5	42.119470	-76.549079
280	5263	Down Milepost	280.00	0	22	C	0	0	5	42.105355	-76.550821
280	2275	Class Change	1.00	0	10	T	0	0	5	42.099160	-76.551120
280	2275	Posted Speed	10.00	0	10	T	0	0	5	42.099160	-76.551120
280	4025	Class Change	2.00	0	10	E	0	0	5	42.094423	-76.550406
280	4025	Posted Speed	25.00	0	10	E	0	0	5	42.094423	-76.550406
279	5216	Down Milepost	279.00	0	23	C	0	0	5	42.091315	-76.548956
278	5270	Down Milepost	278.00	0	23	T	0	0	5	42.076929	-76.548127

Exception Report
Class Plus 1 Exception List Section
Milepost 306 to Milepost 214
Ithaca, NY to Binghamton, NY

Page 2 of 4
Run Date: 05/28/2013
Run ID: 2013052802

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
278	3997	Class Change	1.00	0	10	T	0	0	5	42.066551	-76.544129
278	3997	Posted Speed	10.00	0	10	T	0	0	5	42.066551	-76.544129
277	5248	Down Milepost	277.00	0	9	T	0	0	5	42.063522	-76.541965
277	4131	Class Change	2.00	0	10	T	0	0	5	42.052758	-76.537590
277	4131	Posted Speed	25.00	0	10	T	0	0	5	42.052758	-76.537590
276	5382	Down Milepost	276.00	0	22	T	0	0	5	42.049420	-76.536590
276	1442	Warp 62	2.39	20	24	T	1	3	5	42.045669	-76.534995
275	5334	Down Milepost	275.00	0	25	C	0	0	5	42.035936	-76.529127
274	5250	Down Milepost	274.00	0	24	T	0	0	5	42.022780	-76.522018
273	5337	Down Milepost	273.00	0	21	E	0	0	5	42.008287	-76.523294
273	3635	State Line	PA	0	14	T	0	0	5	41.998460	-76.521222
272	5182	Down Milepost	272.00	0	9	T	0	0	5	41.994243	-76.520596
272	2092	State Line	NY	0	12	T	0	0	5	42.000671	-76.539025
272	2093	Subdivision	SOUTHE	0	12	T	0	0	5	42.000671	-76.539021
272	2097	Class Change	4.00	0	12	T	0	0	5	42.000672	-76.539007
272	2097	Posted Speed	50.00	0	12	T	0	0	5	42.000672	-76.539007
272	2101	Track Change	0.00	0	12	T	0	0	5	42.000672	-76.538992
255	2408	Down Milepost	255.00	0	19	T	0	0	5	42.000735	-76.537865
254	5214	Down Milepost	254.00	0	48	C	0	0	5	42.003302	-76.519068
253	5435	Down Milepost	253.00	0	48	E	0	0	5	42.006474	-76.499567
252	5216	Down Milepost	252.00	0	48	T	0	0	5	42.007724	-76.480530
251	5329	Down Milepost	251.00	0	48	C	0	0	5	42.014228	-76.465183
251	1288	R Align 62	-1.05	1	48	T	4	5	5	42.017625	-76.466289
250	5233	Down Milepost	250.00	0	48	C	0	0	5	42.027841	-76.470947
249	5288	Down Milepost	249.00	0	47	T	0	0	5	42.039555	-76.460271
249	1594	R Align 62	0.87	16	47	C	4	5	5	42.042044	-76.455560
249	1598	L Align 62	0.84	12	47	C	4	5	5	42.042047	-76.455546
249	1643	R Align 62	-1.06	23	47	C	4	5	5	42.042077	-76.455385
249	1643	L Align 62	-1.25	28	47	C	4	5	5	42.042077	-76.455385
249	1699	R Align 62	1.15	27	48	C	4	5	5	42.042111	-76.455185
249	1711	L Align 62	1.20	28	48	C	4	5	5	42.042117	-76.455142
248	5300	Down Milepost	248.00	0	48	B	0	0	5	42.042817	-76.441988
247	5300	Down Milepost	247.00	0	48	S	0	0	5	42.035020	-76.425751
247	2663	R Align 62	-0.82	12	49	C	4	5	5	42.032784	-76.416585
247	4990	L Align 62	-1.12	9	48	T	4	5	5	42.033215	-76.408132
246	5077	Down Milepost	246.00	0	48	T	0	0	5	42.033172	-76.407814
245	5551	Down Milepost	245.00	0	48	T	0	0	5	42.030112	-76.387867
244	5222	Down Milepost	244.00	0	48	T	0	0	5	42.031501	-76.369342
244	3993	Twist 31ft*	-0.96	4	48	B	4	5	5	42.038742	-76.359382
243	5269	Down Milepost	243.00	0	48	T	0	0	5	42.041885	-76.357331
242	5304	Down Milepost	242.00	0	48	T	0	0	5	42.054222	-76.347130
242	3494	Crosslevel	1.32	30	48	T	3	5	5	42.062118	-76.339886
241	5198	Down Milepost	241.00	0	49	C	0	0	5	42.066236	-76.336985
240	5336	Down Milepost	240.00	0	49	T	0	0	5	42.079844	-76.330104

Exception Report
Class Plus 1 Exception List Section
Milepost 306 to Milepost 214
Ithaca, NY to Binghamton, NY

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Run Date: 05/28/2013
Run ID: 2013052802

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
239	5328	Down Milepost	239.00	0	49	T	0	0	5	42.087757	-76.314168
239	4068	L Align 62	-0.79	4	48	C	4	5	5	42.092973	-76.301058
239	4076	L Align 62	-0.73	1	48	C	4	5	5	42.092989	-76.301039
238	5281	Down Milepost	238.00	0	49	B	0	0	5	42.095606	-76.298329
237	5313	Down Milepost	237.00	0	48	C	0	0	5	42.103945	-76.282385
237	3555	R Align 62	-1.16	13	47	T	4	5	5	42.106623	-76.269807
237	3563	L Align 62	-0.96	9	47	T	4	5	5	42.106628	-76.269778
237	3586	R Align 62	1.24	19	47	T	4	5	5	42.106645	-76.269697
237	3593	L Align 62	1.13	20	47	T	4	5	5	42.106650	-76.269672
236	1	L Align 62	-0.94	2	47	T	4	5	5	42.107822	-76.263802
236	1	R Align 62	-1.10	10	47	T	4	5	5	42.107822	-76.263802
236	5245	Down Milepost	236.00	0	47	T	0	0	5	42.107822	-76.263802
234	10592	Down Milepost	234.00	0	49	T	0	0	5	42.097344	-76.229206
234	4517	L Align 31	0.62	2	49	B	4	5	5	42.090891	-76.215040
233	5284	Down Milepost	233.00	0	49	C	0	0	5	42.090085	-76.212452
233	3053	L Align 62	-0.75	4	49	C	4	5	5	42.090111	-76.201330
232	5287	Down Milepost	232.00	0	48	T	0	0	5	42.093140	-76.194237
231	5314	Down Milepost	231.00	0	48	C	0	0	5	42.100669	-76.177623
230	5287	Down Milepost	230.00	0	48	C	0	0	5	42.097561	-76.158983
230	5124	L Prof 62	-1.38	1	48	T	4	5	5	42.085387	-76.150282
229	5298	Down Milepost	229.00	0	48	T	0	0	5	42.084923	-76.150122
228	5268	Down Milepost	228.00	0	49	C	0	0	5	42.071064	-76.144835
227	5298	Down Milepost	227.00	0	49	E	0	0	5	42.064401	-76.130700
226	5307	Down Milepost	226.00	0	48	C	0	0	5	42.071182	-76.113501
225	5222	Down Milepost	225.00	0	48	C	0	0	5	42.081028	-76.099670
225	2033	Twist 31ft*	1.15	21	48	E	3	5	5	42.084573	-76.094176
224	5109	Down Milepost	224.00	0	49	T	0	0	5	42.091148	-76.087289
224	245	R Align 62	0.96	8	49	T	4	5	5	42.091631	-76.086668
224	248	L Align 62	1.07	12	49	T	4	5	5	42.091637	-76.086661
224	280	L Align 62	-1.06	14	49	T	4	5	5	42.091700	-76.086579
224	293	R Align 62	-1.17	14	49	T	4	5	5	42.091726	-76.086546
224	4499	L Prof 62	1.42	5	47	T	4	5	5	42.096925	-76.072996
224	4502	R Prof 62	1.55	10	47	T	4	5	5	42.096928	-76.072986
223	5236	Down Milepost	223.00	0	47	T	0	0	5	42.097598	-76.070437
222	5378	Down Milepost	222.00	0	49	B	0	0	5	42.104758	-76.053394
221	5267	Down Milepost	221.00	0	48	C	0	0	5	42.108199	-76.034765
220	5083	Down Milepost	220.00	0	46	B	0	0	5	42.107996	-76.016072
219	5490	Down Milepost	219.00	0	41	T	0	0	5	42.115822	-75.999155
218	5250	Down Milepost	218.00	0	23	T	0	0	5	42.118408	-75.980788
218	1683	Track Change	0.00	0	22	B	0	0	6	42.117966	-75.974628
218	1979	Class Change	2.00	0	22	E	0	0	6	42.117924	-75.973539
218	1979	Posted Speed	25.00	0	22	E	0	0	6	42.117924	-75.973539
218	2786	Track Change	0.00	0	23	T	0	0	1	42.117708	-75.970586
218	2854	Class Change	4.00	0	23	T	0	0	1	42.117691	-75.970336

Exception Report
Class Plus 1 Exception List Section
Milepost 306 to Milepost 214
Ithaca, NY to Binghamton, NY

Page 4 of 4
Run Date: 05/28/2013
Run ID: 2013052802

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
218	2854	Posted Speed	50.00	0	23	T	0	0	1	42.117691	-75.970336
218	5048	Class Change	2.00	0	23	T	0	0	1	42.117110	-75.962302
218	5048	Posted Speed	25.00	0	23	T	0	0	1	42.117110	-75.962302
217	5319	Down Milepost	217.00	0	22	T	0	0	1	42.117040	-75.961306
216	5305	Down Milepost	216.00	0	13	T	0	0	1	42.112468	-75.943235
216	3528	Class Change	3.00	0	13	T	0	0	1	42.107008	-75.932536
216	3528	Posted Speed	30.00	0	13	T	0	0	1	42.107008	-75.932536
214	9809	Down Milepost	214.00	0	6	T	0	0	1	42.104092	-75.910468
214	453	Class Change	1.00	0	7	B	0	0	1	42.104084	-75.908804
214	453	Posted Speed	10.00	0	7	B	0	0	1	42.104084	-75.908804
214	453	Track Change	0.00	0	7	B	0	0	7	42.104084	-75.908804
214	470	Track Change	0.00	0	7	B	0	0	7	42.104084	-75.908741
214	807	Down Milepost	214.00	0	7	E	0	0	7	42.104115	-75.907510

Notes:

* Federal Track Safety Standard Advisory
Cant Exceptions are in degrees. The following fields are irrelevant for Cant Exceptions: LC, PC
Rail Impact Values are in Gs; the threshold is 20g peak to peak

Exception Report
Class Plus 1 Exception Summary Section
Milepost 306 to Milepost 214
Ithaca, NY to Binghamton, NY

Page 1 of 1
Run Date: 05/28/2013
Run ID: 2013052802

		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot			
MP	FT	EXC	FT	Drop	EXC	FT	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	Cls	Cls	Trk
298	5505	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5	-	-	2	3	5
276	5382	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	20	1	-	-	-	-	1	3	5
251	5329	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5
249	5288	-	-	-	-	-	6	134	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5
247	5300	-	-	-	-	-	2	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5
244	5222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	-	-	4	5	5
242	5304	-	-	-	-	-	-	-	-	1	30	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	5	5
239	5328	-	-	-	-	-	2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5
237	5313	-	-	-	-	-	4	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5
236	5245	-	-	-	-	-	2	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5
234	10592	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5
233	5284	-	-	-	-	-	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5
230	5287	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	4	5	5
225	5222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	21	1	-	3	5	5
224	5109	-	-	-	-	-	4	48	-	-	-	-	-	-	-	2	15	-	-	-	-	-	-	-	-	-	-	-	4	5	5
		-	-	-	-	-	23	288	-	1	30	1	-	-	-	3	16	-	-	-	-	1	20	1	3	30	1	-			

Total Miles: 75.80
Exceptions per 100 Miles: 40.90
CY12 National Average Exceptions per 100 miles: 11.3

Page 1 of 1

Run Date: 05/28/2013

Run ID: 2013052802

Run ID: 2013052802

Ithaca, NY to Binghamton, NY

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
There were no Alignment 62 exceptions detected during this survey.											

DOTX 220 Geometry Car

United States Department of Transportation

AUTOMATED TRACK INSPECTION PROGRAM

TRACK GEOMETRY INSPECTION REPORT

Allentown, PA to Reading, PA

Railroad: NORFOLK SOUTHERN CORPORATION (NS)

Survey Number: 1830

Mile Post 90 to Mile Post 7



Prepared for:

United States Department of Transportation
Federal Railroad Administration
Office of Safety
Washington, D.C.

Prepared by:

ENSCO, Inc.
5400 Port Royal Rd
Springfield, VA 22151



Testing Cert. 2411.01

Approved By:

Survey Director:

DONALD DRAKE

Signature

Date

Under the U.S. Department of Transportation, Federal Railroad Administration (FRA), Office of Safety Assurance and Compliance, Automated Track Inspection Program and in accordance with 49 CFR 213 Federal Track Safety Standards, this Track Geometry Inspection Report provides a list of exceptions that relate only to the time and date the track was inspected and the required remedial action taken. This compliance report is offered only to the track owner and is not to be reproduced to others in whole or part without the expressed written consent of the FRA and the track owner. FRA requests any reprinting be labeled as a copy of the original.

NOTES

An Automated Track Inspection Program (ATIP) Track Geometry Inspection Report (TGIR) is generated for each ATIP survey. The TGIR summarizes the data collected and can be used in conjunction with the strip chart. The TGIR is generated electronically onboard the car and hard copies are distributed as follows:

1. One (1) copy is provided to onboard railroad representative, as requested
2. One (1) copy is provided to onboard FRA Inspector, as requested
3. One (1) copy is archived for FRA management

Following ATIP Compliance survey operations, electronic copies of TGIRs are distributed via email, to a list of recipients designated by FRA and railroad management.

The TGIR may consist of ten (10) parts;

1. Cover,
2. Notes,
3. Exception List,
4. Curve Analysis,
5. Exception Summary,
6. Track Quality Index (TQI),
7. GRMS Exception List (if equipped),
8. Class+1 (C+1) Exception List,
9. C+1 Exception Summary,
10. Alinement MCO worksheet.

Track measurement sample frequency is once per foot.

Exceptions may not be reported for Alinement and Profile parameters when ATIP car speed is less than fifteen (15) and five (5) miles per hour, respectively.

Exception List symbols/notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49CFR 213.57(b).

Rail Impact Values are unit-less; indicating a location with a large vertical axle acceleration.

Rail Cant Exception denoted with (RSA) indicates possible Rail Seat Abrasion.

The following fields are not applicable for Limited Speed, Ride Quality [in classes 1-5], and Rail Cant:

Limited Class (LC); Posted Class (PC).

All Exception Parameter values are reported in inches, except for the following:

- Limiting Speed (Vmax) expressed in: MPH
- Ride Quality; Carbody Lateral, Carbody Vertical, Truck Lateral expressed in: g (gravitational acceleration)
- Rail Cant; Left (L) and Right (R), NEG[ative] and POS[itive] expressed in: angular degrees (°)

For Alinement exceptions: Negative (-) values indicate rail shifting to the right and Positive (+) values indicate rail shifting to the left, referencing direction of ATIP car travel during testing.

Alinement exceptions reported in turnout paths are considered Federal Track Safety Standard Advisory.

For Rail Cant exceptions: Negative (-) values indicate an outward shift in the rail angle, and Positive (+) values indicate an inward shift in the rail angle. Rail Cant exceptions have a minimum length of 15 feet.

A complete description of the information provided in the TGIR is available at

<https://www.fra.dot.gov/eLib/Details/L04545>

ATIP survey exceptions are available for review the next business day, and ATIP track measurement foot by foot data is available the following week at: https://tdms.fra.dot.gov/tdms_lite

Exception Report
Exception List Section
Milepost 90 to Milepost 7
Allentown, PA to Reading, PA

Page 1 of 2
Run Date: 07/25/2018
Run ID: 2018072501

MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	137		State Line	PA	0	5	T	0	0	7	40.610478	-75.411583
0	138		Railroad	NS -	0	5	T	0	0	7	40.610477	-75.411585
0	139		Subdivision	READIN	0	5	T	0	0	7	40.610476	-75.411588
90	184		Up Milepost	90.00	0	5	T	0	0	7	40.610446	-75.411751
90	2641		Track Change	0.00	0	5	T	0	0	7	40.610446	-75.411751
90	2692		Class Change	1.00	0	5	T	0	0	7	40.610415	-75.411929
90	2692		Posted Speed	10.00	0	5	T	0	0	7	40.610415	-75.411929
90	5511		Track Change	0.00	0	7	E	0	0	5	40.608484	-75.421727
90	5567		Class Change	3.00	0	7	E	0	0	5	40.608437	-75.421918
90	5567		Posted Speed	30.00	0	7	E	0	0	5	40.608437	-75.421918
91	7179		Up Milepost	91.00	0	11	C	0	0	5	40.606665	-75.427211
92	5426		Up Milepost	92.00	0	18	T	0	0	5	40.598517	-75.443461
92	3176		Class Change	2.00	0	19	E	0	0	5	40.597831	-75.454019
92	3176		Posted Speed	25.00	0	19	E	0	0	5	40.597831	-75.454019
92	4806		Posted Speed	20.00	0	7	C	0	0	5	40.598056	-75.459353
93	5067		Up Milepost	93.00	0	11	E	0	0	5	40.597432	-75.459801
93	374		Track Change	0.00	0	15	E	0	0	2	40.596426	-75.460038
35	658		Down Milepost	35.00	0	16	T	0	0	2	40.595650	-75.460129
35	556		Track Change	0.00	0	17	E	0	0	1	40.594135	-75.460359
35	643		Class Change	3.00	0	19	E	0	0	1	40.593898	-75.460390
35	643		Posted Speed	30.00	0	19	E	0	0	1	40.593898	-75.460390
35	3291		Posted Speed	40.00	0	32	E	0	0	1	40.587277	-75.463055
34	5321		Down Milepost	34.00	0	35	T	0	0	1	40.584177	-75.469102
33	5285		Down Milepost	33.00	0	36	T	0	0	1	40.572080	-75.478629
32	5296		Down Milepost	32.00	0	36	T	0	0	1	40.558612	-75.485689
31	5205		Down Milepost	31.00	0	39	T	0	0	1	40.545234	-75.487013
31	3634		Class Change	4.00	0	36	E	0	0	1	40.536419	-75.487800
31	3634		Posted Speed	50.00	0	36	E	0	0	1	40.536419	-75.487800
30	5372		Down Milepost	30.00	0	34	T	0	0	1	40.533670	-75.492880
29	5339		Down Milepost	29.00	0	37	T	0	0	1	40.526267	-75.509389
28	5238		Down Milepost	28.00	0	46	T	0	0	1	40.522974	-75.527392
27	5283		Down Milepost	27.00	0	45	T	0	0	1	40.520141	-75.545833
26	5316		Down Milepost	26.00	0	44	T	0	0	1	40.515333	-75.563840
25	5259		Down Milepost	25.00	0	48	T	0	0	1	40.512531	-75.582121
24	5267		Down Milepost	24.00	0	45	T	0	0	1	40.512166	-75.600943
23	5343		Down Milepost	23.00	0	43	B	0	0	1	40.509339	-75.619752
22	5090		Down Milepost	22.00	0	39	C	0	0	1	40.502930	-75.635920
21	5450		Down Milepost	21.00	0	41	E	0	0	1	40.504128	-75.654686
21	4167	34	Twist 31ft*	1.13	1	43	E	3	4	1	40.506860	-75.668901

Exception Report
Exception List Section
Milepost 90 to Milepost 7
Allentown, PA to Reading, PA

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Run Date: 07/25/2018
Run ID: 2018072501

MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
19	10617		Down Milepost	19.00	0	30	T	0	0	1	40.504795	-75.691877
19	2466		Class Change	3.00	0	24	C	0	0	1	40.504055	-75.700670
19	2466		Posted Speed	40.00	0	24	C	0	0	1	40.504055	-75.700670
19	3240		Class Change	4.00	0	23	T	0	0	1	40.504113	-75.703442
19	3240		Posted Speed	50.00	0	23	T	0	0	1	40.504113	-75.703442
18	5262		Down Milepost	18.00	0	27	C	0	0	1	40.504081	-75.710687
17	5369		Down Milepost	17.00	0	17	C	0	0	1	40.496463	-75.726327
16	5197		Down Milepost	16.00	0	17	T	0	0	1	40.488154	-75.741300
15	5243		Down Milepost	15.00	0	33	T	0	0	1	40.481870	-75.758198
14	5355		Down Milepost	14.00	0	31	T	0	0	1	40.474845	-75.775036
13	5301		Down Milepost	13.00	0	36	T	0	0	1	40.467310	-75.791239
12	5188		Down Milepost	12.00	0	28	T	0	0	1	40.458043	-75.805083
12	1442	52	L Prof 62	-2.18	8	31	T	3	4	1	40.455954	-75.809461
11	5422		Down Milepost	11.00	0	22	T	0	0	1	40.451002	-75.822127
10	5270		Down Milepost	10.00	0	23	T	0	0	1	40.446938	-75.840180
9	5275		Down Milepost	9.00	0	23	T	0	0	1	40.443743	-75.858615
8	5280		Down Milepost	8.00	0	15	T	0	0	1	40.440534	-75.877071
8	2276		Track Change	0.00	0	16	T	0	0	5	40.438722	-75.884850
8	2372		Class Change	3.00	0	16	T	0	0	5	40.438609	-75.885161
8	2372		Posted Speed	40.00	0	16	T	0	0	5	40.438609	-75.885161
1	7473		Up Milepost	1.00	0	19	T	0	0	5	40.432624	-75.901673
2	5377		Up Milepost	2.00	0	8	T	0	0	5	40.425238	-75.918098
3	5353		Up Milepost	3.00	0	22	C	0	0	5	40.414193	-75.930460
3	4427		Track Change	0.00	0	21	T	0	0	1	40.402169	-75.929707
3	10413	64	Lmt Speed 3+	39.00	1034	26	C		3	1	40.385863	-75.931277
3	12863		Posted Speed	30.00	0	23	T	0	0	1	40.379409	-75.933038
6	15790		Up Milepost	6.00	0	20	B	0	0	1	40.371604	-75.934017
7	4611		Up Milepost	7.00	0	25	E	0	0	1	40.360876	-75.942531
7	5050		Class Change	2.00	0	22	C	0	0	1	40.349296	-75.951130
7	5050		Posted Speed	25.00	0	22	C	0	0	1	40.349296	-75.951130
8	5806		Up Milepost	8.00	0	22	C	0	0	1	40.347731	-75.952898
8	434		Track Change	0.00	0	22	C	0	0	5	40.346664	-75.953582

Notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Rail Impact Values are unitless; indicating a location with a large vertical axle acceleration

Rail Cant Exceptions values indicate degrees.

(RSA) indicates possible Rail Seat Abrasion. The following fields are irrelevant for Cant Exceptions: LC, PC

Exception Report
Curve Analysis Section
Milepost 90 to Milepost 7
Allentown, PA to Reading, PA

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Run Date: 07/25/2018
Run ID: 2018072501

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

						Average					Limiting Point														
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at								
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0		
7	90	4743	90	5377	635	9	-0/43	0.12	10	60	90	5262	-1/11	-0.03	0	0	60	69	78	85	92	98	104		
5	90	5377	90	5592	216	7	4/01	-0.96	30	26	90	5482	4/09	-1.02	0	0	26	32	37	41	45	49	52		
5	90	5592	91	1390	2979	15	-0/38	-0.94	30	81	90	6203	-0/50	-0.91	0	0	81	91	100	108	115	123	129		
5	91	2834	91	3404	571	17	1/01	0.96	30	71	91	3096	1/10	1.03	0	0	71	78	86	93	99	105	111		
5	91	3961	91	4962	1002	19	0/55	1.03	30	78	91	4394	0/55	0.88	0	0	78	87	95	103	110	117	123		
5	92	1063	92	1850	788	18	4/00	1.58	30	40	92	1849	4/05	1.5	0	0	40	43	47	51	54	57	60		
5	92	1850	92	2547	698	19	4/56	1.47	30	36	92	2211	5/01	1.49	0	0	36	39	43	46	49	52	54		
5	92	2867	92	3281	415	19	1/46	1.02	25	57	92	3053	1/47	1.02	0	0	57	63	69	74	80	84	89		
5	92	3281	92	3667	387	18	-1/19	-1.2	25	62	92	3463	-1/26	-0.91	0	0	62	70	76	83	88	94	99		
5	92	3667	92	4290	624	14	-6/05	-1.69	25	29	92	3920	-7/05	-1.21	0	0	29	32	35	38	40	43	45		
2	92	4290	93	456	1235	15	-7/11	-1.34	20	27	92	4862	-8/49	-1.58	0	0	27	30	32	35	37	39	41		
2	35	153	35	428	276	16	2/32	0.08	20	40	35	329	2/41	0.08	0	0	40	46	52	56	61	65	69		
1	35	428	35	645	218	17	-2/34	-0.03	30	41	35	550	-2/34	-0.04	0	0	41	47	52	57	62	66	70		
1	35	1963	35	3354	1392	31	5/10	1.81	40	36	35	2748	5/15	1.71	0	0	36	39	42	45	48	51	53		
1	34	439	34	1498	1060	34	-1/56	-0.88	40	52	34	1356	-2/01	-0.77	0	0	52	58	63	69	74	78	83		
1	34	1498	34	2460	963	34	-1/58	-0.89	40	52	34	1636	-2/05	-0.89	0	0	52	57	63	68	73	78	82		
1	32	2286	32	4201	1916	38	-2/59	-2.98	40	53	32	2934	-3/02	-2.94	0	0	53	57	61	64	68	71	75		
1	31	968	31	3645	2678	37	3/13	2.86	50	48	31	1786	3/37	2.93	0	0	48	52	56	59	62	65	68		
1	31	3951	31	5160	1210	35	0/52	0.99	50	70	31	4215	1/08	0.92	0	0	70	78	86	93	100	106	111		
1	29	444	29	3273	2830	43	0/56	1.04	50	69	29	1611	1/07	0.71	0	0	69	77	85	92	99	105	111		
1	28	2322	28	3318	997	46	-1/59	-2.79	50	63	28	2643	-2/02	-2.67	0	0	63	68	73	77	82	86	90		
1	27	2471	27	2806	336	46	0/19	1.01	50	125	27	2729	0/22	0.95	0	0	125	140	153	166	177	188	198		
1	27	2806	27	3081	276	45	-0/44	-0.85	50	86	27	2957	-0/44	-0.86	0	0	86	96	106	115	123	130	137		
1	26	2348	26	4439	2092	46	1/03	1.81	50	64	26	2558	1/34	1.58	0	0	64	71	77	83	88	93	98		
1	25	3215	25	4710	1496	46	-0/57	-0.87	50	72	25	3645	-1/02	-0.76	0	0	72	81	89	96	103	110	116		
1	24	5177	23	1219	1387	43	-2/05	-2.77	50	62	23	314	-2/10	-2.82	0	0	62	67	71	76	80	84	88		
1	23	4375	21	191	6359	41	0/57	1.07	50	73	22	2075	1/05	1.05	0	0	73	81	89	96	103	109	115		
1	21	191	21	4287	4097	45	-0/55	-0.65	50	69	21	1697	-1/00	-0.42	0	0	69	79	87	95	102	109	115		
1	19	1967	19	2957	991	25	1/04	0.98	40	71	19	2834	1/07	0.89	0	0	71	79	87	94	100	106	112		
1	19	3995	18	524	1793	28	-0/55	-0.75	50	72	19	4973	-0/59	-0.64	0	0	72	81	90	97	105	111	117		
1	18	1197	18	4017	2821	27	-1/26	-1.95	50	61	18	1846	-1/52	-1.91	0	0	61	67	72	77	82	87	91		
1	18	4968	17	643	1046	17	0/58	1.15	50	72	17	106	1/06	1.04	0	0	72	80	88	95	102	108	114		
1	17	2458	17	4209	1752	17	0/58	1	50	73	17	3733	1/04	1	0	0	73	81	89	96	103	109	115		
1	15	2223	15	2930	708	31	-1/04	-0.68	50	69	15	2698	-1/07	-0.71	0	0	69	77	85	92	99	105	111		
1	14	980	14	1969	990	29	-0/58	-0.74	50	72	14	1380	-1/01	-0.72	0	0	72	81	89	97	104	110	116		
1	14	2329	14	3434	1106	31	0/58	1.13	50	75	14	3080	1/01	1.01	0	0	75	83	91	99	105	112	118		
1	13	312	13	2253	1942	38	-1/29	-1.54	50	64	13	1397	-1/33	-1.51	0	0	64	71	77	83	88	93	98		
1	13	3106	13	5018	1913	34	1/05	1.44	50	67	13	3360	1/22	1.33	0	0	67	74	81	87	93	98	103		
1	12	2812	12	3797	986	30	1/07	1	50	68	12	3165	1/14	0.97	0	0	68	75	83	89	96	102	107		
1	11	1284	11	3906	2623	19	0/27	1.15	50	98	11	3810	0/35	0.96	0	0	98	109	120	129	138	147	155		
1	11	4248	11	4843	596	22	-0/53	-0.88	50	74	11	4442	-0/59	-0.86	0	0	74	83	91	99	106	113	119		
1	8	922	8	2093	1172	15	-1/19	-1.39	50	67	8	1808	-1/24	-1.37	0	0	67	73	80	86	92	97	102		
5	1	3538	1	4649	1112	21	-3/03	-2.36	40	48	1	3958	-3/10	-2.11	0	0	48	52	56	60	64	67	70		
5	2	4173	3	935	2117	23	-2/56	-2.55	40	51	3	379	-3/03	-2.57	0	0	51	55	59	63	66	70	73		
5	3	1976	3	3783	1808	25	0/55	1.65	40	78	3	3009	1/03	1.51	0	0	78	86	94	101	107	113	119		
1	3	6995	3	7636	642	26	2/04	2.03	40	59	3	7421	2/05	2.01	0	0	59	64	69	74	78	82	86		

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Curve Analysis Section
Milepost 90 to Milepost 7

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Run Date: 07/25/2018
Run ID: 2018072501

Allentown, PA to Reading, PA

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point														
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at								
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0		
+	1	3 7636	3 8596	961	27		-2/00	-2.44	40	61	3 7874	-2/02	-2.28	0	0		61	66	71	76	80	84	88		
	1	3 9968	3 11002	1035	27		4/00	1.79	40	39	3 10413	4/04	1.4	82	1		39	43	47	50	54	57	60		
	1	3 11262	3 11772	511	25		-2/41	-1.99	40	47	3 11594	-2/56	-1.56	0	0		47	52	56	60	64	68	71		
	1	3 11772	3 12567	796	25		-2/59	-1.65	40	45	3 11873	-3/15	-1.52	0	0		45	49	53	57	61	64	68		
	1	3 14318	3 15267	950	20		4/02	1.51	30	40	3 14941	4/04	1.49	0	0		40	43	47	51	54	57	60		
	1	3 15493	6 305	604	20		2/51	0.88	30	44	6 27	2/53	0.85	0	0		44	48	53	58	62	66	69		
	1	6 1640	6 1980	341	24		0/29	0.79	30	94	6 1794	0/38	0.93	0	0		94	104	115	124	133	141	148		
	1	6 3709	7 13	917	25		-4/11	-1.54	30	39	6 4297	-4/17	-1.54	0	0		39	42	46	50	53	56	59		
	1	7 1511	7 2654	1144	25		3/59	1.39	30	39	7 2240	4/02	1.35	0	0		39	43	47	51	54	57	60		
	1	7 4884	7 5224	341	22		0/35	0.19	25	86	7 5119	0/40	0.51	0	0		86	98	108	117	126	134	142		
	1	7 5224	7 5459	236	22		-1/04	-0.26	25	58	7 5318	-1/15	0.07	0	0		58	67	75	82	88	95	101		
	5	7 5459	8 449	798	22		-2/38	-1	25	40	7 5719	-3/26	-0.87	0	0		40	44	49	53	57	60	64		
	5	8 449	8 721	273	22		-2/40	0.09	25	35	8 600	-3/31	0.01	0	0		35	40	45	49	53	57	60		
	5	8 721	8 1337	617	21		-7/29	-1.99	25	31	8 926	-7/32	-1.98	0	0		31	33	36	38	41	43	45		
	5	8 1408	8 1946	539	21		-6/55	-1.92	25	32	8 1708	-6/55	-1.92	0	0		32	34	37	40	42	45	47		
	5	8 2027	8 2817	791	19		-4/16	-1	25	36	8 2310	-4/14	-0.93	0	0		36	40	44	48	51	54	57		
	5	8 2929	8 3263	335	19		1/17	0.49	25	62	8 3158	1/17	0.49	0	0		62	70	77	84	91	96	102		
	5	8 3263	8 3484	222	18		-1/49	0	25	49	8 3391	-1/48	0	0	0		49	56	62	69	74	79	84		
	5	8 3484	8 3724	241	16		1/25	0.21	25	55	8 3595	1/29	0.15	0	0		55	63	70	76	82	88	93		
	5	8 3724	8 4004	281	14		-1/28	-0.05	25	51	8 3853	-1/34	0.08	0	0		51	59	66	73	79	84	90		

Notes:

+ Maximum curve speed is limited at qualified cant deficiency.
However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Exception Report
Exception Summary Section
Milepost 90 to Milepost 7
Allentown, PA to Reading, PA

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Run Date: 07/25/2018
Run ID: 2018072501

MP		FT		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
				Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Lim	Pst	
				Exc	FT	Drop	Exc	FT	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	Cls	Cls	Trk
21	5450	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	1	
12	5188	-	-	-	-	-	-	-	-	-	-	-	-	-	1	8	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	1	
3	4427	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	3	1		
		-	-	-	-	-	-	-	-	-	-	-	-	-	1	8	-	-	-	-	-	-	-	-	-	-	1	1	-	1			

Total Miles: 39.30
 Exceptions per 100 Miles: 7.63
 CY17 National Average Exceptions per 100 miles: 7.1

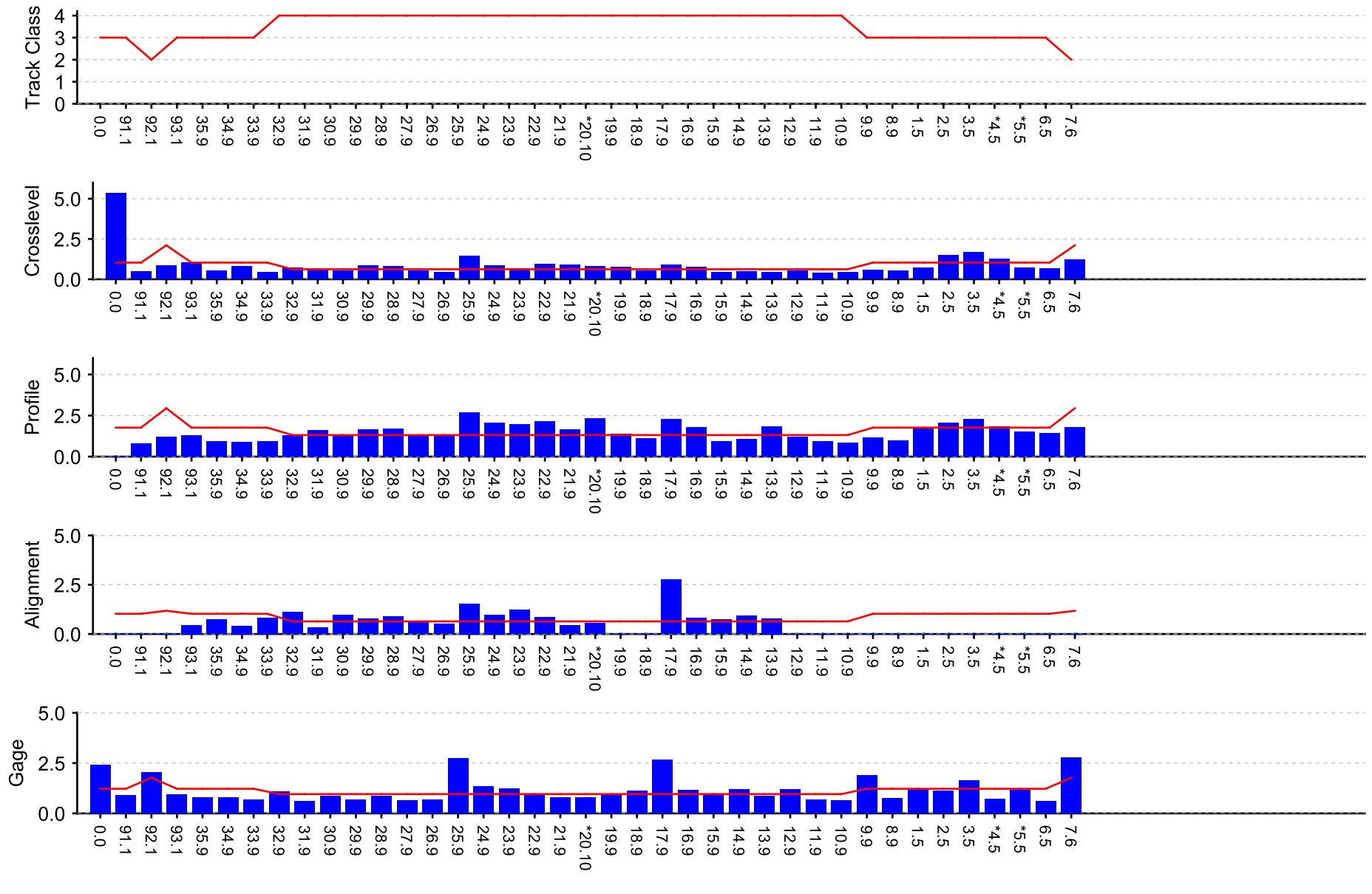
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Milepost 90 to Milepost 7

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Exception Report
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Run Date: 07/25/2018
Run ID: 2018072501

MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	137		State Line	PA	0	5	T	0	0	7	40.610478	-75.411583
0	138		Railroad	NS -	0	5	T	0	0	7	40.610477	-75.411585
0	139		Subdivision	READIN	0	5	T	0	0	7	40.610476	-75.411588
90	184		Up Milepost	90.00	0	5	T	0	0	7	40.610446	-75.411751
90	2641		Track Change	0.00	0	5	T	0	0	7	40.610446	-75.411751
90	2692		Class Change	1.00	0	5	T	0	0	7	40.610415	-75.411929
90	2692		Posted Speed	10.00	0	5	T	0	0	7	40.610415	-75.411929
90	5511		Track Change	0.00	0	7	E	0	0	5	40.608484	-75.421727
90	5567		Class Change	3.00	0	7	E	0	0	5	40.608437	-75.421918
90	5567		Posted Speed	30.00	0	7	E	0	0	5	40.608437	-75.421918
91	7179		Up Milepost	91.00	0	11	C	0	0	5	40.606665	-75.427211
92	5426		Up Milepost	92.00	0	18	T	0	0	5	40.598517	-75.443461
92	3176		Class Change	2.00	0	19	E	0	0	5	40.597831	-75.454019
92	3176		Posted Speed	25.00	0	19	E	0	0	5	40.597831	-75.454019
92	4806		Posted Speed	20.00	0	7	C	0	0	5	40.598056	-75.459353
93	5067		Up Milepost	93.00	0	11	E	0	0	5	40.597432	-75.459801
93	374		Track Change	0.00	0	15	E	0	0	2	40.596426	-75.460038
35	658		Down Milepost	35.00	0	16	T	0	0	2	40.595650	-75.460129
35	556		Track Change	0.00	0	17	E	0	0	1	40.594135	-75.460359
35	643		Class Change	3.00	0	19	E	0	0	1	40.593898	-75.460390
35	643		Posted Speed	30.00	0	19	E	0	0	1	40.593898	-75.460390
35	3291		Posted Speed	40.00	0	32	E	0	0	1	40.587277	-75.463055
34	5321		Down Milepost	34.00	0	35	T	0	0	1	40.584177	-75.469102
33	5285		Down Milepost	33.00	0	36	T	0	0	1	40.572080	-75.478629
32	5296		Down Milepost	32.00	0	36	T	0	0	1	40.558612	-75.485689
31	5205		Down Milepost	31.00	0	39	T	0	0	1	40.545234	-75.487013
31	3634		Class Change	4.00	0	36	E	0	0	1	40.536419	-75.487800
31	3634		Posted Speed	50.00	0	36	E	0	0	1	40.536419	-75.487800
30	5372		Down Milepost	30.00	0	34	T	0	0	1	40.533670	-75.492880
29	5339		Down Milepost	29.00	0	37	T	0	0	1	40.526267	-75.509389
28	5238		Down Milepost	28.00	0	46	T	0	0	1	40.522974	-75.527392
27	5283		Down Milepost	27.00	0	45	T	0	0	1	40.520141	-75.545833
27	2726	6	R Align 62	0.91	13	46	C	4	5	1	40.517677	-75.555068
27	2757	7	R Align 62	-0.98	16	46	E	4	5	1	40.517651	-75.555174
26	5316		Down Milepost	26.00	0	44	T	0	0	1	40.515333	-75.563840
26	4440	8	R Align 62	-0.82	3	46	T	4	5	1	40.512464	-75.579180
26	4442	9	R Align 62	-0.86	1	46	T	4	5	1	40.512464	-75.579187
25	5259		Down Milepost	25.00	0	48	T	0	0	1	40.512531	-75.582121
25	1041	10	L Prof 62	-1.58	4	48	T	4	5	1	40.512609	-75.585855

Exception Report
Class Plus 1 Exception List Section
Milepost 90 to Milepost 7
Allentown, PA to Reading, PA

Page 2 of 3
Run Date: 07/25/2018
Run ID: 2018072501

MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
25	2770	11	L Align 62	1.14	18	47	T	4	5	1	40.512748	-75.592047
25	2793	12	L Prof 62	-1.43	2	47	T	4	5	1	40.512750	-75.592130
25	2814	13	L Align 62	-0.89	10	47	T	4	5	1	40.512752	-75.592206
24	5267		Down Milepost	24.00	0	45	T	0	0	1	40.512166	-75.600943
24	1600	14	R Align 62	0.98	1	43	T	4	5	1	40.511324	-75.606574
24	4480	18	L Prof 62	-1.37	1	43	T	4	5	1	40.509800	-75.616711
23	5343		Down Milepost	23.00	0	43	B	0	0	1	40.509339	-75.619752
23	2535	21	L Prof 62	-1.53	6	42	T	4	5	1	40.506285	-75.627875
23	2536	22	R Prof 62	-1.71	10	42	T	4	5	1	40.506284	-75.627878
22	5090		Down Milepost	22.00	0	39	C	0	0	1	40.502930	-75.635920
22	18	23	L Align 62	0.87	17	39	C	4	5	1	40.502911	-75.635980
22	1665	24	R Align 62	0.76	2	39	C	4	5	1	40.501821	-75.641692
22	1677	25	L Align 62	0.76	8	39	C	4	5	1	40.501818	-75.641735
22	1731	26	L Align 62	-0.94	21	39	C	4	5	1	40.501804	-75.641928
22	1922	28	L Align 62	-0.84	12	39	C	4	5	1	40.501765	-75.642611
22	1922	27	R Align 62	-0.95	14	39	C	4	5	1	40.501765	-75.642611
22	1953	29	R Align 62	1.06	12	39	C	4	5	1	40.501760	-75.642722
22	1958	30	L Align 62	1.20	27	39	C	4	5	1	40.501760	-75.642740
22	2053	31	L Align 62	-0.75	7	39	C	4	5	1	40.501750	-75.643081
21	5450		Down Milepost	21.00	0	41	E	0	0	1	40.504128	-75.654686
21	3608	32	L Align 62	0.98	13	44	C	4	5	1	40.506955	-75.666900
21	3627	33	L Prof 62	-1.70	5	44	C	4	5	1	40.506955	-75.666968
21	4167	35	Twist 31ft*	1.13	7	43	E	3	5	1	40.506860	-75.668901
19	10617		Down Milepost	19.00	0	30	T	0	0	1	40.504795	-75.691877
19	1593	37	R Prof 62	-1.71	9	26	T	4	5	1	40.504283	-75.697554
19	1597	36	L Prof 62	-1.36	1	26	T	4	5	1	40.504281	-75.697568
19	2466		Class Change	3.00	0	24	C	0	0	1	40.504055	-75.700670
19	2466		Posted Speed	40.00	0	24	C	0	0	1	40.504055	-75.700670
19	3240		Class Change	4.00	0	23	T	0	0	1	40.504113	-75.703442
19	3240		Posted Speed	50.00	0	23	T	0	0	1	40.504113	-75.703442
18	5262		Down Milepost	18.00	0	27	C	0	0	1	40.504081	-75.710687
18	18	38	R Align 62	0.92	10	27	C	4	5	1	40.504073	-75.710751
18	96	39	L Align 62	-0.75	1	28	C	4	5	1	40.504040	-75.711027
17	5369		Down Milepost	17.00	0	17	C	0	0	1	40.496463	-75.726327
16	5197		Down Milepost	16.00	0	17	T	0	0	1	40.488154	-75.741300
16	5054	46	R Prof 62	1.43	4	33	T	4	5	1	40.482098	-75.757586
16	5087	47	L Prof 62	-1.59	6	33	T	4	5	1	40.482058	-75.757692
16	5088	48	R Prof 62	-1.81	8	33	T	4	5	1	40.482057	-75.757695
15	5243		Down Milepost	15.00	0	33	T	0	0	1	40.481870	-75.758198

Exception Report
Class Plus 1 Exception List Section
Milepost 90 to Milepost 7
Allentown, PA to Reading, PA

Page 3 of 3
Run Date: 07/25/2018
Run ID: 2018072501

MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
15	836	50	R Align 62	1.08	5	34	T	4	5	1	40.480867	-75.760890
15	838	49	L Align 62	1.19	1	34	T	4	5	1	40.480865	-75.760897
14	5355		Down Milepost	14.00	0	31	T	0	0	1	40.474845	-75.775036
13	5301		Down Milepost	13.00	0	36	T	0	0	1	40.467310	-75.791239
12	5188		Down Milepost	12.00	0	28	T	0	0	1	40.458043	-75.805083
12	1406	51	L Prof 62	1.39	4	31	T	4	5	1	40.456006	-75.809352
12	1442	53	L Prof 62	-2.18	24	31	T	3	5	1	40.455954	-75.809461
12	1443	54	R Prof 62	-1.80	21	31	T	4	5	1	40.455952	-75.809464
12	1486	55	L Prof 62	1.57	13	31	T	4	5	1	40.455889	-75.809595
11	5422		Down Milepost	11.00	0	22	T	0	0	1	40.451002	-75.822127
11	2163	56	R Align 62	0.83	9	15	C	4	5	1	40.448821	-75.829332
11	2166	57	R Align 31	0.78	8	15	C	4	5	1	40.448819	-75.829342
11	2183	58	R Align 31	-0.75	7	15	C	4	5	1	40.448804	-75.829400
10	5270		Down Milepost	10.00	0	23	T	0	0	1	40.446938	-75.840180
9	5275		Down Milepost	9.00	0	23	T	0	0	1	40.443743	-75.858615
8	5280		Down Milepost	8.00	0	15	T	0	0	1	40.440534	-75.877071
8	1890	59	L Align 31	-0.61	1	14	E	4	5	1	40.439171	-75.883597
8	2276		Track Change	0.00	0	16	T	0	0	5	40.438722	-75.884850
8	2372		Class Change	3.00	0	16	T	0	0	5	40.438609	-75.885161
8	2372		Posted Speed	40.00	0	16	T	0	0	5	40.438609	-75.885161
1	7473		Up Milepost	1.00	0	19	T	0	0	5	40.432624	-75.901673
2	5377		Up Milepost	2.00	0	8	T	0	0	5	40.425238	-75.918098
3	5353		Up Milepost	3.00	0	22	C	0	0	5	40.414193	-75.930460
3	4427		Track Change	0.00	0	21	T	0	0	1	40.402169	-75.929707
3	12863		Posted Speed	30.00	0	23	T	0	0	1	40.379409	-75.933038
6	15790		Up Milepost	6.00	0	20	B	0	0	1	40.371604	-75.934017
7	4611		Up Milepost	7.00	0	25	E	0	0	1	40.360876	-75.942531
7	5050		Class Change	2.00	0	22	C	0	0	1	40.349296	-75.951130
7	5050		Posted Speed	25.00	0	22	C	0	0	1	40.349296	-75.951130
7	5314	69	R Align 62	-1.91	3	22	B	2	3	1	40.348779	-75.951788
8	5806		Up Milepost	8.00	0	22	C	0	0	1	40.347731	-75.952898
8	434		Track Change	0.00	0	22	C	0	0	5	40.346664	-75.953582

Notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Rail Impact Values are unitless; indicating a location with a large vertical axle acceleration

Rail Cant Exceptions values indicate degrees.

(RSA) indicates possible Rail Seat Abrasion. The following fields are irrelevant for Cant Exceptions: LC, PC

Exception Report
Class Plus 1 Exception Summary Section
Milepost 90 to Milepost 7
Allentown, PA to Reading, PA

Page 1 of 1
Run Date: 07/25/2018
Run ID: 2018072501

		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot			
MP	FT	EXC	FT	Drop	EXC	FT	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	Cls	Cls	Trk
27	5283	-	-	-	-	-	2	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
26	5316	-	-	-	-	-	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
25	5259	-	-	-	-	-	2	28	-	-	-	-	-	-	-	2	6	-	-	-	-	-	-	-	-	-	-	4	5	1	
24	5267	-	-	-	-	-	1	1	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	4	5	1	
23	5343	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	16	-	-	-	-	-	-	-	-	-	-	4	5	1	
22	5090	-	-	-	-	-	9	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
21	5450	-	-	-	-	-	1	13	-	-	-	-	-	-	-	1	5	-	-	-	-	-	-	-	1	7	1	-	3	5	1
19	10617	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	10	-	-	-	-	-	-	-	-	-	-	4	5	1	
18	5262	-	-	-	-	-	2	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
16	5197	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	18	-	-	-	-	-	-	-	-	-	-	4	5	1	
15	5243	-	-	-	-	-	2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
12	5188	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	62	1	-	-	-	-	-	-	-	-	-	3	5	1	
11	5422	-	-	-	-	-	3	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
8	5280	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
7	5050	-	-	-	-	-	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	1	
		-	-	-	-	-	26	240	-	-	-	-	-	-	-	15	118	1	-	-	-	-	-	-	-	1	7	1	-		

Total Miles: 39.30
Exceptions per 100 Miles: 106.87
CY17 National Average Exceptions per 100 miles: 7.1

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Run Date: 07/25/2018

Run ID: 2018072501

Allentown, PA to Reading, PA

Run ID: 2018072501

Allentown, PA to Reading, PA

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
There were no Alignment 62 exceptions detected during this survey.											

DOTX 220 Geometry Car

United States Department of Transportation

AUTOMATED TRACK INSPECTION PROGRAM

TRACK GEOMETRY INSPECTION REPORT

Conway, PA to Harrisburg, PA

Railroad: NORFOLK SOUTHERN CORPORATION (NS)

Survey Number: 1912

Mile Post 21 to Mile Post 105



Prepared for:

United States Department of Transportation
Federal Railroad Administration
Office of Safety
Washington, D.C.

Prepared by:

ENSCO, Inc.
5400 Port Royal Rd
Springfield, VA 22151



Testing Cert. 2411.01

Approved By:

Survey Director:

MARTIN BROCK

Signature

Date

Under the U.S. Department of Transportation, Federal Railroad Administration (FRA), Office of Safety Assurance and Compliance, Automated Track Inspection Program and in accordance with 49 CFR 213 Federal Track Safety Standards, this Track Geometry Inspection Report provides a list of exceptions that relate only to the time and date the track was inspected and the required remedial action taken. This compliance report is offered only to the track owner and is not to be reproduced to others in whole or part without the expressed written consent of the FRA and the track owner. FRA requests any reprinting be labeled as a copy of the original.

NOTES

An Automated Track Inspection Program (ATIP) Track Geometry Inspection Report (TGIR) is generated for each ATIP survey. The TGIR summarizes the data collected and can be used in conjunction with the strip chart. The TGIR is generated electronically onboard the car and hard copies are distributed as follows:

1. One (1) copy is provided to onboard railroad representative, as requested
2. One (1) copy is provided to onboard FRA Inspector, as requested
3. One (1) copy is archived for FRA management

Following ATIP Compliance survey operations, electronic copies of TGIRs are distributed via email, to a list of recipients designated by FRA and railroad management.

The TGIR may consist of ten (10) parts;

1. Cover,
2. Notes,
3. Exception List,
4. Curve Analysis,
5. Exception Summary,
6. Track Quality Index (TQI),
7. GRMS Exception List (if equipped),
8. Class+1 (C+1) Exception List,
9. C+1 Exception Summary,
10. Alinement MCO worksheet.

Track measurement sample frequency is once per foot.

Exceptions may not be reported for Alinement and Profile parameters when ATIP car speed is less than fifteen (15) and five (5) miles per hour, respectively.

Exception List symbols/notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49CFR 213.57(b).

Rail Impact Values are unit-less; indicating a location with a large vertical axle acceleration.

Rail Cant Exception denoted with (RSA) indicates possible Rail Seat Abrasion.

The following fields are not applicable for Limited Speed, Ride Quality [in classes 1-5], and Rail Cant:

Limited Class (LC); Posted Class (PC).

All Exception Parameter values are reported in inches, except for the following:

- Limiting Speed (Vmax) expressed in: MPH
- Ride Quality; Carbody Lateral, Carbody Vertical, Truck Lateral expressed in: g (gravitational acceleration)
- Rail Cant; Left (L) and Right (R), NEG[ative] and POS[itive] expressed in: angular degrees (°)

For Alinement exceptions: Negative (-) values indicate rail shifting to the right and Positive (+) values indicate rail shifting to the left, referencing direction of ATIP car travel during testing.

Alinement exceptions reported in turnout paths are considered Federal Track Safety Standard Advisory.

For Rail Cant exceptions: Negative (-) values indicate an outward shift in the rail angle, and Positive (+) values indicate an inward shift in the rail angle. Rail Cant exceptions have a minimum length of 15 feet.

A complete description of the information provided in the TGIR is available at

<https://www.fra.dot.gov/eLib/Details/L04545>

ATIP survey exceptions are available for review the next business day, and ATIP track measurement foot by foot data is available the following week at: https://tdms.fra.dot.gov/tdms_lite

Exception Report
Exception List Section
Milepost 21 to Milepost 105
Duncannon, PA to Harrisburg, PA

Page 1 of 17
Run Date: 12/17/2018
Run ID: 2018121701

MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
21	157		Down Milepost	21.00	0	4	T	0	0	7	40.644348	-80.234289
21	529		Track Change	0.00	0	4	T	0	0	7	40.644348	-80.234289
21	529		Class Change	1.00	0	4	T	0	0	7	40.644348	-80.234289
21	529		Posted Speed	10.00	0	4	T	0	0	7	40.644348	-80.234289
21	529		State Line	PA	0	4	T	0	0	7	40.644348	-80.234289
21	530		Railroad	NS -	0	4	T	0	0	7	40.644348	-80.234286
21	531		Subdivision	FORT	0	4	T	0	0	7	40.644348	-80.234282
21	1284		Track Change	0.00	0	8	C	0	0	1	40.642377	-80.233309
21	1427		Class Change	4.00	0	9	E	0	0	1	40.642009	-80.233137
21	1427		Posted Speed	79.00	0	9	E	0	0	1	40.642009	-80.233137
21	3463		Posted Speed	60.00	0	14	B	0	0	1	40.636591	-80.231525
20	4980		Down Milepost	20.00	0	18	T	0	0	1	40.632463	-80.231012
20	1247		Posted Speed	79.00	0	19	E	0	0	1	40.629057	-80.230930
19	5283		Down Milepost	19.00	0	18	T	0	0	1	40.618056	-80.232055
19	3120		Posted Speed	70.00	0	18	T	0	0	1	40.609534	-80.232112
18	5316		Down Milepost	18.00	0	35	E	0	0	1	40.603627	-80.233089
18	1964		Posted Speed	79.00	0	41	E	0	0	1	40.598408	-80.234471
18	5221		Posted Speed	70.00	0	43	T	0	0	1	40.589623	-80.232911
17	5274		Down Milepost	17.00	0	43	C	0	0	1	40.589482	-80.232853
17	5121		Posted Speed	79.00	0	48	T	0	0	1	40.577402	-80.223753
16	5186		Down Milepost	16.00	0	48	T	0	0	1	40.577261	-80.223605
16	2890		Posted Speed	70.00	0	45	T	0	0	1	40.571120	-80.217088
15	5149		Down Milepost	15.00	0	45	T	0	0	1	40.566316	-80.211993
14	5444		Down Milepost	14.00	0	44	E	0	0	1	40.553446	-80.202505
13	5327		Down Milepost	13.00	0	46	T	0	0	1	40.540949	-80.192748
13	393		Posted Speed	60.00	0	46	T	0	0	1	40.539984	-80.192129
13	2767	46	PLG24 Maint*	58.03	3	46	C	4	4	1	40.534791	-80.187167
13	2981	47	PLG24 Maint*	58.08	3	46	C	4	4	1	40.534456	-80.186540
13	3003	48	PLG24 Maint*	58.26	9	46	C	4	4	1	40.534423	-80.186473
13	3175	49	PLG24 Maint*	58.14	4	47	C	4	4	1	40.534183	-80.185943
13	3267	52	Gage Wide	57.60	1	47	E	3	4	1	40.534066	-80.185646
13	3269	50	PLG24 Maint*	58.18	12	47	C	4	4	1	40.534066	-80.185646
13	3314	51	PLG24 Maint*	58.12	7	47	C	4	4	1	40.534012	-80.185501
13	4032		Posted Speed	79.00	0	48	T	0	0	1	40.533272	-80.183112
13	7737		Posted Speed	70.00	0	46	T	0	0	1	40.529715	-80.170687
13	10277	55	PLG24 Maint*	58.04	4	46	T	4	4	1	40.527315	-80.162166
13	10525	56	PLG24 Maint*	58.13	6	46	T	4	4	1	40.527062	-80.161342
11	11152		Down Milepost	11.00	0	46	T	0	0	1	40.526316	-80.159307
11	5254		Posted Speed	79.00	0	47	T	0	0	1	40.520627	-80.142065

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
10	5347		Down Milepost	10.00	0	47	T	0	0	1	40.520516	-80.141761
9	5260		Down Milepost	9.00	0	47	T	0	0	1	40.515996	-80.123925
8	5310		Down Milepost	8.00	0	46	C	0	0	1	40.511573	-80.105846
8	1593		Posted Speed	70.00	0	46	T	0	0	1	40.509535	-80.100809
7	5235		Down Milepost	7.00	0	44	T	0	0	1	40.505257	-80.089025
7	5069		Posted Speed	79.00	0	42	C	0	0	1	40.499015	-80.073000
6	5448		Down Milepost	6.00	0	42	T	0	0	1	40.498299	-80.072011
5	5181		Down Milepost	5.00	0	36	E	0	0	1	40.488307	-80.058862
5	866		Class Change	3.00	0	36	T	0	0	1	40.486685	-80.056596
5	866		Posted Speed	50.00	0	36	T	0	0	1	40.486685	-80.056596
4	5340		Down Milepost	4.00	0	34	T	0	0	1	40.478753	-80.044468
3	5330		Down Milepost	3.00	0	10	B	0	0	1	40.465946	-80.035656
2	5445		Down Milepost	2.00	0	21	T	0	0	1	40.456911	-80.020720
2	371		Class Change	2.00	0	20	T	0	0	1	40.456352	-80.019612
2	371		Posted Speed	30.00	0	20	T	0	0	1	40.456352	-80.019612
2	3650		Posted Speed	25.00	0	17	E	0	0	1	40.451052	-80.010257
2	5180		Posted Speed	30.00	0	16	C	0	0	1	40.449336	-80.005702
1	5208		Down Milepost	1.00	0	17	E	0	0	1	40.449347	-80.005599
1	1765		Posted Speed	25.00	0	15	B	0	0	1	40.450601	-79.999506
1	2693	81	PLG24 Maint*	58.03	3	14	B	2	2	1	40.449300	-79.996975
1	2715	82	PLG24 Maint*	58.06	5	14	B	2	2	1	40.449247	-79.996940
1	3152	84	PLG24 Maint*	58.14	4	15	T	2	2	1	40.448179	-79.996237
1	3461	85	PLG24 Maint*	58.04	4	16	T	2	2	1	40.447420	-79.995726
1	3538		Posted Speed	30.00	0	17	T	0	0	1	40.447221	-79.995599
1	3658	86	PLG24 Maint*	58.16	6	17	T	2	2	1	40.446934	-79.995416
1	4699		Subdivision	PITTSBU	0	13	B	0	0	1	40.444891	-79.993039
1	4756		Posted Speed	20.00	0	13	B	0	0	1	40.444850	-79.992841
1	5550	89	PLG24 Maint*	58.18	5	9	C	2	2	1	40.445601	-79.990465
1	5691	92	PLG24 Maint*	58.15	5	8	E	2	2	1	40.445795	-79.990088
1	9934		Class Change	4.00	0	15	T	0	0	1	40.452938	-79.977908
1	9934		Posted Speed	60.00	0	15	T	0	0	1	40.452938	-79.977908
352	10407		Down Milepost	352.00	0	15	C	0	0	1	40.453734	-79.976569
352	1826		Class Change	3.00	0	21	T	0	0	1	40.456898	-79.971517
352	1826		Posted Speed	40.00	0	21	T	0	0	1	40.456898	-79.971517
352	5384		Posted Speed	35.00	0	26	T	0	0	1	40.460644	-79.960046
351	5422		Down Milepost	351.00	0	26	T	0	0	1	40.460668	-79.959910
351	528	109	PLG24 Maint*	58.04	3	22	T	3	3	1	40.460953	-79.958066
351	590	110	PLG24 Maint*	58.02	3	22	T	3	3	1	40.460959	-79.957845
351	771	111	PLG24 Maint*	58.13	4	22	B	3	3	1	40.460905	-79.957204

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
351	855	112	PLG24 Maint*	58.02	3	22	B	3	3	1	40.460847	-79.956914
351	932	113	PLG24 Maint*	58.02	3	22	B	3	3	1	40.460772	-79.956658
351	1229	114	PLG24 Maint*	58.27	16	22	C	3	3	1	40.460333	-79.955784
351	1333	115	PLG24 Maint*	58.07	3	22	C	3	3	1	40.460126	-79.955531
351	5565		Posted Speed	40.00	0	23	C	0	0	1	40.454638	-79.943023
349	10766		Down Milepost	349.00	0	20	T	0	0	1	40.458703	-79.926676
349	3021		Class Change	4.00	0	15	T	0	0	1	40.459434	-79.916326
349	3021		Posted Speed	60.00	0	15	T	0	0	1	40.459434	-79.916326
347	10289		Down Milepost	347.00	0	14	C	0	0	1	40.450317	-79.893220
346	5877		Down Milepost	346.00	0	22	T	0	0	1	40.435873	-79.885668
346	3008		Class Change	3.00	0	14	T	0	0	1	40.427745	-79.885238
346	3008		Posted Speed	40.00	0	14	T	0	0	1	40.427745	-79.885238
345	5098		Down Milepost	345.00	0	16	B	0	0	1	40.422201	-79.887068
344	5111		Down Milepost	344.00	0	24	C	0	0	1	40.413814	-79.874623
343	5283		Down Milepost	343.00	0	27	E	0	0	1	40.402580	-79.864626
343	2585		Posted Speed	45.00	0	23	E	0	0	1	40.398061	-79.857685
343	4542		Posted Speed	40.00	0	24	T	0	0	1	40.396390	-79.851039
342	5237		Down Milepost	342.00	0	25	C	0	0	1	40.395624	-79.848778
342	3029	140	Lmt Speed 4	39.00	2260	17	C		3	1	40.392413	-79.839022
341	5308		Down Milepost	341.00	0	16	T	0	0	1	40.395958	-79.833033
341	2671	142	Lmt Speed 4	38.00	1848	11	C		3	1	40.402185	-79.828072
341	4163		Posted Speed	45.00	0	11	T	0	0	1	40.402174	-79.823179
340	5214		Down Milepost	340.00	0	15	T	0	0	1	40.400749	-79.819920
340	1583		Posted Speed	30.00	0	17	T	0	0	1	40.397873	-79.815746
340	1773	145	L Align 62	-1.95	2	17	B	2	3	1	40.397481	-79.815302
340	1774	147	R Align 62	-2.12	10	17	B	2	3	1	40.397479	-79.815300
340	2035		Track Change	0.00	0	17	E	0	0	2	40.396958	-79.814660
340	2262		Posted Speed	45.00	0	18	T	0	0	2	40.396489	-79.814127
340	4259		Class Change	4.00	0	25	E	0	0	2	40.393839	-79.808237
340	4259		Posted Speed	60.00	0	25	E	0	0	2	40.393839	-79.808237
339	5243		Down Milepost	339.00	0	29	T	0	0	2	40.393768	-79.804716
339	6083	159	Lmt Speed 4	58.00	1407	37	C		4	2	40.399634	-79.785195
338	6722		Down Milepost	338.00	0	36	C	0	0	2	40.400140	-79.783013
338	300	160	Lmt Speed 4	55.00	5262	37	C		4	2	40.400208	-79.781943
338	4730		Posted Speed	75.00	0	37	C	0	0	2	40.392503	-79.771011
337	5100		Down Milepost	337.00	0	37	C	0	0	2	40.391559	-79.770529
336	5458		Down Milepost	336.00	0	42	C	0	0	2	40.377430	-79.764250
335	4765		Down Milepost	335.00	0	43	T	0	0	2	40.367900	-79.752995
334	5307		Down Milepost	334.00	0	46	T	0	0	2	40.358118	-79.739125

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
333	5292		Down Milepost	333.00	0	45	T	0	0	2	40.346537	-79.727900
332	4964		Down Milepost	332.00	0	42	C	0	0	2	40.337705	-79.714433
331	5048		Down Milepost	331.00	0	50	C	0	0	2	40.332126	-79.698113
331	1260		Posted Speed	60.00	0	48	C	0	0	2	40.331722	-79.693644
331	3306		Posted Speed	75.00	0	42	T	0	0	2	40.332302	-79.686431
330	4774		Down Milepost	330.00	0	38	T	0	0	2	40.333436	-79.681399
330	912		Posted Speed	50.00	0	38	T	0	0	2	40.334140	-79.678279
329	5660		Down Milepost	329.00	0	42	B	0	0	2	40.333885	-79.662002
329	1337		Posted Speed	75.00	0	43	T	0	0	2	40.333218	-79.657449
329	3722		Posted Speed	57.00	0	45	T	0	0	2	40.330033	-79.650019
328	5022		Down Milepost	328.00	0	47	C	0	0	2	40.328477	-79.645849
328	1377		Posted Speed	75.00	0	47	T	0	0	2	40.328890	-79.641053
327	5290		Down Milepost	327.00	0	39	C	0	0	2	40.331492	-79.627634
326	5326		Down Milepost	326.00	0	44	T	0	0	2	40.325172	-79.610949
326	5208		Posted Speed	60.00	0	46	T	0	0	2	40.316303	-79.596399
325	5398		Down Milepost	325.00	0	46	B	0	0	2	40.315979	-79.595863
325	1438		Posted Speed	70.00	0	45	E	0	0	2	40.314250	-79.591303
324	3780		Down Milepost	324.00	0	46	T	0	0	2	40.312592	-79.583216
323	5683		Down Milepost	323.00	0	50	E	0	0	2	40.307792	-79.563931
322	5420		Down Milepost	322.00	0	45	B	0	0	2	40.305065	-79.545608
321	5088		Down Milepost	321.00	0	43	T	0	0	2	40.308928	-79.528161
320	5191		Down Milepost	320.00	0	46	T	0	0	2	40.311954	-79.510079
319	5161		Down Milepost	319.00	0	46	C	0	0	2	40.317156	-79.493282
319	1705		Posted Speed	79.00	0	47	T	0	0	2	40.317152	-79.487237
318	3977		Down Milepost	318.00	0	45	T	0	0	2	40.316097	-79.479243
318	977		Posted Speed	75.00	0	43	T	0	0	2	40.315646	-79.475806
318	2759		Posted Speed	79.00	0	40	E	0	0	2	40.314832	-79.469533
317	5587		Down Milepost	317.00	0	47	T	0	0	2	40.312381	-79.459963
316	5296		Down Milepost	316.00	0	47	T	0	0	2	40.307193	-79.442303
316	5068		Posted Speed	75.00	0	36	B	0	0	2	40.302232	-79.425409
315	5283		Down Milepost	315.00	0	35	B	0	0	2	40.302030	-79.424683
314	4433		Down Milepost	314.00	0	37	C	0	0	2	40.302693	-79.409239
313	5140		Down Milepost	313.00	0	47	C	0	0	2	40.311035	-79.394530
312	5153		Down Milepost	312.00	0	45	T	0	0	2	40.320900	-79.381381
311	5489		Down Milepost	311.00	0	41	C	0	0	2	40.325980	-79.363654
310	5314		Down Milepost	310.00	0	41	T	0	0	2	40.321623	-79.345586
310	1358		Posted Speed	70.00	0	44	T	0	0	2	40.320395	-79.341013
309	4671		Down Milepost	309.00	0	46	T	0	0	2	40.321022	-79.329667
308	5291		Down Milepost	308.00	0	44	B	0	0	2	40.326918	-79.312409

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308	2597		Posted Speed	79.00	0	49	E	0	0	2	40.330960	-79.304857
307	5307		Down Milepost	307.00	0	48	T	0	0	2	40.336383	-79.298257
306	5325		Down Milepost	306.00	0	43	T	0	0	2	40.347217	-79.285565
306	2499		Posted Speed	70.00	0	45	C	0	0	2	40.352752	-79.280336
305	5182		Down Milepost	305.00	0	47	C	0	0	2	40.357668	-79.273240
303	10523		Down Milepost	303.00	0	46	T	0	0	2	40.381124	-79.251514
302	5429		Down Milepost	302.00	0	47	C	0	0	2	40.393438	-79.240873
302	4612		Posted Speed	55.00	0	47	E	0	0	2	40.404252	-79.234231
301	5442		Down Milepost	301.00	0	45	C	0	0	2	40.405529	-79.231793
300	5010		Down Milepost	300.00	0	42	C	0	0	2	40.417990	-79.224516
299	5323		Down Milepost	299.00	0	41	B	0	0	2	40.415590	-79.208991
299	1849		Posted Speed	50.00	0	40	T	0	0	2	40.411911	-79.204478
298	5309		Down Milepost	298.00	0	42	T	0	0	2	40.412099	-79.193736
298	2493		Posted Speed	70.00	0	43	E	0	0	2	40.412996	-79.185342
297	5285		Down Milepost	297.00	0	42	B	0	0	2	40.410356	-79.175968
297	4392		Class Change	3.00	0	38	T	0	0	2	40.409848	-79.160539
297	4392		Posted Speed	45.00	0	38	T	0	0	2	40.409848	-79.160539
296	4842		Down Milepost	296.00	0	37	B	0	0	2	40.410155	-79.158977
295	5137		Down Milepost	295.00	0	38	C	0	0	2	40.399511	-79.154302
295	2824		Class Change	4.00	0	36	T	0	0	2	40.396963	-79.145367
295	2824		Posted Speed	70.00	0	36	T	0	0	2	40.396963	-79.145367
295	4283		Posted Speed	60.00	0	35	T	0	0	2	40.397417	-79.140183
294	5128		Down Milepost	294.00	0	33	C	0	0	2	40.397625	-79.137171
294	1145		Posted Speed	70.00	0	34	E	0	0	2	40.397023	-79.133177
294	2852		Posted Speed	55.00	0	41	T	0	0	2	40.395412	-79.127453
293	5272		Down Milepost	293.00	0	44	C	0	0	2	40.390971	-79.121789
293	1718		Posted Speed	70.00	0	42	T	0	0	2	40.386724	-79.123865
292	4676		Down Milepost	292.00	0	26	C	0	0	2	40.379364	-79.127147
291	5098		Down Milepost	291.00	0	13	T	0	0	2	40.373456	-79.113188
291	1905		Class Change	3.00	0	19	B	0	0	2	40.374938	-79.106658
291	1905		Posted Speed	30.00	0	19	B	0	0	2	40.374938	-79.106658
291	1989	276	L Align 62	1.98	10	19	B	2	3	2	40.375002	-79.106370
291	2315		Track Change	0.00	0	21	E	0	0	1	40.375223	-79.105241
291	2456		Class Change	4.00	0	21	T	0	0	1	40.375332	-79.104757
291	2456		Posted Speed	79.00	0	21	T	0	0	1	40.375332	-79.104757
290	4778		Down Milepost	290.00	0	26	T	0	0	1	40.377131	-79.096796
290	3333		Posted Speed	75.00	0	39	T	0	0	1	40.379734	-79.085381
289	4807		Down Milepost	289.00	0	40	C	0	0	1	40.380487	-79.080221
288	4596		Down Milepost	288.00	0	45	C	0	0	1	40.378567	-79.064037

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
288	3408		Posted Speed	79.00	0	45	E	0	0	1	40.382131	-79.053073
287	5120		Down Milepost	287.00	0	43	T	0	0	1	40.385317	-79.048586
286	5230		Down Milepost	286.00	0	49	C	0	0	1	40.395318	-79.035233
286	7774		Posted Speed	55.00	0	45	T	0	0	1	40.413914	-79.022027
284	10591		Down Milepost	284.00	0	45	C	0	0	1	40.418350	-79.014520
284	1395		Posted Speed	79.00	0	45	E	0	0	1	40.417472	-79.009725
284	4431		Posted Speed	60.00	0	41	T	0	0	1	40.413768	-79.000008
283	5017		Down Milepost	283.00	0	37	B	0	0	1	40.413063	-78.998120
283	4897		Posted Speed	79.00	0	32	T	0	0	1	40.406051	-78.984009
282	5323		Down Milepost	282.00	0	33	T	0	0	1	40.405034	-78.983262
281	5256		Down Milepost	281.00	0	40	C	0	0	1	40.392517	-78.974033
281	3534		Posted Speed	60.00	0	38	T	0	0	1	40.383769	-78.968673
280	5247		Down Milepost	280.00	0	30	E	0	0	1	40.379354	-78.966723
280	5322		Class Change	3.00	0	35	T	0	0	1	40.367132	-78.957500
280	5322		Posted Speed	45.00	0	35	T	0	0	1	40.367132	-78.957500
279	5367		Down Milepost	279.00	0	35	T	0	0	1	40.367048	-78.957378
279	2185		Posted Speed	40.00	0	31	E	0	0	1	40.362412	-78.952517
279	4200		Posted Speed	35.00	0	30	E	0	0	1	40.361913	-78.946422
278	5232		Down Milepost	278.00	0	32	C	0	0	1	40.363554	-78.943542
278	1157	298	PLG24 Maint*	58.28	6	30	C	3	3	1	40.361789	-78.940570
278	1164		Posted Speed	40.00	0	30	E	0	0	1	40.361766	-78.940558
278	1451	299	PLG24 Maint*	58.07	6	28	E	3	3	1	40.361039	-78.940192
278	3349		Posted Speed	45.00	0	30	E	0	0	1	40.356087	-78.939912
277	5335		Down Milepost	277.00	0	32	C	0	0	1	40.351077	-78.942566
276	5382		Down Milepost	276.00	0	33	C	0	0	1	40.340000	-78.931837
276	2450		Posted Speed	40.00	0	32	E	0	0	1	40.334902	-78.926540
275	5245		Down Milepost	275.00	0	32	B	0	0	1	40.329227	-78.920248
275	3059		Class Change	4.00	0	34	E	0	0	1	40.330056	-78.909766
275	3059		Posted Speed	60.00	0	34	E	0	0	1	40.330056	-78.909766
274	5487		Down Milepost	274.00	0	33	T	0	0	1	40.334288	-78.903084
273	5247		Down Milepost	273.00	0	37	T	0	0	1	40.342985	-78.888170
273	1006		Class Change	3.00	0	36	B	0	0	1	40.344691	-78.885349
273	1006		Posted Speed	45.00	0	36	B	0	0	1	40.344691	-78.885349
273	5188		Posted Speed	40.00	0	31	C	0	0	1	40.353920	-78.878233
272	5233		Down Milepost	272.00	0	31	C	0	0	1	40.353962	-78.878077
272	4930		Posted Speed	35.00	0	35	B	0	0	1	40.352778	-78.861793
271	5027		Down Milepost	271.00	0	34	B	0	0	1	40.352876	-78.861466
271	5470		Posted Speed	40.00	0	31	E	0	0	1	40.365318	-78.855593
270	5525		Down Milepost	270.00	0	31	T	0	0	1	40.365459	-78.855671

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270	680	315	PLG24 Maint*	58.08	5	31	T	3	3	1	40.367183	-78.856553
270	1328	316	PLG24 Maint*	58.06	5	32	C	3	3	1	40.368938	-78.856574
270	1480	317	PLG24 Maint*	58.08	7	33	E	3	3	1	40.369340	-78.856430
270	1488	318	PLG24 Maint*	58.11	5	32	C	3	3	1	40.369361	-78.856421
270	1615	319	PLG24 Maint*	58.09	5	33	C	3	3	1	40.369684	-78.856257
270	1646	320	PLG24 Maint*	58.13	3	33	C	3	3	1	40.369761	-78.856211
270	1662	321	PLG24 Maint*	58.09	6	33	C	3	3	1	40.369801	-78.856187
270	1674	322	PLG24 Maint*	58.01	3	33	C	3	3	1	40.369830	-78.856168
270	1712	323	PLG24 Maint*	58.20	9	33	C	3	3	1	40.369923	-78.856106
270	1733	324	PLG24 Maint*	58.12	5	33	C	3	3	1	40.369974	-78.856071
270	1749	325	PLG24 Maint*	58.44	13	33	C	3	3	1	40.370012	-78.856044
270	1773	326	PLG24 Maint*	58.16	6	33	C	3	3	1	40.370069	-78.856001
270	1779	327	PLG24 Maint*	58.22	8	33	C	3	3	1	40.370083	-78.855990
270	1800	328	PLG24 Maint*	58.04	3	33	C	3	3	1	40.370132	-78.855951
270	2749	331	PLG24 Maint*	58.08	4	33	E	3	3	1	40.372213	-78.853932
270	2844	332	PLG24 Maint*	58.29	9	33	B	3	3	1	40.372448	-78.853785
270	2874	333	PLG24 Maint*	58.26	13	33	B	3	3	1	40.372524	-78.853744
270	2910	334	PLG24 Maint*	58.05	3	33	B	3	3	1	40.372616	-78.853698
270	2986	335	PLG24 Maint*	58.01	3	33	B	3	3	1	40.372813	-78.853612
270	2994	336	PLG24 Maint*	58.03	3	33	B	3	3	1	40.372834	-78.853604
270	3000	337	PLG24 Maint*	58.09	6	33	B	3	3	1	40.372849	-78.853598
270	3018	338	PLG24 Maint*	58.18	7	33	B	3	3	1	40.372897	-78.853581
270	3050	339	PLG24 Maint*	58.02	3	33	B	3	3	1	40.372982	-78.853552
270	3823	340	PLG24 Maint*	58.09	6	35	E	3	3	1	40.375060	-78.853068
270	3872	341	PLG24 Maint*	58.05	5	35	E	3	3	1	40.375187	-78.853012
270	3909	342	PLG24 Maint*	58.26	14	36	B	3	3	1	40.375282	-78.852966
270	3986	343	PLG24 Maint*	58.19	9	35	B	3	3	1	40.375476	-78.852857
270	4345	344	PLG24 Maint*	58.03	3	35	C	3	3	1	40.376298	-78.852166
270	4449	345	PLG24 Maint*	58.15	4	34	C	3	3	1	40.376505	-78.851912
270	4460	346	PLG24 Maint*	58.11	4	34	C	3	3	1	40.376526	-78.851884
270	4535	347	PLG24 Maint*	58.17	5	34	C	3	3	1	40.376664	-78.851686
270	4573	348	PLG24 Maint*	58.06	4	34	C	3	3	1	40.376730	-78.851582
270	4585	349	PLG24 Maint*	58.16	3	33	C	3	3	1	40.376750	-78.851548
270	4830	350	PLG24 Maint*	58.04	4	33	C	3	3	1	40.377114	-78.850817
270	4847	351	PLG24 Maint*	58.04	3	33	C	3	3	1	40.377135	-78.850763
270	4944	352	PLG24 Maint*	58.08	3	32	C	3	3	1	40.377248	-78.850449
270	4958	353	PLG24 Maint*	58.09	3	32	C	3	3	1	40.377263	-78.850403
270	4963	354	PLG24 Maint*	58.18	9	32	C	3	3	1	40.377268	-78.850387
269	5256		Down Milepost	269.00	0	31	C	0	0	1	40.377519	-78.849382

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269	637	355	PLG24 Maint*	58.03	3	31	C	3	3	1	40.377669	-78.847131
269	3122	358	PLG24 Maint*	58.10	6	33	B	3	3	1	40.377631	-78.838352
269	3166	359	PLG24 Maint*	58.04	4	33	B	3	3	1	40.377623	-78.838195
269	3189	360	PLG24 Maint*	58.12	4	33	B	3	3	1	40.377617	-78.838113
269	3198	361	PLG24 Maint*	58.04	4	33	B	3	3	1	40.377615	-78.838081
269	3386	362	PLG24 Maint*	58.21	7	34	B	3	3	1	40.377540	-78.837417
269	3397	363	PLG24 Maint*	58.00	3	33	C	3	3	1	40.377533	-78.837378
268	5286		Down Milepost	268.00	0	30	B	0	0	1	40.374705	-78.831873
268	1536		Posted Speed	35.00	0	28	E	0	0	1	40.372767	-78.827146
267	5334		Down Milepost	267.00	0	27	E	0	0	1	40.367716	-78.816390
267	647		Posted Speed	40.00	0	28	T	0	0	1	40.368518	-78.814337
267	3687		Posted Speed	45.00	0	22	E	0	0	1	40.368902	-78.804154
266	5299		Down Milepost	266.00	0	20	T	0	0	1	40.366873	-78.799030
265	5290		Down Milepost	265.00	0	30	C	0	0	1	40.369529	-78.781272
265	2462	374	Twist 31ft*	1.46	4	32	E	2	3	1	40.369934	-78.772732
265	2609		Class Change	4.00	0	33	T	0	0	1	40.370100	-78.772254
265	2609		Posted Speed	79.00	0	33	T	0	0	1	40.370100	-78.772254
264	5225		Down Milepost	264.00	0	38	T	0	0	1	40.373117	-78.763775
264	1848	377	Twist 31ft*	1.12	4	40	E	3	4	1	40.375235	-78.757778
263	4863		Down Milepost	263.00	0	45	T	0	0	1	40.377803	-78.747547
263	250	381	Crosslevel	1.63	33	45	T	3	4	1	40.377970	-78.746677
262	4892		Down Milepost	262.00	0	48	C	0	0	1	40.381129	-78.730604
261	4867		Down Milepost	261.00	0	47	T	0	0	1	40.387093	-78.715071
261	2343		Posted Speed	60.00	0	47	T	0	0	1	40.390127	-78.707700
261	2736	385	Twist 31ft*	1.11	3	46	B	3	4	1	40.390639	-78.706459
259	9502		Down Milepost	259.00	0	43	T	0	0	1	40.388833	-78.683081
259	3412		Posted Speed	79.00	0	37	E	0	0	1	40.391126	-78.671438
258	4571		Down Milepost	258.00	0	39	T	0	0	1	40.392800	-78.667917
257	5317		Down Milepost	257.00	0	25	T	0	0	1	40.400479	-78.651771
256	3936		Down Milepost	256.00	0	23	T	0	0	1	40.406155	-78.639816
256	483		Posted Speed	70.00	0	24	T	0	0	1	40.406849	-78.638349
256	2991		Posted Speed	79.00	0	12	E	0	0	1	40.411298	-78.631595
255	4697		Down Milepost	255.00	0	14	T	0	0	1	40.414992	-78.627868
255	847		Posted Speed	60.00	0	8	T	0	0	1	40.416832	-78.626025
255	8463		Posted Speed	79.00	0	21	E	0	0	1	40.436180	-78.618445
253	9801		Down Milepost	253.00	0	22	T	0	0	1	40.438953	-78.615320
252	5309		Down Milepost	252.00	0	26	T	0	0	1	40.449948	-78.602919
251	5257		Down Milepost	251.00	0	14	T	0	0	1	40.461677	-78.592127
251	2477		Posted Speed	75.00	0	15	T	0	0	1	40.467475	-78.587547

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250	5299		Down Milepost	250.00	0	16	T	0	0	1	40.474049	-78.582253
250	684		Class Change	3.00	0	13	T	0	0	1	40.475651	-78.580988
250	684		Posted Speed	45.00	0	13	T	0	0	1	40.475651	-78.580988
250	3102		Class Change	4.00	0	14	T	0	0	1	40.477910	-78.573932
250	3102		Posted Speed	55.00	0	14	T	0	0	1	40.477910	-78.573932
249	5325		Down Milepost	249.00	0	14	T	0	0	1	40.476911	-78.566135
249	2544		Posted Speed	75.00	0	12	T	0	0	1	40.477016	-78.557027
249	3255		Track Change	0.00	0	11	C	0	0	5	40.477050	-78.554482
249	3608		Class Change	3.00	0	11	T	0	0	5	40.477063	-78.553217
249	3608		Posted Speed	30.00	0	11	T	0	0	5	40.477063	-78.553217
248	4569		Down Milepost	248.00	0	12	T	0	0	5	40.477082	-78.549777
248	3531		Track Change	0.00	0	9	T	0	0	1	40.478199	-78.537238
247	5231		Down Milepost	247.00	0	16	C	0	0	1	40.478363	-78.531166
247	3478		Posted Speed	35.00	0	20	T	0	0	1	40.481336	-78.519418
247	4898	422	R Align 62	1.88	2	18	E	2	3	1	40.480894	-78.514968
247	4900	423	L Align 62	1.92	7	18	E	2	3	1	40.480890	-78.514965
245	10667		Down Milepost	245.00	0	18	B	0	0	1	40.477806	-78.497818
245	840	431	Lmt Speed 4+	34.00	1107	16	C		3	1	40.478134	-78.494861
244	5293		Down Milepost	244.00	0	17	B	0	0	1	40.475091	-78.480545
244	1223	433	PLG24 Maint*	58.12	4	18	C	3	3	1	40.477470	-78.477716
243	5204		Down Milepost	243.00	0	21	T	0	0	1	40.488163	-78.475180
243	5100	442	L Align 62	1.98	8	22	C	2	3	1	40.496189	-78.485355
243	5106	440	PLG24 Maint*	58.02	4	22	B	3	3	1	40.496196	-78.485366
242	5377		Down Milepost	242.00	0	20	C	0	0	1	40.496787	-78.485945
242	351	445	Lmt Speed 4	34.00	2012	21	C		3	1	40.497723	-78.486086
242	1249	446	Lmt Speed 4	34.00	470	19	C		3	1	40.499108	-78.483773
242	1539		Posted Speed	44.00	0	19	E	0	0	1	40.498930	-78.482770
242	6836		Posted Speed	35.00	0	13	B	0	0	1	40.499779	-78.464016
242	7184	448	Lmt Speed 4	39.00	1649	13	C		3	1	40.499639	-78.462795
242	8233		Posted Speed	40.00	0	14	E	0	0	1	40.497369	-78.460890
240	10265		Down Milepost	248.00	0	17	T	0	0	1	40.494540	-78.455861
240	5378	452	Crosslevel	1.93	12	10	T	2	3	1	40.490373	-78.438044
240	5412	453	Crosslevel	1.90	11	11	T	2	3	1	40.490348	-78.437927
239	5528		Down Milepost	239.00	0	13	T	0	0	1	40.490265	-78.437522
238	5391		Down Milepost	238.00	0	13	C	0	0	1	40.500128	-78.426400
238	3960		Posted Speed	30.00	0	13	T	0	0	1	40.506709	-78.415183
237	5284		Down Milepost	237.00	0	15	T	0	0	1	40.508819	-78.411329
236	5368		Down Milepost	236.00	0	13	C	0	0	1	40.517645	-78.396016
236	1683		Class Change	4.00	0	6	T	0	0	1	40.521341	-78.392818

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236	1683		Posted Speed	70.00	0	6	T	0	0	1	40.521341	-78.392818
235	5305		Down Milepost	235.00	0	23	T	0	0	1	40.529518	-78.385490
234	5277		Down Milepost	234.00	0	31	T	0	0	1	40.541884	-78.375869
234	5401		Posted Speed	65.00	0	36	T	0	0	1	40.555099	-78.367453
233	5441		Down Milepost	233.00	0	36	T	0	0	1	40.555188	-78.367365
233	1687		Posted Speed	70.00	0	35	T	0	0	1	40.559140	-78.364263
233	3386		Posted Speed	79.00	0	37	T	0	0	1	40.563283	-78.361504
232	5007		Down Milepost	232.00	0	42	T	0	0	1	40.567235	-78.358869
231	5358		Down Milepost	231.00	0	46	T	0	0	1	40.580296	-78.350173
231	1217		Posted Speed	70.00	0	46	T	0	0	1	40.583262	-78.348195
231	2464		Posted Speed	79.00	0	47	T	0	0	1	40.586220	-78.345975
230	5308		Down Milepost	230.00	0	46	T	0	0	1	40.592737	-78.340407
229	5312		Down Milepost	229.00	0	49	T	0	0	1	40.604907	-78.330010
229	2881		Posted Speed	60.00	0	48	T	0	0	1	40.611511	-78.324374
228	5211		Down Milepost	228.00	0	49	E	0	0	1	40.617430	-78.321822
228	4989		Posted Speed	79.00	0	49	T	0	0	1	40.628859	-78.315449
227	5025		Down Milepost	227.00	0	49	T	0	0	1	40.628901	-78.315328
226	5243		Down Milepost	226.00	0	49	T	0	0	1	40.634872	-78.298223
226	3617		Posted Speed	65.00	0	47	T	0	0	1	40.638991	-78.286424
225	5323		Down Milepost	225.00	0	46	C	0	0	1	40.641496	-78.281318
225	3028		Posted Speed	79.00	0	47	E	0	0	1	40.647787	-78.274424
224	5306		Down Milepost	224.00	0	46	T	0	0	1	40.650999	-78.267414
224	3118		Posted Speed	55.00	0	41	C	0	0	1	40.655475	-78.257897
223	5289		Down Milepost	223.00	0	37	B	0	0	1	40.659571	-78.252257
223	1932		Class Change	3.00	0	36	B	0	0	1	40.662153	-78.246250
223	1932		Posted Speed	40.00	0	36	B	0	0	1	40.662153	-78.246250
222	5354		Down Milepost	222.00	0	15	C	0	0	1	40.668340	-78.237644
221	5186		Down Milepost	221.00	0	33	T	0	0	1	40.662990	-78.220843
221	3425		Class Change	4.00	0	33	E	0	0	1	40.656791	-78.212388
221	3425		Posted Speed	50.00	0	33	E	0	0	1	40.656791	-78.212388
221	4031	516	PLG24 Maint*	58.02	3	34	E	4	4	1	40.656013	-78.210473
220	5303		Down Milepost	220.00	0	35	C	0	0	1	40.654307	-78.206491
220	5315		Class Change	3.00	0	35	T	0	0	1	40.642057	-78.196961
220	5315		Posted Speed	35.00	0	35	T	0	0	1	40.642057	-78.196961
219	5348		Down Milepost	219.00	0	35	T	0	0	1	40.641966	-78.196938
219	2381		Class Change	4.00	0	34	E	0	0	1	40.637374	-78.191651
219	2381		Posted Speed	50.00	0	34	E	0	0	1	40.637374	-78.191651
219	4041	519	PLG24 Maint*	58.17	4	35	C	4	4	1	40.634036	-78.187629
218	5218		Down Milepost	218.00	0	32	T	0	0	1	40.631749	-78.184642

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218	1375		Class Change	3.00	0	33	T	0	0	1	40.629086	-78.181160
218	1375		Posted Speed	40.00	0	33	T	0	0	1	40.629086	-78.181160
217	5370		Down Milepost	217.00	0	36	T	0	0	1	40.624173	-78.169754
217	534		Posted Speed	35.00	0	37	T	0	0	1	40.622923	-78.168764
217	3504		Posted Speed	40.00	0	32	T	0	0	1	40.615551	-78.164394
216	5205		Down Milepost	216.00	0	30	C	0	0	1	40.611917	-78.161023
215	5377		Down Milepost	215.00	0	34	B	0	0	1	40.612624	-78.142784
215	4529		Class Change	4.00	0	35	T	0	0	1	40.603418	-78.133191
215	4529		Posted Speed	60.00	0	35	T	0	0	1	40.603418	-78.133191
214	5197		Down Milepost	214.00	0	35	T	0	0	1	40.602313	-78.131278
213	5213		Down Milepost	213.00	0	35	C	0	0	1	40.595172	-78.115174
213	425		Posted Speed	70.00	0	35	E	0	0	1	40.594290	-78.114184
212	5253		Down Milepost	212.00	0	50	C	0	0	1	40.584667	-78.102488
212	2975		Posted Speed	79.00	0	50	T	0	0	1	40.580675	-78.093196
211	5140		Down Milepost	211.00	0	49	T	0	0	1	40.577772	-78.086429
210	5303		Down Milepost	210.00	0	49	T	0	0	1	40.570670	-78.069852
210	755		Posted Speed	75.00	0	49	T	0	0	1	40.569657	-78.067494
210	5285		Posted Speed	58.00	0	51	T	0	0	1	40.567125	-78.052004
209	5325		Down Milepost	209.00	0	50	T	0	0	1	40.567131	-78.051858
208	5299		Down Milepost	208.00	0	39	T	0	0	1	40.558551	-78.038653
207	5274		Down Milepost	207.00	0	44	C	0	0	1	40.544797	-78.035659
207	2589		Posted Speed	50.00	0	45	T	0	0	1	40.539426	-78.029768
207	4595		Posted Speed	65.00	0	43	E	0	0	1	40.534825	-78.026234
206	5288		Down Milepost	206.00	0	43	T	0	0	1	40.532929	-78.026135
205	5282		Down Milepost	205.00	0	49	B	0	0	1	40.518495	-78.025471
205	1408		Posted Speed	60.00	0	49	T	0	0	1	40.514682	-78.024802
203	10511		Down Milepost	203.00	0	49	T	0	0	1	40.490647	-78.020162
202	5408		Down Milepost	202.00	0	46	C	0	0	1	40.481601	-78.005900
202	5158		Posted Speed	79.00	0	49	E	0	0	1	40.472540	-77.992037
201	5198		Down Milepost	201.00	0	49	E	0	0	1	40.472453	-77.991945
201	3626		Posted Speed	70.00	0	52	T	0	0	1	40.464651	-77.983946
201	9776		Posted Speed	75.00	0	47	T	0	0	1	40.452581	-77.968837
199	10574		Down Milepost	199.00	0	47	T	0	0	1	40.451256	-77.966566
198	5316		Down Milepost	198.00	0	49	T	0	0	1	40.443840	-77.950321
197	5290		Down Milepost	197.00	0	47	C	0	0	1	40.437082	-77.933955
196	5300		Down Milepost	196.00	0	43	C	0	0	1	40.423158	-77.930007
196	1431	557	Lmt Speed 4+	72.00	2177	47	C		4	1	40.419312	-77.930883
195	5263		Down Milepost	195.00	0	49	T	0	0	1	40.410296	-77.937732
195	1632		Posted Speed	65.00	0	49	E	0	0	1	40.406410	-77.940535

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
195	4141		Posted Speed	60.00	0	49	T	0	0	1	40.399744	-77.942642
194	5327		Down Milepost	194.00	0	48	C	0	0	1	40.396539	-77.942893
194	3999		Posted Speed	65.00	0	45	E	0	0	1	40.391989	-77.931789
193	5279		Down Milepost	193.00	0	44	C	0	0	1	40.393002	-77.927420
193	2398		Posted Speed	70.00	0	50	T	0	0	1	40.391707	-77.919141
192	5275		Down Milepost	192.00	0	47	C	0	0	1	40.388816	-77.909602
191	4209		Down Milepost	191.00	0	49	C	0	0	1	40.390511	-77.894881
191	2594		Posted Speed	79.00	0	50	T	0	0	1	40.388979	-77.886002
190	5288		Down Milepost	190.00	0	49	T	0	0	1	40.385535	-77.877483
190	2390		Posted Speed	70.00	0	47	T	0	0	1	40.382482	-77.869929
189	5278		Down Milepost	189.00	0	49	C	0	0	1	40.380444	-77.860099
188	4900		Down Milepost	188.00	0	49	T	0	0	1	40.387275	-77.845873
188	3892		Posted Speed	79.00	0	49	T	0	0	1	40.394489	-77.835970
187	5619		Down Milepost	187.00	0	49	T	0	0	1	40.396724	-77.830523
186	4916		Down Milepost	186.00	0	48	T	0	0	1	40.403222	-77.815130
185	5274		Down Milepost	185.00	0	48	C	0	0	1	40.411712	-77.799895
185	4509		Posted Speed	65.00	0	36	T	0	0	1	40.420253	-77.788262
184	5302		Down Milepost	184.00	0	36	C	0	0	1	40.421802	-77.786273
184	4609		Class Change	3.00	0	40	C	0	0	1	40.432703	-77.778165
184	4609		Posted Speed	40.00	0	40	C	0	0	1	40.432703	-77.778165
183	5350		Down Milepost	183.00	0	41	B	0	0	1	40.434151	-77.776309
183	2000		Class Change	4.00	0	37	E	0	0	1	40.435625	-77.769612
183	2000		Posted Speed	79.00	0	37	E	0	0	1	40.435625	-77.769612
182	5225		Down Milepost	182.00	0	47	T	0	0	1	40.441020	-77.760482
182	7352		Posted Speed	65.00	0	42	T	0	0	1	40.453324	-77.739679
180	10674		Down Milepost	180.00	0	25	C	0	0	1	40.461038	-77.733906
180	338		Posted Speed	79.00	0	20	E	0	0	1	40.461941	-77.733623
179	5243		Down Milepost	179.00	0	33	T	0	0	1	40.475073	-77.730013
179	1742		Posted Speed	65.00	0	38	C	0	0	1	40.479766	-77.729079
178	5295		Down Milepost	178.00	0	44	T	0	0	1	40.489252	-77.731793
177	5290		Down Milepost	177.00	0	46	T	0	0	1	40.501938	-77.725488
176	5323		Down Milepost	176.00	0	50	T	0	0	1	40.512125	-77.711872
176	3470		Posted Speed	79.00	0	49	E	0	0	1	40.514683	-77.700615
175	5288		Down Milepost	175.00	0	51	T	0	0	1	40.513407	-77.694313
175	4512		Posted Speed	65.00	0	47	T	0	0	1	40.510285	-77.678680
174	5354		Down Milepost	174.00	0	47	C	0	0	1	40.509826	-77.675720
174	1373		Posted Speed	79.00	0	47	E	0	0	1	40.509977	-77.670852
174	3995		Posted Speed	65.00	0	47	T	0	0	1	40.511742	-77.661748
173	5213		Down Milepost	173.00	0	47	C	0	0	1	40.512938	-77.657693

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
173	2594		Posted Speed	75.00	0	41	T	0	0	1	40.518470	-77.652060
173	5312		Posted Speed	55.00	0	39	T	0	0	1	40.525209	-77.647973
172	5357		Down Milepost	172.00	0	38	T	0	0	1	40.525322	-77.647904
171	5240		Down Milepost	171.00	0	21	C	0	0	1	40.539073	-77.646791
171	797		Posted Speed	75.00	0	20	E	0	0	1	40.540654	-77.644852
170	5308		Down Milepost	170.00	0	22	T	0	0	1	40.548470	-77.632344
169	5542		Down Milepost	169.00	0	11	T	0	0	1	40.555867	-77.615234
169	299		Class Change	1.00	0	9	B	0	0	1	40.556151	-77.614229
169	299		Posted Speed	10.00	0	9	B	0	0	1	40.556151	-77.614229
169	630		Track Change	0.00	0	9	C	0	0	2	40.556493	-77.613130
169	862		Track Change	0.00	0	9	E	0	0	6	40.556726	-77.612355
168	5075		Down Milepost	168.00	0	8	C	0	0	6	40.561047	-77.598356
168	4177	611	PLG24 Maint*	58.07	3	8	C	1	1	6	40.569740	-77.589358
168	4887	612	PLG24 Maint*	58.12	5	9	C	1	1	6	40.571653	-77.588934
168	4957	613	PLG24 Maint*	58.14	7	9	C	1	1	6	40.571844	-77.588912
168	5075	614	PLG24 Maint*	58.14	4	9	C	1	1	6	40.572166	-77.588882
168	5096	615	PLG24 Maint*	58.56	6	9	C	1	1	6	40.572224	-77.588878
168	9181	617	PLG24 Maint*	58.26	8	8	T	1	1	6	40.583389	-77.588564
168	9208	618	PLG24 Maint*	58.05	3	8	T	1	1	6	40.583462	-77.588557
168	9215	619	PLG24 Maint*	58.19	9	8	T	1	1	6	40.583481	-77.588554
168	9292	620	PLG24 Maint*	58.14	6	8	T	1	1	6	40.583690	-77.588523
168	9375	621	PLG24 Maint*	58.37	7	8	T	1	1	6	40.583914	-77.588475
168	9623	622	PLG24 Maint*	58.20	6	9	B	1	1	6	40.584563	-77.588230
168	9629	623	PLG24 Maint*	58.07	4	9	B	1	1	6	40.584578	-77.588222
168	9786	624	PLG24 Maint*	58.06	3	8	B	1	1	6	40.584969	-77.587988
168	9814	625	PLG24 Maint*	58.28	20	8	B	1	1	6	40.585037	-77.587940
168	9903	626	PLG24 Maint*	58.04	3	8	C	1	1	6	40.585246	-77.587778
168	9915	627	PLG24 Maint*	58.18	8	8	C	1	1	6	40.585274	-77.587754
168	9937	628	PLG24 Maint*	58.12	4	9	C	1	1	6	40.585324	-77.587711
168	9957	629	PLG24 Maint*	58.03	3	8	C	1	1	6	40.585370	-77.587671
168	10007	630	PLG24 Maint*	58.07	7	8	C	1	1	6	40.585481	-77.587566
168	10033	631	PLG24 Maint*	58.12	5	8	C	1	1	6	40.585537	-77.587510
166	10205		Down Milepost	166.00	0	7	C	0	0	6	40.585897	-77.587098
166	93	632	PLG24 Maint*	58.00	3	7	C	1	1	6	40.586068	-77.586862
166	106	633	PLG24 Maint*	58.15	5	7	C	1	1	6	40.586092	-77.586827
166	605	634	PLG24 Maint*	58.39	14	9	C	1	1	6	40.586809	-77.585313
166	621	635	PLG24 Maint*	58.08	4	9	C	1	1	6	40.586826	-77.585261
166	1823		Class Change	3.00	0	9	C	0	0	6	40.587791	-77.581136
166	1823		Posted Speed	35.00	0	9	C	0	0	6	40.587791	-77.581136

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
166	1855		Track Change	0.00	0	9	C	0	0	2	40.587817	-77.581026
166	2598	641	PLG24 Maint*	58.11	6	12	T	3	3	2	40.588431	-77.578494
166	2673	642	PLG24 Maint*	58.25	4	14	T	3	3	2	40.588467	-77.578230
166	2711	643	PLG24 Maint*	58.27	3	15	T	3	3	2	40.588482	-77.578095
166	3552		Class Change	4.00	0	33	E	0	0	2	40.587696	-77.575368
166	3552		Posted Speed	55.00	0	33	E	0	0	2	40.587696	-77.575368
165	5344		Down Milepost	165.00	0	47	E	0	0	2	40.584488	-77.570567
165	3116		Posted Speed	75.00	0	49	T	0	0	2	40.580583	-77.560872
165	4509		Posted Speed	60.00	0	49	T	0	0	2	40.577618	-77.557736
164	5176		Down Milepost	164.00	0	49	C	0	0	2	40.576250	-77.556153
164	1884	645	PLG24 Maint*	58.02	3	48	C	4	4	2	40.574626	-77.549948
163	5213		Down Milepost	163.00	0	49	B	0	0	2	40.577232	-77.538514
163	957		Posted Speed	70.00	0	49	E	0	0	2	40.578708	-77.535704
163	3881		Posted Speed	75.00	0	50	T	0	0	2	40.582929	-77.527016
162	4987		Down Milepost	162.00	0	50	C	0	0	2	40.583994	-77.523303
161	5419		Down Milepost	161.00	0	49	T	0	0	2	40.592303	-77.507271
160	5321		Down Milepost	160.00	0	49	T	0	0	2	40.598796	-77.490218
160	3988	698	PLG24 Maint*	58.13	5	49	T	4	4	2	40.602328	-77.476730
160	4885		Posted Speed	70.00	0	50	T	0	0	2	40.602857	-77.473580
159	5258		Down Milepost	159.00	0	50	B	0	0	2	40.603073	-77.472273
159	944		Posted Speed	75.00	0	50	E	0	0	2	40.603847	-77.469044
159	4535		Posted Speed	70.00	0	49	T	0	0	2	40.607434	-77.457056
158	5320		Down Milepost	158.00	0	48	C	0	0	2	40.608154	-77.454403
158	980		Posted Speed	50.00	0	46	T	0	0	2	40.608724	-77.450967
158	3511		Posted Speed	70.00	0	43	T	0	0	2	40.607377	-77.442569
157	5265		Down Milepost	157.00	0	48	T	0	0	2	40.604276	-77.437760
157	2462		Posted Speed	60.00	0	50	C	0	0	2	40.599917	-77.431036
156	5338		Down Milepost	156.00	0	49	C	0	0	2	40.595140	-77.422841
155	5323		Down Milepost	155.00	0	49	E	0	0	2	40.585983	-77.409387
155	3265		Posted Speed	50.00	0	45	C	0	0	2	40.577224	-77.407431
154	5313		Down Milepost	154.00	0	41	E	0	0	2	40.572252	-77.404178
154	365		Posted Speed	75.00	0	41	E	0	0	2	40.571256	-77.404111
154	3052		Class Change	3.00	0	39	T	0	0	2	40.563909	-77.404191
154	3052		Posted Speed	40.00	0	39	T	0	0	2	40.563909	-77.404191
154	3899		Class Change	4.00	0	39	B	0	0	2	40.561608	-77.404430
154	3899		Posted Speed	50.00	0	39	B	0	0	2	40.561608	-77.404430
153	5143		Down Milepost	153.00	0	41	T	0	0	2	40.558238	-77.404067
153	1330		Posted Speed	65.00	0	47	C	0	0	2	40.554848	-77.402453
152	5404		Down Milepost	4.00	0	51	T	0	0	2	40.545726	-77.394102

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151	5334		Down Milepost	151.00	0	49	B	0	0	2	40.533518	-77.383650
151	2090		Posted Speed	70.00	0	50	T	0	0	2	40.530329	-77.377657
150	5110		Down Milepost	150.00	0	49	C	0	0	2	40.528396	-77.367179
150	1488		Posted Speed	75.00	0	49	E	0	0	2	40.529160	-77.361987
150	3458		Posted Speed	65.00	0	37	B	0	0	2	40.531240	-77.355465
149	4883		Down Milepost	149.00	0	29	C	0	0	2	40.532059	-77.350516
149	2432		Posted Speed	75.00	0	26	E	0	0	2	40.529556	-77.342669
149	4584		Posted Speed	60.00	0	16	T	0	0	2	40.525422	-77.337181
148	5297		Down Milepost	148.00	0	19	B	0	0	2	40.524054	-77.335361
148	3390		Posted Speed	75.00	0	21	T	0	0	2	40.523396	-77.324269
147	5101		Down Milepost	147.00	0	21	B	0	0	2	40.525695	-77.318921
146	5412		Down Milepost	146.00	0	16	T	0	0	2	40.531011	-77.300856
146	4469		Posted Speed	70.00	0	16	T	0	0	2	40.534959	-77.285708
145	5215		Down Milepost	145.00	0	17	B	0	0	2	40.535634	-77.283180
145	711		Posted Speed	75.00	0	18	T	0	0	2	40.536423	-77.280854
145	2249		Class Change	3.00	0	20	B	0	0	2	40.538243	-77.275891
145	2249		Posted Speed	40.00	0	20	B	0	0	2	40.538243	-77.275891
145	2927		Class Change	4.00	0	20	E	0	0	2	40.538984	-77.273658
145	2927		Posted Speed	75.00	0	20	E	0	0	2	40.538984	-77.273658
145	2988		Track Change	0.00	0	20	E	0	0	1	40.539056	-77.273461
144	5382		Down Milepost	144.00	0	22	T	0	0	1	40.541892	-77.265724
143	5274		Down Milepost	143.00	0	21	T	0	0	1	40.548307	-77.248801
143	763		Posted Speed	60.00	0	23	T	0	0	1	40.549424	-77.246497
142	5291		Down Milepost	142.00	0	31	B	0	0	1	40.553539	-77.231363
142	1026		Posted Speed	75.00	0	30	E	0	0	1	40.554353	-77.227864
142	5280		Posted Speed	70.00	0	31	B	0	0	1	40.560271	-77.214753
141	5316		Down Milepost	141.00	0	31	B	0	0	1	40.560323	-77.214639
141	2002		Posted Speed	75.00	0	34	E	0	0	1	40.561547	-77.207791
140	5101		Down Milepost	140.00	0	37	B	0	0	1	40.560610	-77.196751
140	5350		Posted Speed	55.00	0	37	T	0	0	1	40.562722	-77.177889
139	5387		Down Milepost	139.00	0	37	B	0	0	1	40.562748	-77.177757
139	3947		Posted Speed	75.00	0	41	C	0	0	1	40.557781	-77.166668
138	5154		Down Milepost	138.00	0	43	C	0	0	1	40.554935	-77.164473
137	5370		Down Milepost	137.00	0	36	T	0	0	1	40.542222	-77.154870
136	5249		Down Milepost	136.00	0	22	T	0	0	1	40.530250	-77.144544
135	5278		Down Milepost	135.00	0	30	C	0	0	1	40.517298	-77.136198
134	5280		Down Milepost	134.00	0	38	T	0	0	1	40.503210	-77.134451
133	5253		Down Milepost	133.00	0	46	C	0	0	1	40.488989	-77.135808
132	5083		Down Milepost	132.00	0	46	C	0	0	1	40.476625	-77.127861

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132	1916		Posted Speed	66.00	0	46	B	0	0	1	40.471976	-77.124707
132	3992		Posted Speed	68.00	0	46	C	0	0	1	40.468289	-77.119335
130	10306		Down Milepost	130.00	0	43	T	0	0	1	40.478458	-77.105676
129	5313		Down Milepost	129.00	0	43	C	0	0	1	40.488423	-77.094685
128	5307		Down Milepost	128.00	0	48	T	0	0	1	40.481056	-77.078973
128	2098	780	PLG24 Maint*	58.08	7	48	B	4	4	1	40.476693	-77.074112
128	2296	781	PLG24 Maint*	58.01	3	48	B	4	4	1	40.476331	-77.073584
128	2451	782	PLG24 Maint*	58.20	6	48	B	4	4	1	40.476067	-77.073150
128	2798	783	PLG24 Maint*	58.37	6	48	C	4	4	1	40.475540	-77.072117
128	4630	785	PLG24 Maint*	58.14	7	47	C	4	4	1	40.474188	-77.065876
128	4629	786	Gage Wide	57.61	2	48	E	3	4	1	40.474188	-77.065873
128	5155	788	PLG24 Maint*	58.04	3	47	E	4	4	1	40.474281	-77.064002
127	5504		Down Milepost	127.00	0	47	C	0	0	1	40.474434	-77.062758
126	5090		Down Milepost	126.00	0	45	T	0	0	1	40.475153	-77.045535
126	4524		Posted Speed	79.00	0	44	T	0	0	1	40.466681	-77.034376
125	5293		Down Milepost	125.00	0	45	T	0	0	1	40.464674	-77.033545
124	5309		Down Milepost	124.00	0	45	T	0	0	1	40.450842	-77.027804
123	5309		Down Milepost	123.00	0	46	T	0	0	1	40.437005	-77.022058
122	5313		Down Milepost	122.00	0	46	T	0	0	1	40.422916	-77.017883
122	2447		Posted Speed	75.00	0	40	T	0	0	1	40.416275	-77.016977
122	4008		Posted Speed	65.00	0	28	T	0	0	1	40.412151	-77.015573
121	5322		Down Milepost	121.00	0	27	C	0	0	1	40.408610	-77.014839
121	3579		Posted Speed	75.00	0	24	T	0	0	1	40.399837	-77.019671
120	5403		Down Milepost	120.00	0	20	T	0	0	1	40.396221	-77.024167
120	829		Posted Speed	65.00	0	18	B	0	0	1	40.394577	-77.026208
120	4476		Posted Speed	75.00	0	15	E	0	0	1	40.385338	-77.028948
120	6026		Class Change	3.00	0	28	T	0	0	1	40.381299	-77.027273
120	6026		Posted Speed	35.00	0	28	T	0	0	1	40.381299	-77.027273
120	9323		Posted Speed	55.00	0	34	T	0	0	1	40.373261	-77.023262
118	10005		Down Milepost	118.00	0	34	B	0	0	1	40.371408	-77.023533
118	2726		Class Change	4.00	0	35	T	0	0	1	40.364446	-77.020779
117	5206		Down Milepost	117.00	0	36	C	0	0	1	40.359670	-77.014628
117	4908	805	PLG24 Maint*	58.05	3	38	T	4	4	1	40.356221	-76.997756
116	5280		Down Milepost	116.00	0	38	E	0	0	1	40.356142	-76.996420
116	330		Posted Speed	75.00	0	38	T	0	0	1	40.356133	-76.995240
115	5321		Down Milepost	115.00	0	23	T	0	0	1	40.356071	-76.977401
114	5283		Down Milepost	114.00	0	22	T	0	0	1	40.357306	-76.958620
114	799		Posted Speed	55.00	0	22	T	0	0	1	40.357586	-76.955788
114	3944		Posted Speed	79.00	0	13	C	0	0	1	40.357327	-76.944628

Exception Report
Exception List Section
Milepost 21 to Milepost 105
Duncannon, PA to Harrisburg, PA

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Run Date: 12/17/2018
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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
114	4516		Class Change	3.00	0	14	B	0	0	1	40.357367	-76.942584
114	4516		Posted Speed	40.00	0	14	B	0	0	1	40.357367	-76.942584
114	5220		Track Change	0.00	0	14	C	0	0	2	40.357519	-76.940074
114	5461		Posted Speed	79.00	0	14	B	0	0	2	40.357511	-76.939213
114	6179		Class Change	3.00	0	14	C	0	0	2	40.357124	-76.936707
114	6179		Posted Speed	45.00	0	14	C	0	0	2	40.357124	-76.936707
112	10679		Down Milepost	112.00	0	16	T	0	0	2	40.346802	-76.929203
112	3858	835	PLG24 Maint*	58.00	3	12	B	3	3	2	40.336836	-76.925259
112	5255		Posted Speed	35.00	0	14	T	0	0	2	40.334084	-76.921789
111	5269		Down Milepost	111.00	0	14	T	0	0	2	40.334055	-76.921752
111	2302		Posted Speed	45.00	0	14	C	0	0	2	40.332169	-76.914801
111	4567		Posted Speed	35.00	0	12	T	0	0	2	40.334376	-76.907242
110	5465		Down Milepost	110.00	0	11	C	0	0	2	40.335094	-76.904187
110	3617		Class Change	4.00	0	12	B	0	0	2	40.328389	-76.895131
110	3617		Posted Speed	55.00	0	12	B	0	0	2	40.328389	-76.895131
109	5397		Down Milepost	109.00	0	12	C	0	0	2	40.323884	-76.893260
109	1553		Posted Speed	79.00	0	12	T	0	0	2	40.319659	-76.893720
109	7512		Class Change	3.00	0	12	B	0	0	2	40.303360	-76.893812
109	7512		Posted Speed	30.00	0	12	B	0	0	2	40.303360	-76.893812
109	8497		Class Change	4.00	0	11	C	0	0	2	40.300676	-76.893523
109	8497		Posted Speed	79.00	0	11	C	0	0	2	40.300676	-76.893523
107	10577		Down Milepost	107.00	0	6	T	0	0	2	40.295150	-76.891737
107	3963		Posted Speed	60.00	0	15	T	0	0	2	40.284651	-76.888199
106	5296		Down Milepost	106.00	0	18	T	0	0	2	40.281081	-76.887295
106	1314		Class Change	3.00	0	15	C	0	0	2	40.277597	-76.886173
106	1314		Posted Speed	30.00	0	15	C	0	0	2	40.277597	-76.886173
106	2968		Posted Speed	35.00	0	11	E	0	0	2	40.273690	-76.883263
105	5261		Down Milepost	105.00	0	18	T	0	0	2	40.267999	-76.879800

Notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Rail Impact Values are unitless; indicating a location with a large vertical axle acceleration

Rail Cant Exceptions values indicate degrees.

(RSA) indicates possible Rail Seat Abrasion. The following fields are irrelevant for Cant Exceptions: LC, PC

Exception Report
Curve Analysis Section
Milepost 21 to Milepost 105

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Run Date: 12/17/2018
Run ID: 2018121701

Duncannon, PA to Harrisburg, PA

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

						Average					Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
	7	21 712	21 940	229	5		-5/14	-0.64	10	31	21	831	-5/14	-0.6	0	0	31	35	39	42	45	48	51	
	7	21 940	21 1046	107	6		0/22	-0.34	10	93	21	958	0/26	-0.36	0	0	93	109	124	136	148	159	169	
	7	21 1046	21 1125	80	5		-0/16	0.2	10	121	21	1055	-0/15	0.32	0	0	121	144	163	180	195	209	222	
	1	21 1125	21 1444	320	8		4/30	0.18	79	30	21	1279	4/38	-0.16	0	0	30	34	38	42	45	49	52	
+	1	21 1444	21 2592	1149	12		0/38	1.26	60	70	21	1480	0/51	-0.05	106	-1	70	81	91	100	108	115	122	
	1	21 3453	21 4423	971	17		0/58	2.56	60	87	21	4249	1/01	2.35	0	0	87	94	101	108	114	120	126	
	1	20 408	20 1373	966	19		0/53	2.59	79	92	20	1142	0/52	2.12	0	0	92	100	108	116	123	129	135	
	1	20 3634	20 3794	161	17		0/16	1.84	79	159	20	3700	0/17	1.87	0	0	159	173	187	200	212	224	235	
	1	19 284	19 1854	1571	19		-0/25	-1.12	79	109	19	1070	-0/29	-1.18	0	0	109	122	134	144	154	163	172	
	1	19 3412	19 3696	285	24		0/38	2.23	70	105	19	3570	0/37	1.65	0	0	105	115	124	133	142	150	157	
	1	19 3696	19 4125	430	28		1/17	2.38	70	72	19	3805	1/26	2.26	0	0	72	78	84	90	95	100	105	
+	1	19 4125	18 285	1478	34		1/21	2.37	60	70	19	4217	1/34	2.31	13	-1	70	76	81	87	92	97	101	
	1	18 285	18 1975	1691	40		-1/31	-2.92	79	72	18	696	-1/34	-2.71	0	0	72	78	84	89	94	99	103	
	1	18 2688	18 5032	2345	43		-0/40	-2.01	79	94	18	3878	-0/48	-1.98	0	0	94	103	111	119	126	133	140	
	1	18 5224	17 102	154	43		-0/15	-2.01	70	165	17	1	-0/15	-1.9	0	0	165	183	198	212	225	237	249	
	1	17 279	17 327	49	44		-0/14	-2.18	70	175	17	279	-0/14	-2.17	0	0	175	195	211	225	238	251	263	
+	1	17 327	17 1302	976	44		-1/21	-1.65	60	69	17	782	-1/25	-1.71	174	-1	69	75	82	88	93	98	103	
	1	17 1302	17 1538	237	44		-0/16	-1.02	70	138	17	1482	-0/17	-0.99	0	0	138	156	171	185	198	210	221	
	1	17 1538	17 1821	284	44		-0/17	-0.93	70	125	17	1708	-0/20	-0.88	0	0	125	143	157	169	181	193	203	
	1	17 1858	17 3039	1182	46		-0/16	-1.09	70	140	17	1983	-0/17	-1	0	0	140	159	175	189	202	214	225	
	1	17 3128	17 3284	157	46		-0/16	-1.15	70	147	17	3219	-0/16	-1.16	0	0	147	168	184	198	211	224	236	
	1	17 3370	17 3805	436	46		-0/16	-1.05	70	144	17	3756	-0/16	-1.05	0	0	144	163	178	193	206	218	230	
	1	17 3870	17 4346	477	47		-0/17	-1.05	70	132	17	4303	-0/19	-1.01	0	0	132	149	163	176	189	200	211	
	1	17 4346	17 4831	486	47		-0/16	-1.18	70	136	17	4469	-0/18	-1.06	0	0	136	155	169	183	195	207	218	
	1	15 1386	15 2972	1587	45		1/12	2.6	70	78	15	2051	1/22	2.73	0	0	78	84	90	95	101	106	111	
	1	15 4462	14 226	1210	45		-1/15	-2.22	70	73	15	5332	-1/28	-2.5	0	0	73	79	85	91	96	101	106	
	1	14 1411	14 2475	1065	46		0/28	0.26	70	87	14	2280	0/36	0.19	0	0	87	99	111	121	130	139	147	
	1	14 3983	14 4402	420	46		1/16	0.52	60	61	14	4151	1/16	0.35	27	-1	61	69	77	84	90	96	102	
	1	13 661	13 3957	3297	47		-1/20	-1.66	60	61	13	2497	-1/41	-1.41	0	0	61	67	73	79	84	89	94	
	1	13 6148	13 6403	256	46		-0/27	-0.83	79	99	13	6292	-0/33	-0.83	0	0	99	112	123	133	142	151	159	
	1	13 6894	13 7620	727	46		0/53	1.91	79	86	13	7055	0/50	1.32	0	0	86	95	104	112	119	126	133	
+	1	13 8137	13 8870	734	46		-1/05	-1.21	55	67	13	8429	-1/26	-1.54	202	-1	67	74	80	86	92	97	102	
	1	13 10056	13 10855	800	46		1/15	2.07	70	70	13	10306	1/32	2.27	0	0	70	76	82	87	93	97	102	
	1	11 2485	11 3691	1207	47		-0/55	-0.67	70	72	11	3575	-0/54	-0.3	0	0	72	82	91	100	107	114	121	
	1	11 4226	11 5101	876	47		1/13	2.34	70	75	11	4490	1/22	2.37	0	0	75	81	87	93	98	103	108	
	1	10 1017	10 2248	1232	47		-0/59	-3.09	79	86	10	1258	-1/01	-2.33	0	0	86	94	101	108	114	120	126	
	1	9 3424	8 122	2010	47		0/29	0.98	79	95	9	4115	0/38	0.98	0	0	95	106	116	125	134	142	150	
	1	8 1924	8 2511	588	46		-0/27	-0.77	70	102	8	2137	-0/31	-0.86	0	0	102	115	126	137	146	156	164	
	1	7 1108	7 1975	868	44		-1/16	-3.24	70	73	7	1566	-1/37	-3.13	0	0	73	79	84	89	94	99	103	
	1	7 2289	7 5196	2908	44		0/53	1.32	79	73	7	2913	1/29	2.56	0	0	73	79	85	90	96	100	105	
	1	6 2838	6 3561	724	38		0/36	1.33	79	94	6	3322	0/40	1.17	0	0	94	105	114	123	132	139	147	
	1	6 3561	6 3921	361	37		0/19	0.15	79	115	6	3672	0/20	0.21	0	0	115	132	147	161	174	185	196	
	1	6 3921	6 4876	956	37		-0/20	-1.01	79	119	6	4550	-0/23	-0.93	0	0	119	136	149	161	172	183	193	
	1	6 4876	5 34	341	36		-0/22	-0.64	79	110	6	5153	-0/25	-0.53	0	0	110	125	138	150	161	172	182	
	1	5 34	5 217	184	36		-0/30	-0.32	79	89	5	160	-0/37	-0.5	0	0	89	101	112	122	131	139	147	
	1	5 1015	5 1706	692	36		-1/28	-0.26	50	52	5	1171	-1/32	0.04	0	0	52	60	67	74	80	85	91	

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Duncannon, PA to Harrisburg, PA

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point														
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at								
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0		
1	5	2308	5	2989	682	36	1/28	1.22	50	63	5	2641	1/31	1.2	0	0	63	69	76	82	87	92	97		
1	5	3969	5	4427	459	36	-1/26	-0.92	50	61	5	4207	-1/31	-0.96	0	0	61	68	75	81	86	92	97		
1	5	4427	5	5330	904	35	2/17	1.41	50	50	5	4696	2/20	1.18	0	0	50	56	61	66	70	74	78		
1	152	802	152	1522	721	33	0/44	0.91	50	80	152	1175	0/56	1.19	0	0	80	89	97	105	112	118	125		
1	152	2428	152	3770	1343	26	1/01	0.9	50	70	152	3134	1/06	0.79	0	0	70	78	86	93	100	106	112		
1	152	5143	3	1532	1721	19	-1/55	-0.98	50	53	3	183	-1/56	-0.85	0	0	53	59	65	71	76	80	85		
1	3	2164	3	3429	1266	21	-1/45	-0.99	50	56	3	2592	-1/51	-1.04	0	0	56	62	68	73	78	83	88		
1	3	3955	3	4587	633	20	2/25	1.57	50	52	3	4389	2/28	1.59	0	0	52	56	61	66	70	74	78		
1	2	2841	2	3688	848	17	4/08	1.15	25	37	2	3313	4/13	0.97	0	0	37	41	44	48	51	55	58		
1	2	3771	1	332	1771	18	-4/34	-1.52	30	27	2	4084	-8/07	-1.24	0	0	27	30	33	35	38	40	42		
1	1	977	1	1379	403	17	-1/50	-1.82	30	61	1	1176	-1/52	-1.83	0	0	61	66	72	77	82	86	91		
1	1	1524	1	2209	686	17	9/26	1.5	25	26	1	1851	9/44	1.52	0	0	26	28	30	33	35	37	39		
1	1	2209	1	2661	453	16	9/22	1.37	20	25	1	2299	9/25	0.98	10	-1	25	27	30	32	34	36	38		
1	1	3917	1	4673	757	15	-6/37	-1.45	25	28	1	4218	-7/45	-1.37	95	-1	28	31	34	36	39	41	43		
1	1	4673	1	5357	685	12	-11/36	-1.31	20	23	1	5015	-11/28	-1.17	0	0	23	25	27	29	31	33	35		
1	1	7885	1	8299	415	14	2/47	0.38	20	41	1	8067	2/49	0.26	0	0	41	46	51	56	60	64	68		
1	1	8696	1	9140	445	13	-1/52	-1.25	20	56	1	8959	-1/55	-1.17	0	0	56	62	67	73	77	82	86		
1	1	10273	352	120	256	17	-0/16	-1.01	60	145	352	43	-0/16	-1	0	0	145	165	181	196	209	222	234		
1	352	2626	352	3732	1107	18	3/36	1.37	40	40	352	3103	3/46	1.32	0	0	40	44	48	52	56	59	62		
1	351	203	351	1631	1429	22	6/46	3.65	35	37	351	654	6/55	3.51	0	0	37	39	41	44	46	48	50		
1	351	1826	351	2898	1073	21	-7/14	-3.24	30	34	351	2335	-7/14	-2.85	52	-2	34	36	39	41	44	46	48		
1	351	3859	351	4946	1088	21	5/40	1.72	30	33	351	4347	6/01	1.52	200	-1	33	36	39	42	44	47	49		
1	351	4946	351	5429	484	23	-1/49	-1.41	35	54	351	5218	-2/03	-1.21	0	0	54	60	65	70	75	80	84		
1	351	5429	351	5948	520	23	-1/52	-1.47	40	57	351	5517	-1/55	-1.38	0	0	57	63	68	74	78	83	87		
1	351	5948	351	8407	2460	23	-3/28	-1.27	40	40	351	7488	-3/30	-0.96	0	0	40	44	49	53	56	60	63		
1	351	8407	351	10515	2109	22	1/23	1.03	30	38	351	8784	3/38	0.7	250	-1	38	42	47	51	54	58	61		
1	349	1420	349	2920	1501	18	3/54	2.35	40	44	349	1888	3/58	2.33	0	0	44	47	51	54	58	61	63		
1	349	5478	349	5726	249	14	0/18	-0.15	60	110	349	5613	0/20	-0.17	0	0	110	128	144	158	171	184	195		
1	349	6599	349	6823	225	17	-0/26	0.32	60	82	349	6715	-0/32	0.43	0	0	82	97	109	121	131	141	150		
1	349	9692	347	2788	3387	22	1/30	1.51	35	57	347	2585	2/02	1.57	482	-2	57	62	67	72	77	81	86		
1	347	3835	347	4315	481	21	1/27	0.68	35	58	347	4111	1/32	0.66	61	-1	58	65	72	78	84	89	94		
1	346	1361	346	2864	1504	14	1/46	2.63	60	63	346	2531	1/59	2.59	0	0	63	68	73	78	82	87	91		
1	346	4901	345	1952	2151	19	-3/52	-2.25	40	42	345	305	-3/47	-1.77	0	0	42	46	50	54	57	60	63		
1	345	2903	345	4572	1670	29	-1/58	-0.83	40	51	345	3327	-2/04	-0.78	0	0	51	57	63	68	73	77	82		
1	345	4674	344	1283	1722	26	2/31	1.44	40	49	345	4988	2/34	1.39	0	0	49	54	59	64	68	72	75		
1	344	2992	344	4025	1034	30	5/59	3.89	35	40	344	3377	6/10	3.78	64	-1	40	42	45	47	49	52	54		
1	344	4425	343	267	1127	27	-5/24	-3.85	40	42	344	4906	-5/24	-3.69	0	0	42	45	47	50	53	55	57		
1	343	1570	343	2621	1052	21	-4/37	-2.85	45	42	343	1992	-4/41	-2.87	0	0	42	45	48	51	54	57	60		
1	343	4674	342	303	868	25	4/50	2.92	40	41	343	5067	4/53	2.86	0	0	41	44	47	50	53	56	58		
1	342	303	342	1188	886	25	-6/32	-3.66	35	38	342	626	-6/36	-3.56	223	-1	38	40	43	45	47	50	52		
1	342	1300	342	2390	1091	24	2/05	0.91	40	51	342	2206	2/07	0.82	0	0	51	56	62	67	72	77	81		
1	342	2602	342	4862	2261	22	-4/40	-2.17	35	36	342	3029	-6/15	-2.75	577	1	36	39	42	44	47	49	51		
1	341	2078	341	2220	143	15	-0/15	0.18	40	125	341	2130	-0/15	0.19	0	0	125	147	165	182	197	211	224		
1	341	2220	341	4068	1849	16	6/01	2.69	35	35	341	2671	6/18	2.51	1048	1	35	38	41	43	46	48	51		
1	340	53	340	1149	1097	17	2/29	1.37	45	49	340	424	2/32	1.27	0	0	49	54	59	64	68	72	76		
1	340	1682	340	1920	239	17	-2/52	0.03	30	38	340	1820	-2/55	0.08	0	0	38	43	49	53	58	62	66		

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Duncannon, PA to Harrisburg, PA

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point														
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at								
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0		
2	340	1920	340	2149	230	17	2/51	0.15	30	37	340	2007	2/55	-0.22	0	0	37	43	48	53	57	61	65		
1	340	2647	340	4314	1668	24	-3/39	-2.1	60	41	340	3066	-3/52	-1.53	526	0	41	45	49	52	56	59	62		
1	339	855	339	3359	2505	33	-1/58	-2.29	60	60	339	1870	-2/00	-2.08	0	0	60	65	71	75	80	84	88		
1	339	5508	338	192	1408	37	2/32	2.42	45	53	339	6083	2/40	2.26	845	1	53	57	62	66	70	74	77		
1	338	192	337	353	5263	39	1/22	1.99	75	50	338	300	3/01	2.35	706	0	50	54	59	62	66	70	73		
1	337	5051	336	3021	3430	45	-0/55	-1.38	75	78	336	1201	-1/01	-1.31	0	0	78	86	94	101	108	114	120		
1	335	3159	335	5081	1923	46	1/00	1.68	75	76	335	4771	1/21	2.44	0	0	76	82	88	94	99	105	110		
2	334	3312	334	5224	1913	46	-0/54	-1.27	75	79	334	4755	-0/58	-1.27	0	0	79	88	96	104	110	117	123		
2	333	4414	331	2126	7727	50	-0/30	-1.25	60	100	333	4675	-0/33	-0.9	0	0	100	112	123	133	143	152	160		
2	331	2126	331	3053	928	46	-1/57	-2.73	60	64	331	2511	-2/00	-2.71	0	0	64	69	74	78	83	87	91		
+	2	330	1359	330	2655	1297	41	4/08	3.97	45	49	330	2252	4/11	3.98	551	-1	49	52	55	58	61	63	66	
+	2	330	3563	330	4923	1361	41	-4/05	-3.62	45	48	330	4617	-4/05	-3.5	605	-1	48	51	54	57	60	63	66	
+	2	330	5383	329	1285	1564	43	3/56	3.82	45	49	329	171	4/03	3.79	629	-2	49	52	55	58	61	64	67	
+	2	329	4267	328	1334	2091	47	-3/01	-3.89	45	56	328	24	-3/08	-3.77	410	-3	56	59	63	66	70	73	76	
+	2	328	2644	327	3751	6399	44	0/56	0.99	60	74	327	3204	1/03	1	477	-6	74	82	90	97	104	110	116	
2	326	3232	326	3614	383	46	0/20	0.94	75	120	326	3423	0/23	0.91	0	0	120	134	147	159	170	180	190		
2	326	3651	326	3780	130	46	0/16	0.34	75	132	326	3684	0/17	0.37	0	0	132	149	165	180	193	206	218		
2	326	3780	326	4107	328	45	-0/25	-0.84	75	90	326	3905	-0/38	-0.62	0	0	90	102	112	122	131	139	147		
2	326	5353	325	1497	1544	46	-1/58	-3.42	70	66	325	1051	-2/02	-3.27	0	0	66	71	76	80	84	88	92		
2	324	126	324	580	455	46	0/19	1.08	70	126	324	302	0/23	1.18	0	0	126	139	152	164	175	185	195		
2	324	3850	323	39	1874	50	0/26	1.06	70	105	324	4405	0/31	1.03	0	0	105	117	128	138	148	157	165		
2	323	2024	323	4672	2649	47	-1/32	-3.72	70	75	323	3860	-1/47	-4.07	0	0	75	80	85	89	94	98	102		
2	323	4672	323	4886	215	46	-0/27	-1.49	70	106	323	4775	-0/34	-1.49	0	0	106	118	128	138	147	155	163		
2	323	4886	323	5054	169	46	-0/16	-1.58	70	154	323	4977	-0/16	-1.48	0	0	154	173	188	202	215	228	239		
2	323	5054	323	5287	234	46	-0/18	-1.59	70	138	323	5170	-0/20	-1.54	0	0	138	154	168	180	192	203	213		
2	323	5288	322	113	247	45	-0/19	-1.5	70	139	322	15	-0/20	-1.58	0	0	139	155	168	181	192	203	214		
2	322	113	322	359	247	45	-0/16	-1.58	70	141	322	226	-0/19	-1.47	0	0	141	158	172	185	197	208	219		
2	321	649	321	825	177	45	0/19	0.69	70	120	321	741	0/21	0.52	0	0	120	135	150	163	175	186	197		
2	321	825	321	1007	183	46	0/16	0.79	70	137	321	929	0/17	0.78	0	0	137	153	168	182	195	207	219		
2	321	2774	321	3056	283	44	0/17	1.13	70	136	321	2984	0/19	1.13	0	0	136	151	165	178	190	201	212		
2	321	3111	321	3591	481	44	0/20	1.1	70	126	321	3557	0/22	1.08	0	0	126	140	153	165	176	187	197		
2	321	3591	321	3798	208	43	0/18	1.11	70	127	321	3700	0/22	1.04	0	0	127	141	154	167	178	189	199		
2	321	3856	321	4125	270	44	0/17	1.08	70	139	321	4093	0/18	1.05	0	0	139	155	169	183	195	207	218		
2	321	4315	321	4484	170	44	0/17	1.13	70	139	321	4389	0/19	1.13	0	0	139	153	168	181	193	205	216		
+	2	320	752	320	3059	2308	47	-1/27	-2.92	70	75	320	2667	-1/29	-2.86	0	0	75	81	86	92	97	102	106	
+	2	320	3340	319	1639	3462	47	1/26	2.31	60	68	320	4131	1/31	1.96	164	-1	68	75	81	86	92	97	101	
2	318	1183	318	1725	543	42	-0/25	-0.5	75	94	318	1430	-0/31	-0.26	0	0	94	109	121	132	142	152	161		
2	318	1851	318	2927	1077	41	0/56	0.83	79	73	318	2189	1/02	0.84	233	0	73	81	89	96	103	110	116		
2	318	3273	318	4484	1212	44	0/25	0.93	79	102	318	3965	0/32	0.88	0	0	102	114	125	136	145	154	163		
2	316	5026	314	1471	6164	39	-0/54	-1.32	75	75	315	4199	-0/51	-0.41	0	0	75	86	95	103	111	118	125		
2	314	4795	313	298	645	47	-0/16	-0.78	75	135	313	147	-0/17	-0.82	0	0	135	154	169	183	196	208	219		
2	312	129	311	1553	6915	47	0/54	1.48	75	79	311	1221	0/56	1.02	0	0	79	87	96	103	110	117	124		
+	2	310	1652	310	4146	2495	46	-1/59	-3.85	60	68	310	3655	-2/06	-3.72	739	-2	68	72	77	81	85	89	93	
2	309	5173	308	2667	2787	49	-0/51	-1.47	79	73	308	1783	-1/02	-0.86	0	0	73	81	89	97	103	110	116		
2	307	4044	307	5094	1051	45	-0/50	-1.26	79	81	307	4278	-0/52	-1.07	0	0	81	91	99	107	115	122	128		
2	306	1493	306	1682	190	42	0/15	0.55	79	135	306	1613	0/16	0.33	0	0	135	154	171	186	200	213	226		

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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

								Average				Limiting Point														
Track		Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at								
		MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0		
+	2	306	1701	306	3879	2179	46	0/45	1.37	70	77	306	3048	0/57	0.96	0	0	77	86	94	102	109	116	122		
	2	306	4422	305	719	1481	47	-1/51	-3.7	60	69	305	248	-2/01	-3.79	351	-3	69	74	79	83	87	91	95		
	2	305	1180	305	2436	1257	48	0/35	1.06	70	94	305	1440	0/38	0.98	0	0	94	105	115	124	133	141	149		
+	2	303	3989	303	5031	1043	46	-1/54	-4.01	70	70	303	4641	-2/03	-4.11	0	0	70	75	79	83	88	91	95		
	2	303	5031	302	379	779	47	-1/59	-3.92	60	68	303	5149	-2/05	-3.83	172	-2	68	73	77	81	86	89	93		
	2	302	1613	302	4672	3060	47	1/55	3.58	55	67	302	4402	2/02	3.41	1418	0	67	72	76	81	85	89	93		
+	2	302	4672	301	949	1721	46	-3/03	-3.41	50	53	302	5013	-3/05	-3.09	722	-2	53	57	61	64	68	71	74		
+	2	301	4175	300	2638	3475	42	2/19	2.81	50	51	301	4746	3/05	2.6	1111	-1	51	55	59	63	66	70	73		
+	2	300	2638	300	2851	214	39	2/04	4.52	55	72	300	2850	2/04	4.52	0	0	72	76	81	85	89	92	96		
	2	300	2851	300	4610	1760	42	2/54	4.54	55	60	300	3325	2/58	4.43	0	0	60	63	67	70	74	77	80		
	2	300	4920	299	748	1153	41	-1/38	-1.41	55	60	299	142	-1/45	-1.37	0	0	60	66	72	77	82	87	92		
+	2	299	2051	299	4533	2483	39	-3/56	-3.74	45	48	299	3947	-4/05	-3.55	1150	-2	48	51	54	57	60	63	66		
+	2	298	99	298	1650	1552	44	2/35	2.5	50	53	298	888	2/38	2.11	0	0	53	57	62	66	70	73	77		
	2	298	1650	298	2510	861	43	3/01	3.69	70	54	298	1770	3/08	3.5	0	0	54	58	62	65	69	72	75		
	2	298	5163	297	1735	1859	42	-0/56	-1.39	70	77	297	1329	-0/59	-1.12	0	0	77	85	93	101	108	114	120		
+	2	297	2596	297	3874	1279	39	-1/59	-2.71	40	62	297	3028	-2/03	-2.49	612	-1	62	67	72	76	81	85	89		
	2	297	4577	296	3217	3484	38	4/11	3.22	40	45	296	423	4/14	2.95	80	-1	45	48	51	54	57	60	63		
	2	296	3567	295	2611	4183	39	-3/03	-2.12	45	45	296	5111	-4/04	-2.68	386	-5	45	48	51	55	58	61	64		
+	2	295	4621	294	1189	1698	33	1/58	2.37	70	61	295	5044	2/01	2.27	0	0	61	66	71	76	81	85	89		
+	2	294	3148	293	1634	3760	44	3/11	4.08	55	55	293	109	3/14	3.88	0	0	55	59	62	66	69	72	75		
	2	293	1986	292	4979	7671	40	-1/56	-3.78	60	68	293	2448	-2/07	-3.81	1610	-11	68	72	77	81	85	89	92		
	2	291	1904	291	2132	229	20	2/50	-0.1	30	37	291	2034	2/53	-0.19	0	0	37	43	48	53	58	62	66		
+	1	291	2132	291	2345	214	21	-2/53	0.16	30	35	291	2231	-2/56	0.47	0	0	35	41	46	51	56	60	64		
	1	290	3504	289	1737	3042	44	0/59	2.32	75	80	289	282	1/22	3.15	0	0	80	86	92	97	102	107	112		
	1	289	2964	288	3455	5089	46	-1/06	-3.01	79	83	288	1676	-1/13	-2.94	0	0	83	90	96	102	107	113	118		
+	1	287	3275	286	71	2028	49	-0/17	-1.06	79	131	287	3673	-0/19	-0.97	0	0	131	148	163	176	188	200	210		
	1	286	116	286	2794	2679	49	-0/17	-1	79	132	286	2579	-0/19	-0.92	0	0	132	150	165	178	191	202	213		
	1	286	2846	286	3110	265	45	-0/18	-0.94	79	132	286	3014	-0/19	-0.91	0	0	132	150	165	178	190	202	213		
+	1	286	3144	286	4026	883	45	-0/17	-0.89	79	130	286	3945	-0/19	-0.82	0	0	130	146	161	174	186	198	209		
	1	286	4080	286	4792	713	44	-0/19	-0.85	79	125	286	4257	-0/20	-0.85	0	0	125	142	156	169	181	192	203		
	1	286	7827	284	1465	4231	45	2/23	3.6	79	58	286	10404	2/28	2.9	0	0	58	63	67	71	75	79	82		
+	1	284	4732	283	880	1167	36	-1/32	-1.85	60	66	283	417	-1/35	-1.82	0	0	66	72	78	84	89	94	98		
	1	283	1264	283	4769	3506	32	1/25	1.74	60	66	283	1711	1/31	1.55	0	0	66	72	78	84	89	95	99		
	1	282	4999	281	757	1016	41	0/27	0.89	79	105	281	609	0/30	0.86	0	0	105	117	129	140	149	159	167		
+	1	281	3681	281	4309	629	37	0/21	1.01	60	111	281	4308	0/28	1.09	0	0	111	124	136	146	156	166	175		
	1	281	4309	280	135	1075	36	2/01	2.3	50	58	281	4599	2/11	2.14	136	-1	58	63	68	72	77	81	85		
	1	280	257	280	1737	1481	26	-1/10	-1.7	60	62	280	845	-2/10	-2.95	0	0	62	67	72	76	80	84	88		
+	1	280	2440	280	4146	1707	29	-1/38	-1.33	50	60	280	3569	-1/42	-1.28	51	-1	60	66	72	78	83	88	92		
+	1	279	189	279	1340	1152	37	2/02	0.89	45	51	279	687	2/04	0.83	0	0	51	57	63	68	73	78	82		
	1	279	1547	279	2319	773	32	-2/55	-0.85	40	42	279	1892	-3/01	-0.76	85	0	42	47	52	56	60	64	68		
	1	279	2368	279	4272	1905	30	-6/04	-3.96	35	40	279	3813	-6/13	-3.91	134	0	40	42	45	47	50	52	54		
+	1	279	4457	278	1185	1962	33	7/53	4.25	40	36	278	261	7/58	4.1	0	0	36	38	40	42	44	46	48		
	1	278	1849	278	3388	1540	29	4/07	2.57	45	44	278	2987	4/08	2.5	0	0	44	47	50	54	57	60	63		
	1	278	4079	277	3421	4679	34	-1/50	-0.91	45	49	277	2418	-2/14	-0.83	0	0	49	55	61	66	70	75	79		
+	1	277	3474	277	3538	65	32	-0/14	-0.11	45	136	277	3480	-0/14	-0.11	0	0	136	159	178	194	210	224	237		
	1	277	5184	276	951	1151	33	0/26	1.04	45	102	276	950	0/32	0.81	0	0	102	113	125	135	145	154	162		

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								Average				Limiting Point														
Track		Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at								
		MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0		
+	1	276	951	276	2563	1613	32	2/46	0.68	40	42	276	2180	2/52	0.49	868	0	42	47	52	56	61	64	68		
	1	276	2563	276	3443	881	31	-6/29	-4.15	35	39	276	2965	-6/38	-4.18	88	-1	39	41	44	46	49	51	53		
	1	276	3443	276	4053	611	33	1/24	0.98	40	63	276	3815	1/26	0.92	0	0	63	70	76	83	88	94	99		
+	1	276	4053	276	5047	995	34	-1/41	-1.73	40	46	276	4350	-2/56	-1.36	0	0	46	51	55	59	63	67	71		
	1	276	5047	275	600	800	32	-5/31	-2.56	35	37	275	178	-5/35	-2.51	145	-1	37	40	43	46	49	51	54		
	1	275	1388	275	4482	3095	35	-1/18	-1.72	35	44	275	1807	-3/22	-1.65	20	-1	44	49	53	57	60	64	67		
+	1	275	4641	275	5476	836	33	0/30	1.09	60	97	275	5155	0/38	1.09	0	0	97	107	117	126	135	143	151		
	1	274	1306	274	1751	446	40	0/21	0.96	60	121	274	1628	0/23	1	0	0	121	135	148	160	171	181	191		
	1	274	1751	274	2486	736	40	0/23	0.93	60	114	274	2385	0/26	0.91	0	0	114	127	140	151	162	172	181		
+	1	274	2699	274	3261	563	38	-1/22	-0.91	45	57	274	2897	-1/25	-0.25	27	-1	57	65	72	79	85	91	96		
	1	273	979	273	1640	662	35	-0/40	-1.61	45	97	273	1361	-0/42	-1.72	0	0	97	108	117	125	133	140	147		
	1	273	1640	273	3264	1625	34	-3/32	-3.72	45	49	273	2009	-3/47	-3.38	0	0	49	52	56	59	62	65	68		
+	1	273	3367	272	145	2013	34	4/11	4.29	40	46	272	144	3/28	2.24	0	0	46	50	54	58	61	64	68		
	1	272	145	272	1201	1057	31	5/23	4.15	40	42	272	489	5/34	4.03	0	0	42	45	48	50	53	55	57		
	1	272	2315	272	3596	1282	32	-5/26	-3.97	40	42	272	2728	-5/32	-3.84	0	0	42	44	47	50	52	55	57		
+	1	272	4786	271	1879	2122	33	-5/43	-3.84	35	37	271	524	-6/36	-3.46	0	0	37	40	42	45	47	49	51		
	1	271	1879	271	3552	1674	34	5/46	3.31	35	37	271	2182	5/59	2.82	0	0	37	40	43	45	48	50	53		
	1	271	3733	271	5521	1789	36	-6/00	-3.38	40	38	271	4510	-6/31	-3.47	0	0	38	40	43	45	47	50	52		
+	1	270	313	270	2304	1992	34	3/58	2.38	40	40	270	1414	4/08	1.71	0	0	40	44	48	51	54	57	60		
	1	270	2304	270	3421	1118	33	-4/39	-2.74	40	42	270	3009	-4/40	-2.68	0	0	42	45	48	51	54	57	59		
	1	270	3421	269	1063	2900	36	3/36	1.68	35	39	270	3860	4/36	2	30	-1	39	43	46	49	52	55	58		
+	1	269	1284	269	2115	832	29	-4/26	-2.04	40	40	269	1739	-4/28	-1.92	28	-2	40	43	47	50	53	56	59		
	1	269	2589	269	4826	2238	34	2/43	1.39	40	41	269	2940	3/19	0.93	0	0	41	46	50	54	58	62	65		
	1	269	5258	268	769	799	30	-2/27	-0.85	40	46	268	393	-2/29	-0.69	0	0	46	51	57	62	66	70	74		
+	1	268	769	268	1602	834	29	-3/40	-2.15	35	45	268	1324	-3/35	-2.02	0	0	45	48	52	56	59	63	66		
	1	268	1720	268	2873	1154	26	2/56	1.23	35	44	268	2872	3/02	1.05	0	0	44	48	53	57	61	65	68		
	1	268	2873	268	3628	756	28	5/22	4.28	35	43	268	3149	5/30	4.17	0	0	43	46	48	51	53	56	58		
+	1	268	3628	268	4392	765	29	-2/50	-1.01	35	44	268	3843	-2/49	-0.9	0	0	44	49	54	59	63	67	70		
	1	268	4392	267	468	1412	29	-7/01	-3.92	35	37	268	4778	-7/03	-3.91	0	0	37	40	42	44	47	49	51		
	1	267	1113	267	3834	2722	29	2/07	1.15	45	45	267	1549	4/20	3.2	0	0	45	48	52	55	58	60	63		
+	1	266	159	266	1926	1768	17	-3/37	-2.77	45	45	266	573	-4/00	-2.67	8	-1	45	48	52	55	58	61	64		
	1	266	3787	265	323	1828	30	2/38	1.93	45	50	266	5249	3/07	2.47	0	0	50	54	58	62	65	69	72		
	1	265	497	265	2559	2063	32	-1/49	-2	45	50	265	878	-3/44	-3.47	0	0	50	53	56	60	63	66	69		
+	1	264	1527	264	1857	331	40	0/26	0.54	79	94	264	1715	0/32	0.28	0	0	94	107	119	130	140	149	158		
	1	264	1857	264	2270	414	41	0/19	1.34	79	120	264	1980	0/25	1.22	0	0	120	133	145	156	167	177	186		
	1	264	2270	264	3079	810	44	0/19	1.3	79	119	264	2427	0/25	1.13	0	0	119	132	144	155	166	176	185		
+	1	264	3127	264	3446	320	44	0/19	1.28	79	136	264	3364	0/20	1.24	0	0	136	150	164	177	188	200	210		
	1	264	3446	264	4058	613	44	0/21	1.27	79	107	264	3568	0/30	1.02	0	0	107	119	131	141	151	160	169		
	1	264	4058	264	4450	393	45	0/23	0.65	79	105	264	4195	0/29	0.79	0	0	105	118	129	140	150	160	168		
+	1	263	3844	262	1808	2858	49	-0/28	-0.58	79	90	262	67	-0/32	-0.12	0	0	90	104	116	127	137	146	155		
	1	261	2582	261	5431	2850	46	1/56	3.97	60	68	261	4398	2/04	3.71	0	0	68	72	77	81	85	89	93		
	1	261	6867	261	8265	1399	46	-1/58	-3.86	60	69	261	7637	-2/02	-3.76	0	0	69	73	78	82	87	90	94		
+	1	259	420	259	3527	3108	41	-1/01	-1.65	79	68	259	654	-1/08	-0.67	0	0	68	76	84	91	98	104	110		
	1	256	764	256	3009	2246	24	-0/57	-1.3	79	77	256	1685	-1/00	-1.23	0	0	77	86	94	101	108	114	120		
	1	255	1507	255	3649	2143	21	-1/58	-2.42	50	59	255	3258	-2/12	-2.39	175	-1	59	64	69	73	78	82	85		
+	1	255	6219	255	7022	804	22	1/58	2.8	45	59	255	6633	2/13	2.44	54	-1	59	64	69	73	78	82	85		

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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point														
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at								
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0		
1	255	7022	255	8470	1449	24	1/53	2.73	79	63	255	7611	2/00	2.48	0	0	63	68	73	77	82	86	90		
1	252	1151	252	3185	2035	30	-0/26	-0.69	79	102	252	1652	-0/31	-0.78	0	0	102	115	127	137	147	156	165		
1	251	3383	251	3784	402	14	0/31	0.85	75	100	251	3513	0/33	0.79	0	0	100	111	122	132	142	151	159		
1	251	4070	251	4509	440	13	-0/33	-0.82	75	90	251	4243	-0/42	-1.04	0	0	90	101	111	119	128	135	143		
1	250	951	250	2874	1924	17	4/59	4.44	45	45	250	1570	5/09	4.41	0	0	45	48	51	53	56	58	60		
1	250	4054	250	5032	979	17	-2/50	-2.54	45	52	250	4663	-2/52	-2.51	110	-1	52	57	61	65	68	72	75		
1	249	2942	249	3174	233	11	-0/54	0.44	75	62	249	3082	-0/58	0.36	42	-1	62	73	83	91	99	106	113		
5	249	3174	249	3368	195	11	0/53	-0.05	45	68	249	3274	0/55	-0.03	50	-1	68	78	87	96	104	111	118		
5	240	646	240	1239	594	15	-2/28	-0.85	30	47	240	991	-2/32	-0.88	0	0	47	52	57	62	66	70	74		
1	240	3645	240	4438	794	15	1/55	0.96	30	54	240	4076	1/59	1.02	0	0	54	60	65	71	76	80	85		
1	240	4765	247	1576	2044	17	-1/17	-1.07	30	65	240	5106	-1/23	-1.14	0	0	65	72	79	85	91	96	102		
1	247	2961	247	3295	335	18	0/26	0.69	30	107	247	3256	0/28	0.67	0	0	107	120	132	143	154	164	173		
1	247	3711	247	5123	1413	22	8/41	3.69	30	33	247	4767	8/51	3.64	652	-1	33	35	37	39	41	43	45		
1	247	5123	247	6449	1327	19	-3/21	-0.72	35	38	247	5440	-3/39	-0.6	0	0	38	42	46	50	54	58	61		
1	247	6907	247	8317	1411	19	-6/24	-3.54	35	38	247	7890	-6/26	-3.49	0	0	38	40	43	45	48	50	52		
1	247	8921	247	9834	914	19	7/42	3.7	30	35	247	9601	7/37	3.51	5	-1	35	37	39	42	44	46	48		
1	247	9834	247	10466	633	18	-2/41	-1.04	35	38	247	10085	-4/02	-1.07	0	0	38	42	46	49	53	56	59		
1	247	10466	245	408	611	18	-3/56	-1.22	35	38	245	27	-4/01	-1.17	0	0	38	42	46	50	53	57	60		
1	245	408	245	1515	1108	19	9/02	3.91	30	32	245	840	9/08	3.59	393	1	32	34	36	38	40	42	44		
1	245	1515	245	3634	2120	18	-2/19	-0.98	30	34	245	1924	-5/21	-1.3	279	-1	34	37	41	44	47	49	52		
1	245	4042	245	5194	1153	18	-1/56	-0.8	35	50	245	4691	-2/01	-0.52	0	0	50	56	62	68	73	77	82		
1	245	5194	244	1121	1222	18	-4/19	-1.16	35	36	244	203	-4/49	-1.33	0	0	36	39	43	46	49	52	55		
1	244	1121	244	1521	401	18	-4/53	-1.24	30	34	244	1241	-4/58	-1.08	45	-1	34	38	41	45	48	51	53		
1	244	3325	244	4050	726	18	1/37	0.93	35	58	244	3805	1/40	0.98	0	0	58	65	71	77	82	87	92		
1	243	732	243	2569	1838	23	-3/47	-1.1	30	33	243	1147	-5/32	-1.23	728	-1	33	36	40	43	46	48	51		
1	243	2569	243	3452	884	23	-4/44	-1.43	30	34	243	2874	-4/52	-0.91	76	-1	34	37	41	45	48	51	53		
1	243	3879	243	4522	644	20	-2/00	-0.91	35	52	243	4235	-2/05	-0.92	0	0	52	57	63	68	73	78	82		
1	243	4522	242	1156	2013	22	9/16	3.95	30	32	242	352	9/32	3.75	1614	1	32	34	36	38	40	41	43		
1	242	1156	242	1626	471	21	9/04	3.63	44	32	242	1249	9/12	3.61	67	0	32	34	36	38	40	42	44		
1	242	1626	242	2942	1317	19	-2/56	-1.61	44	45	242	2117	-3/08	-1.51	0	0	45	50	54	58	62	65	69		
1	242	3837	242	4637	801	17	1/00	1.13	44	74	242	4372	1/04	1.09	0	0	74	82	90	97	103	110	116		
1	242	6623	242	8272	1650	14	7/22	3.92	40	36	242	7184	7/26	3.8	0	0	36	38	41	43	45	47	49		
1	242	8272	242	10141	1870	15	-5/49	-3.6	30	39	242	9828	-5/54	-3.3	268	-2	39	42	44	47	49	52	54		
1	240	816	240	1838	1023	19	6/15	4.27	35	39	240	1525	6/28	3.84	41	-1	39	41	44	46	48	51	53		
1	240	3034	240	4086	1053	12	-2/28	-1.09	40	48	240	3471	-2/31	-1.08	0	0	48	53	58	63	67	71	75		
1	239	285	239	2047	1763	17	-5/53	-3.88	40	40	239	787	-5/59	-3.77	0	0	40	43	45	48	50	52	55		
1	239	4073	239	4278	206	11	0/24	-0.54	40	93	239	4277	0/25	-0.54	0	0	93	109	124	137	150	161	171		
1	239	4278	238	1332	2447	13	1/18	0.89	40	56	239	4532	1/31	0.34	0	0	56	64	71	77	83	88	94		
1	237	404	237	645	242	13	-2/52	-1.01	30	44	237	535	-2/54	-1.02	0	0	44	49	54	58	62	66	70		
1	237	659	237	773	115	13	-0/18	0.21	30	105	237	720	-0/19	0.47	0	0	105	125	142	157	170	183	195		
1	237	773	237	994	222	13	2/53	0.27	30	39	237	881	2/56	0.06	0	0	39	44	49	54	58	62	66		
1	237	2239	237	2491	253	14	1/02	1.35	30	72	237	2380	1/11	1.35	0	0	72	80	87	94	100	106	111		
1	237	3051	237	3415	365	18	-0/50	-0.59	30	78	237	3309	-0/52	-0.67	0	0	78	88	97	105	112	119	126		
1	237	4294	236	383	1459	13	-1/49	-1	30	54	237	4680	-1/58	-0.96	0	0	54	60	65	71	76	80	85		
1	236	1299	236	1643	345	5	0/21	1.07	30	122	236	1525	0/23	1.13	0	0	122	137	149	161	172	182	192		
1	235	2708	235	5010	2303	29	-0/34	-0.82	70	89	235	3151	-0/40	-0.81	0	0	89	101	111	120	129	137	144		

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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point														
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at								
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0		
	1	234 2344	234 5163	2820	35	0/31	1.09	70 97	234 3118	0/36	1	0 0	97	109 119 129 137 146 154											
	1	233 250	233 1129	880	35	-1/11	-1.36	65 67	233 432	-1/19	-1.13	0 0	67	74 81 88 94 99 105											
	1	231 1468	231 2248	781	47	0/55	1.97	70 85	231 2108	0/58	1.89	0 0	85	93 100 107 114 120 126											
	1	229 3186	228 218	2245	49	-1/56	-3.73	60 69	229 4465	-1/59	-3.57	0 0	69	73 78 83 87 91 95											
	1	228 984	228 4969	3986	49	1/57	4.1	60 71	228 4079	2/01	4.02	0 0	71	75 80 84 88 92 96											
	1	226 3949	225 608	1984	46	-1/55	-3.89	65 70	226 5254	-2/01	-3.89	0 0	70	74 79 83 87 91 95											
	1	225 1461	225 3159	1699	47	1/58	4	79 69	225 2163	2/04	3.96	0 0	69	74 78 82 86 90 94											
	1	224 2386	224 3961	1576	41	-0/56	-0.86	55 72	224 3675	-1/01	-0.69	388 0	72	81 89 96 103 110 116											
	1	224 5102	223 1019	1208	37	2/32	3.63	55 59	223 638	2/32	3.27	0 0	59	63 68 72 75 79 83											
	1	223 1610	223 3730	2121	36	-1/56	-2.46	40 59	223 2136	-2/37	-3.51	0 0	59	63 68 72 75 79 82											
+	1	223 3972	222 1567	2951	29	3/34	1.88	35 39	223 4498	6/02	3.37	178 -2	39	41 44 47 49 51 54											
	1	222 2189	222 3380	1192	32	-3/08	-1.31	40 43	222 2508	-3/16	-1.27	0 0	43	48 52 56 60 63 66											
	1	222 3697	222 4594	898	33	3/19	1.26	40 42	222 4263	3/22	1.17	0 0	42	46 51 55 58 62 65											
+	1	221 1373	221 2511	1139	33	6/07	3.69	35 38	221 2204	6/04	3.09	101 -1	38	40 43 46 48 51 53											
	1	221 2511	221 3622	1112	34	-6/05	-3.96	50 40	221 2852	-6/05	-3.83	0 0	40	42 45 48 50 52 54											
	1	221 4587	220 2413	3131	35	1/09	0.83	50 66	220 306	1/13	0.74	0 0	66	74 82 89 95 101 107											
+	1	220 3986	220 4983	998	34	2/06	0.74	35 48	220 4318	2/12	0.56	156 -1	48	54 60 65 70 74 78											
	1	219 255	219 1609	1355	35	-5/46	-3.54	35 40	219 678	-5/47	-3.34	0 0	40	42 45 48 50 52 55											
	1	219 1609	219 2405	797	34	6/35	3.58	50 37	219 2000	6/45	3.43	0 0	37	39 42 44 46 49 51											
	1	219 3053	219 3821	769	35	-0/29	-0.89	50 98	219 3261	-0/33	-0.76	0 0	98	111 122 132 142 150 159											
+	1	218 1598	218 2793	1196	33	-6/10	-3.4	35 38	218 2224	-6/15	-3.39	435 -1	38	41 43 46 48 51 53											
	1	218 3045	218 4619	1575	34	5/15	3.36	40 41	218 4254	5/22	3.35	0 0	41	44 47 49 52 54 57											
	1	217 1193	217 2611	1419	33	0/57	1.19	35 76	217 1730	1/02	1.23	0 0	76	84 92 99 106 112 118											
	1	217 3696	217 4366	671	32	-1/53	-1.43	40 54	217 4092	-1/53	-0.9	0 0	54	61 66 72 77 82 86											
+	1	217 4366	216 1239	2080	31	-4/47	-2.84	35 38	216 273	-5/49	-3	179 -2	38	41 44 46 49 51 54											
	1	216 2327	216 3632	1306	34	4/35	3.7	40 43	216 2748	4/52	3.43	0 0	43	46 49 52 55 57 60											
	1	216 5283	215 572	668	34	0/53	1	40 77	215 177	0/58	1	0 0	77	85 93 101 108 115 121											
	1	215 572	215 2078	1507	34	3/54	1.79	40 41	215 860	3/53	1.6	0 0	41	45 49 52 56 59 62											
	1	215 2623	215 3089	467	33	-1/34	-0.81	40 59	215 3088	-1/34	-0.8	0 0	59	66 72 78 84 89 94											
	1	215 3089	215 4454	1366	34	-2/32	-0.88	40 45	215 3574	-2/38	-0.81	0 0	45	51 56 60 64 69 72											
	1	214 69	214 924	856	36	-1/26	-0.92	60 61	214 662	-1/28	-0.83	0 0	61	68 75 81 87 92 98											
	1	214 4115	213 495	1595	36	1/52	3.08	70 63	214 4755	2/13	3.05	0 0	63	67 72 76 80 84 88											
	1	213 1978	213 2314	337	42	-0/19	-0.61	70 123	213 2210	-0/21	-0.76	0 0	123	139 153 166 177 189 199											
	1	213 3171	212 181	2265	50	-1/00	-2.01	70 82	213 3761	-1/03	-1.99	0 0	82	90 97 104 110 116 122											
	1	210 1447	210 4384	2938	50	-1/11	-2.61	75 80	210 3410	-1/13	-2.4	0 0	80	86 93 99 105 110 116											
+	1	209 349	209 4193	3845	49	1/49	1.91	50 55	209 1085	2/38	2.62	1377 -3	55	59 64 68 72 75 79											
+	1	208 1652	208 3609	1958	45	2/17	2.71	50 55	208 2161	2/49	2.92	327 -1	55	59 63 67 70 74 77											
	1	208 3886	207 1215	2605	44	-2/40	-3.76	58 58	207 556	-2/48	-3.72	0 0	58	62 66 70 73 77 80											
	1	207 2813	207 3744	932	46	2/03	2.49	50 58	207 3394	2/13	2.21	0 0	58	63 68 72 77 81 85											
	1	207 3744	207 4818	1075	45	3/37	4.02	65 52	207 4072	3/43	3.98	0 0	52	55 58 61 64 67 70											
	1	206 5233	205 761	812	49	-1/01	-0.91	65 71	205 272	-1/05	-0.87	0 0	71	79 87 94 101 107 113											
	1	205 1805	205 3402	1598	49	0/29	1.08	60 99	205 3287	0/35	1.03	0 0	99	111 121 131 140 149 157											
	1	205 3402	205 4562	1161	47	1/50	2.73	60 64	205 4226	1/57	2.58	0 0	64	69 74 79 83 88 92											
	1	205 4821	205 7309	2489	50	-1/27	-2.3	60 63	205 5447	-2/23	-3.76	0 0	63	68 72 76 80 83 87											
	1	203 523	203 2494	1972	49	-2/08	-2.82	60 61	203 1348	-2/15	-2.83	0 0	61	65 70 74 79 82 86											
	1	203 2935	203 3164	230	49	-0/14	-0.43	60 139	203 3093	-0/14	-0.4	0 0	139	161 179 195 209 223 236											

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						Average				Limiting Point													
Track	Starting	Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0
+	1	203 3193	203 4105	913	49	-1/33	-1.2	50 60	203 3867	-1/35	-0.97	6 -1					60	66	73	79	84	89	94
+	1	203 4893	202 1254	1771	46	2/07	2.58	50 60	202 378	2/13	2.48	192 -3					60	64	69	74	78	82	86
	1	202 1506	202 3270	1765	48	-1/44	-1.71	60 60	202 2212	-1/47	-1.57	0 0					60	66	72	77	82	87	91
	1	202 3788	202 4158	371	49	1/36	2.62	60 70	202 4081	1/32	2.24	0 0					70	76	81	87	92	97	102
	1	202 4158	201 103	1145	49	2/02	2.72	79 61	202 4258	2/11	2.72	0 0					61	66	71	75	79	83	87
	1	201 6859	201 7855	997	47	-1/56	-3.86	70 70	201 7379	-1/59	-3.87	0 0					70	75	79	84	88	92	96
	1	199 1428	199 5113	3686	49	-0/26	-1.09	75 104	199 4920	-0/31	-0.96	0 0					104	116	127	138	147	156	165
	1	198 2423	197 2600	5469	49	1/12	2.68	75 76	198 5159	1/19	2.35	0 0					76	83	89	95	100	106	111
	1	197 4318	197 4598	281	44	0/41	0.7	75 84	197 4470	0/41	0.39	0 0					84	96	106	115	124	132	140
+	1	197 4598	196 374	1078	44	0/55	0.79	60 73	197 4738	1/01	0.72	479 -3					73	81	89	97	104	111	117
+	1	196 374	196 1339	966	44	0/55	0.74	60 68	196 482	1/07	0.59	371 -2					68	76	84	91	98	104	110
	1	196 1339	196 3516	2178	47	0/50	0.72	60 64	196 1431	1/16	0.6	190 3					64	72	79	86	92	98	104
	1	195 501	195 1899	1399	49	-2/02	-3.91	65 68	195 1011	-2/10	-3.97	586 0					68	72	77	81	85	88	92
	1	195 4234	194 4396	5491	49	-2/28	-3.88	65 60	195 5176	-2/44	-3.89	39 0					60	64	68	71	75	78	82
+	1	194 4396	193 2265	3150	48	1/34	1.82	60 63	193 1603	1/32	1.28	540 -5					63	70	76	82	87	93	97
	1	193 3924	192 2589	3942	49	-1/07	-1.49	70 72	192 2314	-1/16	-1.66	0 0					72	80	86	93	99	104	109
+	1	192 3331	191 2441	3321	50	1/26	2.3	60 68	191 1203	1/36	2.22	462 -2					68	74	80	85	90	95	100
	1	190 2702	189 4284	6862	50	-1/12	-2.93	70 80	189 566	-1/14	-2.53	0 0					80	87	93	99	105	110	115
	1	188 1289	188 3325	2037	49	1/27	2.6	70 73	188 2796	1/31	2.59	0 0					73	78	84	89	94	99	104
	1	186 4062	186 4256	195	47	-0/16	-0.82	79 136	186 4152	-0/17	-0.74	0 0					136	155	171	185	198	211	222
	1	186 5142	185 108	242	48	-0/20	-0.77	79 119	185 7	-0/22	-0.71	0 0					119	134	148	160	172	183	193
	1	185 108	185 286	179	48	-0/16	-1.02	79 139	185 226	-0/17	-0.91	0 0					139	158	173	187	200	213	224
	1	185 403	185 542	140	48	-0/17	-1.05	79 142	185 475	-0/17	-1.04	0 0					142	160	175	189	202	214	226
	1	185 542	185 807	266	48	-0/17	-1.01	79 135	185 694	-0/18	-0.97	0 0					135	153	168	182	194	206	217
	1	185 4811	184 759	1252	36	-0/58	-1.38	65 75	184 758	-1/04	-1.29	0 0					75	84	91	98	105	111	117
	1	184 759	184 1563	805	36	-1/38	-2.79	65 70	184 975	-1/43	-2.85	0 0					70	75	80	85	90	95	99
	1	184 2793	184 5190	2398	41	0/58	0.94	40 74	184 5189	1/00	0.77	0 0					74	82	90	98	105	111	118
	1	184 5190	183 1050	1212	40	4/55	3.88	40 44	183 320	4/59	3.91	0 0					44	47	50	53	55	58	60
	1	183 1050	183 2145	1096	37	-5/11	-3.31	79 41	183 1451	-5/19	-3.21	0 0					41	44	46	49	52	54	57
	1	182 7425	182 9770	2346	41	-1/38	-3.05	65 68	182 8603	-2/05	-3.8	0 0					68	73	77	82	86	90	93
	1	182 10366	180 371	681	25	-1/31	-2.45	79 68	182 10652	-1/38	-2.38	0 0					68	74	80	85	90	95	99
	1	179 813	179 2445	1633	39	-1/56	-3.9	65 69	179 1931	-2/01	-3.81	594 0					69	74	79	83	87	91	95
	1	178 402	178 4890	4489	47	1/19	2.45	65 72	178 2185	1/59	4.24	0 0					72	77	81	85	90	93	97
	1	176 147	176 3502	3356	50	1/56	4.11	79 70	176 2651	2/02	3.93	0 0					70	74	79	83	87	91	95
	1	175 3906	175 4005	100	48	-0/14	-0.94	79 148	175 3955	-0/15	-0.94	0 0					148	167	184	199	212	225	238
	1	175 4167	175 4268	102	48	-0/14	-0.89	79 149	175 4225	-0/14	-0.87	0 0					149	170	186	202	216	229	242
	1	175 4932	174 3	427	47	-0/20	-1.09	65 118	174 2	-0/26	-1.33	0 0					118	133	145	156	166	176	185
	1	174 3	174 1441	1439	47	-1/58	-3.89	79 70	174 843	-2/01	-3.86	0 0					70	74	79	83	87	91	95
+	1	174 4175	173 2577	3617	47	-1/25	-1.82	55 62	173 468	-2/08	-2.84	750 -2					62	67	72	76	81	85	89
	1	172 337	172 1499	1163	37	-1/35	-1.43	55 60	172 1364	-1/43	-1.35	0 0					60	66	72	78	83	88	92
+	1	172 1499	172 2815	1317	35	-2/19	-2.24	50 55	172 1722	-2/28	-2.16	63 -1					55	59	64	68	72	76	80
	1	172 3348	171 818	2712	25	2/56	3.83	75 56	172 3850	3/04	3.69	0 0					56	59	63	67	70	73	76
	1	170 1397	170 1676	280	19	0/19	1.63	75 139	170 1557	0/20	1.57	0 0					139	152	166	178	189	200	210
	1	170 1820	170 2764	945	18	0/53	1.51	75 81	170 2384	0/58	1.45	0 0					81	89	97	104	111	117	124
	1	170 2764	170 3865	1102	16	0/56	1.47	75 77	170 2870	1/04	1.5	0 0					77	85	93	100	106	112	118
	1	169 221	169 507	287	9	-1/47	0.56	10 41	169 389	-1/48	0.83	0 0					41	50	57	64	69	75	80

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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
	2	169 507	169 729	223	9		1/34	0.16	10	49	169 621	1/41	-0.17	0	0		49	56	63	70	76	81	86	
	6	169 729	169 954	226	9		-2/50	0.29	10	37	169 824	-2/52	0.32	0	0		37	42	48	53	57	61	65	
	6	169 1015	169 1354	340	9		1/59	0.41	10	49	169 1187	2/06	0.58	0	0		49	55	61	66	71	76	80	
	6	169 1733	169 2268	536	9		-0/20	-1.15	10	123	169 2050	-0/23	-1.11	0	0		123	138	151	163	174	185	194	
	6	169 4505	168 5419	5991	10		-1/08	-2.14	10	76	169 4862	-1/16	-2.09	0	0		76	83	89	95	101	106	112	
	6	168 8944	166 986	2249	9		3/52	1.42	10	39	168 9445	4/08	1.36	0	0		39	43	46	50	53	56	59	
	6	166 1224	166 1587	364	9		2/29	-0.09	10	40	166 1357	2/36	-0.12	0	0		40	46	51	56	61	65	69	
	2	166 1587	166 1939	353	9		-1/59	0.01	35	44	166 1856	-2/10	0.03	0	0		44	51	57	62	67	72	76	
	2	166 2326	166 3713	1388	29		6/25	4.21	55	38	166 2774	6/43	3.96	0	0		38	41	43	46	48	50	52	
	2	166 4287	165 451	1510	47		-2/11	-3.42	55	59	166 4746	-2/46	-3.77	0	0		59	63	67	70	74	77	81	
+	2	165 1594	165 3068	1475	49		2/51	3.89	55	56	165 2443	3/04	3.79	0	0		56	60	64	67	70	74	77	
	2	165 4609	164 2569	3138	49		-2/29	-3.73	55	58	164 2025	-2/47	-3.59	148	-1		58	62	66	70	73	77	80	
	2	164 4778	163 1062	1499	49		-2/36	-3.71	70	59	163 579	-2/41	-3.66	179	0		59	63	67	71	75	78	81	
	2	163 1643	163 3396	1754	49		1/56	4.19	70	70	163 2150	2/06	4.26	0	0		70	74	79	83	87	91	94	
	2	163 4181	162 1436	2244	50		-0/56	-1.43	75	78	163 4840	-1/01	-1.34	0	0		78	86	94	101	108	114	120	
	2	162 3058	162 4803	1746	49		0/34	1.09	75	95	162 3936	0/39	1.07	0	0		95	105	115	124	133	141	148	
+	2	161 3372	161 4248	877	49		0/47	1.28	60	74	161 3748	1/05	1.25	35	-1		74	82	90	97	103	110	115	
	2	160 2126	160 3286	1161	49		1/01	2.76	75	86	160 2978	1/05	2.62	0	0		86	93	100	106	112	118	123	
	2	160 5148	159 948	1060	50		-0/58	-1.34	75	74	159 124	-0/59	-0.79	0	0		74	83	91	99	106	112	118	
	2	159 4718	158 673	1277	49		0/58	2.09	70	85	159 5046	0/59	1.99	0	0		85	93	100	107	113	120	125	
	2	158 1420	158 3295	1876	42		3/18	3.86	50	53	158 1828	3/28	3.76	0	0		53	56	60	63	66	69	72	
	2	158 3690	158 4004	315	44		0/17	1.19	70	142	158 3870	0/17	1.06	0	0		142	157	172	186	199	211	222	
	2	157 2146	157 2520	375	50		-0/28	-0.64	60	91	157 2357	-0/35	-0.49	0	0		91	104	115	125	134	143	151	
	2	157 3487	157 4053	567	49		-0/21	-0.81	60	113	157 3766	-0/25	-0.71	0	0		113	128	141	152	163	174	183	
	2	157 4806	156 526	1060	50		-1/26	-2.21	60	71	156 168	-1/29	-2.28	0	0		71	77	83	89	94	99	104	
	2	156 1707	156 2227	521	51		0/29	1.84	60	111	156 2226	0/38	2.46	0	0		111	120	130	138	146	153	161	
	2	156 2227	155 423	3521	51		1/45	2.59	60	62	156 3599	2/02	2.54	0	0		62	67	72	77	81	85	89	
	2	155 1939	155 3778	1840	47		-1/54	-3.35	50	67	155 3207	-1/58	-3.29	0	0		67	72	77	82	86	90	94	
	2	155 4124	155 4617	494	42		0/59	1.33	50	74	155 4364	1/08	1.32	0	0		74	81	88	95	102	108	113	
	2	155 4617	154 578	1276	42		3/37	3.89	75	51	155 4905	3/49	3.82	0	0		51	54	57	60	63	66	69	
	2	154 3266	154 3678	413	38		3/46	3.11	40	48	154 3450	3/47	3.1	0	0		48	51	55	58	61	64	67	
	2	154 3802	154 4945	1144	40		-2/24	-2.76	50	57	154 4119	-2/28	-2.64	0	0		57	61	66	70	74	78	82	
	2	153 357	153 1630	1274	47		-3/07	-3.23	50	53	153 1108	-3/13	-3.23	21	-1		53	56	60	64	67	70	73	
+	2	153 1881	153 2549	669	49		1/52	2.72	65	65	153 2322	1/56	2.74	0	0		65	70	75	80	84	89	93	
	2	152 5157	151 2012	2191	50		-2/11	-3.88	50	64	151 892	-2/22	-3.82	104	-1		64	68	73	77	80	84	88	
	2	151 3829	150 1649	2932	50		-1/27	-3.31	75	74	151 4142	-1/32	-2.91	0	0		74	80	85	90	95	100	105	
	2	150 3405	149 2605	4085	35		1/45	3.19	75	67	149 1816	1/58	3.12	0	0		67	72	76	81	85	90	94	
	2	149 5180	148 3135	3254	21		-2/30	-2.82	55	55	148 403	-2/42	-2.79	2411	-1		55	59	64	68	71	75	78	
	2	148 5085	147 2168	2186	22		0/26	1.49	75	106	147 1855	0/32	1.27	0	0		106	118	128	138	147	156	164	
	2	146 4990	145 502	729	18		-1/16	-2.51	70	76	145 263	-1/20	-2.48	0	0		76	83	89	95	100	106	111	
	2	145 2221	145 2525	305	20		1/34	-0.37	40	46	145 2371	1/43	-0.48	0	0		46	54	61	67	73	79	84	
	1	145 2719	145 2999	281	20		-1/46	0.37	75	46	145 2874	-1/46	0.43	0	0		46	53	60	67	73	78	83	
	1	144 4246	144 5098	853	21		-0/56	-2.12	75	87	144 4691	-0/58	-2.18	0	0		87	95	102	109	116	122	128	
	1	143 1473	143 1752	280	25		1/07	1.62	60	75	143 1685	1/05	1.23	0	0		75	83	90	97	104	110	116	
	1	143 1752	143 2843	1092	27		2/31	2.77	55	55	143 2233	2/38	2.61	566	-1		55	59	64	68	72	75	79	
	1	143 3014	143 4097	1084	30		-1/25	-1.45	60	65	143 3360	-1/31	-1.47	0	0		65	71	77	83	89	94	99	

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Duncannon, PA to Harrisburg, PA

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

								Average				Limiting Point														
Track		Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at								
		MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0		
+	1	143	4397	143	5263	867	31	2/25	3.63	55	60	143	4711	2/35	3.49	5	-1	60	64	68	72	76	79	82		
	1	143	5263	142	1087	1117	31	-1/57	-2.36	75	60	142	273	-1/58	-2.06	0	0	60	66	71	76	81	85	89		
	1	142	1176	142	2127	952	30	-0/46	-1.43	75	81	142	1821	-0/56	-1.38	0	0	81	90	98	105	112	119	125		
	1	142	5217	141	2132	2233	33	1/57	4.2	75	71	141	308	1/59	4.02	0	0	71	76	80	85	89	93	96		
	1	141	4974	140	1524	1653	38	-0/53	-2.25	75	87	140	1082	-1/01	-2.5	0	0	87	95	102	109	115	121	126		
	1	140	2605	140	3570	966	37	-0/57	-2.34	75	88	140	3149	-0/59	-2.45	0	0	88	96	103	110	116	122	128		
	1	140	5368	139	3684	3705	41	1/59	2.6	55	56	139	2257	2/50	3.35	0	0	56	60	64	68	72	75	78		
	1	139	3791	138	131	1496	44	0/17	0.97	75	122	138	14	0/23	0.95	0	0	122	136	149	161	172	183	193		
	1	138	2262	138	2964	703	44	-0/55	-2.62	75	85	138	2577	-1/05	-2.6	0	0	85	92	99	106	112	117	123		
	1	137	2237	137	2986	750	27	-0/59	-2.54	75	87	137	2723	-1/03	-2.56	0	0	87	94	101	107	114	119	125		
	1	137	3618	137	4815	1198	23	0/52	2.5	75	88	137	3895	0/59	2.29	0	0	88	95	102	109	115	121	127		
	1	136	5003	136	5035	33	29	0/15	1.62	75	159	136	5012	0/16	1.58	0	0	159	175	190	204	217	229	241		
	1	136	5172	135	4344	4452	32	0/43	1.6	75	85	135	3897	0/52	1.41	0	0	85	94	103	110	118	125	131		
	1	134	2842	134	3091	250	46	-0/25	-0.48	75	93	134	2945	-0/26	0.33	0	0	93	109	123	135	147	157	167		
	1	134	3091	133	418	2582	46	-0/57	-2.04	75	78	134	3220	-1/05	-1.7	0	0	78	86	94	100	107	113	118		
	1	133	1611	133	3448	1838	46	-0/53	-1.42	75	80	133	2377	-0/58	-1.36	0	0	80	89	97	104	111	118	124		
	1	133	4749	132	793	1129	46	0/55	1.84	75	84	132	337	0/58	1.82	0	0	84	92	100	107	113	120	126		
+	1	132	1846	132	9191	7346	46	-2/02	-3.89	60	65	132	2331	-2/19	-3.91	1602	-1	65	69	74	78	81	85	89		
	1	130	313	130	1712	1400	44	0/56	1.77	68	82	130	1570	0/59	1.73	0	0	82	90	98	105	112	118	124		
1	130	1712	129	1597	5200	45	1/55	4.21	68	71	129	937	2/01	4.12	0	0	71	75	80	84	88	92	96			
+	1	129	2861	129	4323	1463	47	2/00	3.29	60	66	129	3747	2/03	3.33	622	-1	66	71	76	80	84	88	92		
+	1	128	1598	128	3327	1730	49	-1/50	-2.6	60	64	128	2003	-1/54	-2.44	1102	-1	64	69	74	79	84	88	92		
1	128	3327	128	3783	457	48	-1/09	-2.25	68	76	128	3338	-1/15	-2.12	0	0	76	83	90	96	102	107	112			
+	1	128	3783	127	837	2560	48	-1/26	-2.42	60	63	128	4023	-1/59	-2.63	651	-1	63	69	74	78	83	87	91		
+	1	127	1866	127	5028	3163	46	1/57	3.36	60	65	127	3380	2/04	3.09	862	-2	65	69	74	79	83	87	91		
1	126	1891	126	4507	2617	45	1/43	3.15	68	69	126	2350	1/50	3.04	0	0	69	74	79	84	88	92	96			
1	123	2644	123	4569	1926	46	0/50	1.69	79	83	123	4252	1/00	1.78	0	0	83	90	98	105	112	118	124			
1	122	929	122	2433	1505	45	-0/58	-1.9	79	84	122	1489	-0/59	-1.9	0	0	84	92	99	106	113	119	125			
1	122	4190	121	3443	4577	27	1/16	1.96	65	68	122	4605	1/30	1.88	0	0	68	74	80	86	91	97	101			
1	120	765	120	4515	3751	18	-1/41	-2.25	75	64	120	3786	-1/45	-2.07	345	0	64	70	75	81	86	90	95			
1	120	6499	120	7297	799	32	-4/22	-1.86	35	39	120	6828	-4/28	-1.72	0	0	39	42	46	49	52	55	58			
1	120	7774	120	8887	1114	33	6/58	3.62	35	37	120	8458	6/58	3.57	0	0	37	39	41	44	46	48	50			
1	120	9908	118	2157	2256	34	-1/51	-2.17	55	56	118	206	-1/57	-1.27	0	0	56	62	67	72	77	82	86			
1	118	2868	117	1490	3830	37	-1/11	-0.88	55	62	117	1355	-1/24	-0.82	0	0	62	70	77	83	89	94	100			
1	117	4643	116	102	741	38	-2/42	-3.34	55	58	117	5108	-2/42	-3.34	0	0	58	62	66	70	73	77	80			
1	115	1186	115	2193	1008	23	-0/47	-1.49	75	84	115	1359	-0/52	-1.39	0	0	84	94	102	110	117	124	130			
1	114	1540	114	2462	923	18	2/54	3.63	55	56	114	2009	2/58	3.61	0	0	56	60	64	67	71	74	77			
1	114	3677	114	4357	681	13	-2/31	-2.86	50	57	114	3941	-2/37	-2.93	143	-1	57	61	65	69	73	77	80			
1	114	4454	114	4678	225	14	-2/46	-0.18	40	40	114	4589	-2/46	-0.18	0	0	40	46	51	56	60	64	68			
1	114	4678	114	4874	197	15	2/35	0.22	40	40	114	4763	2/44	0.06	0	0	40	46	51	56	60	64	68			
+	2	114	5073	114	5355	283	14	1/57	0.43	40	39	114	5207	3/02	0.3	13	-1	39	44	49	54	58	62	66		
+	2	114	5355	114	5916	562	14	1/56	1.22	40	39	114	5489	3/22	0.64	212	-1	39	44	48	53	56	60	63		
2	114	5916	114	6400	485	14	2/15	1.11	45	49	114	6167	2/27	1.1	57	0	49	54	59	64	68	72	76			
+	2	114	6400	114	8073	1674	16	3/07	1.22	40	41	114	7477	3/32	1.21	570	-2	41	45	50	53	57	60	64		
2	114	8564	114	8964	401	14	0/56	0.82	45	72	114	8704	1/03	0.85	0	0	72	81	89	96	103	109	115			
2	114	8964	114	9211	248	15	-1/15	-0.74	45	65	114	9080	-1/15	-0.69	0	0	65	73	80	87	93	99	105			

Exception Report
Curve Analysis Section
Milepost 21 to Milepost 105

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Duncannon, PA to Harrisburg, PA

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
2	112	26	112	876	851	17	2/00	1.05	45	51	112	331	2/14	1.05	0	0	51	56	62	67	71	75	80	
2	112	1571	112	2781	1211	18	-1/25	-0.92	45	56	112	2656	-1/46	-0.95	0	0	56	63	69	74	80	85	89	
2	112	2942	112	3377	436	15	-1/37	-1.43	45	60	112	3216	-1/42	-1.37	0	0	60	67	73	78	83	88	93	
2	112	3377	112	3691	315	14	-2/49	-1.55	45	47	112	3603	-2/54	-1.4	0	0	47	51	56	60	64	68	71	
+	2	112	3691	112	4007	317	13	-3/21	-1.03	35	41	112	3849	-3/21	-1.02	39	-1	41	46	50	54	58	62	65
2	111	626	111	2087	1462	15	-6/10	-2.97	35	37	111	1439	-6/20	-2.96	0	0	37	39	42	44	47	49	51	
2	111	2087	111	2457	371	14	-0/20	-0.6	45	114	111	2418	-0/23	-0.58	0	0	114	131	144	157	168	179	189	
2	111	5030	110	1020	1457	12	5/58	2.46	35	35	111	5300	6/23	2.51	0	0	35	38	40	43	46	48	50	
2	110	3568	109	6	1837	12	2/46	3.89	55	56	110	3955	3/07	3.9	0	0	56	60	63	67	70	73	76	
2	109	6	109	172	167	11	1/45	2.85	55	69	109	168	1/46	2.84	0	0	69	74	79	84	89	93	98	
2	109	172	109	654	483	11	2/29	2.74	55	56	109	302	2/37	2.72	0	0	56	60	64	69	72	76	80	
2	109	654	109	1333	680	9	-1/58	-3.25	55	65	109	922	-2/06	-3.2	0	0	65	69	74	79	83	87	91	
2	109	7299	109	7750	452	12	-1/31	-1.04	30	60	109	7578	-1/35	-1.03	0	0	60	67	73	79	84	90	94	
2	109	8090	109	9084	995	12	-1/37	-1.12	35	57	109	8492	-1/46	-1.08	227	-1	57	64	70	75	80	85	90	
2	107	4354	107	4978	625	17	1/32	2.76	60	71	107	4539	1/40	2.78	0	0	71	76	81	86	91	96	100	
2	106	72	106	1800	1729	15	-1/11	-3.28	30	68	106	664	-1/52	-3.12	0	0	68	73	78	83	87	92	96	
2	106	1991	106	2599	609	14	-4/26	-1.06	30	36	106	2270	-4/30	-1.04	0	0	36	40	43	47	50	53	56	
2	106	2599	106	3125	527	11	4/45	1.9	35	38	106	2878	4/46	1.9	0	0	38	42	45	48	51	54	57	
2	106	4244	106	4525	282	15	0/25	0.35	35	100	106	4445	0/31	0.58	0	0	100	113	125	135	145	155	163	

Notes:

+ Maximum curve speed is limited at qualified cant deficiency.
However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Exception Report
Exception Summary Section
Milepost 21 to Milepost 105
Duncannon, PA to Harrisburg, PA

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Run Date: 12/17/2018
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		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl		Tot	Lim	Pst
MP	FT	EXC	FT	Drop	EXC	FT	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	Cls	Cls	Trk
13	5327	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	1	
342	5237	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	3	1	
341	5308	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	3	1	
340	5214	-	-	-	-	-	2	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	1	
338	6722	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	4	2	
337	5100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	4	2	
291	1905	-	-	-	-	-	1	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	2	
265	5290	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	-	-	2	3	1	
264	5225	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	-	-	3	4	1	
263	4863	-	-	-	-	-	-	-	-	1	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	1	
261	4867	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	3	4	1	
247	5231	-	-	-	-	-	2	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	1	
245	10667	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	3	1	
243	5204	-	-	-	-	-	1	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	1	
242	5377	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	0	3	1	
240	10265	-	-	-	-	-	-	-	-	2	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	1	
196	5300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	4	1	
128	5307	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	1	
		2	3	-	-	-	6	39	-	3	56	-	-	-	-	-	-	-	-	-	-	-	-	-	3	11	-	9			

Total Miles: 266.30
 Exceptions per 100 Miles: 8.64
 CY17 National Average Exceptions per 100 miles: 7.1

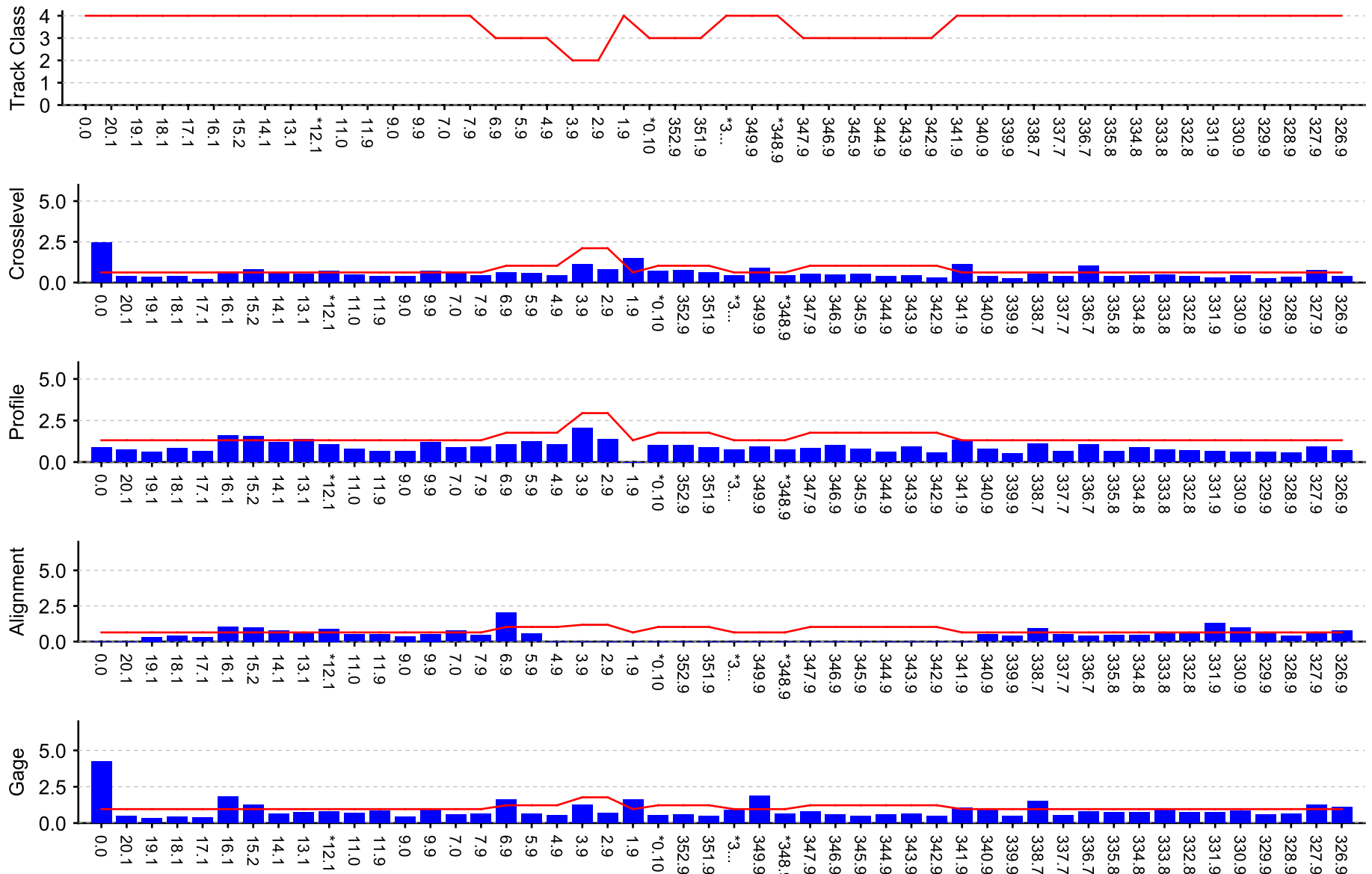
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Milepost 21 to Milepost 105

Duncannon, PA

- Harrisburg, PA



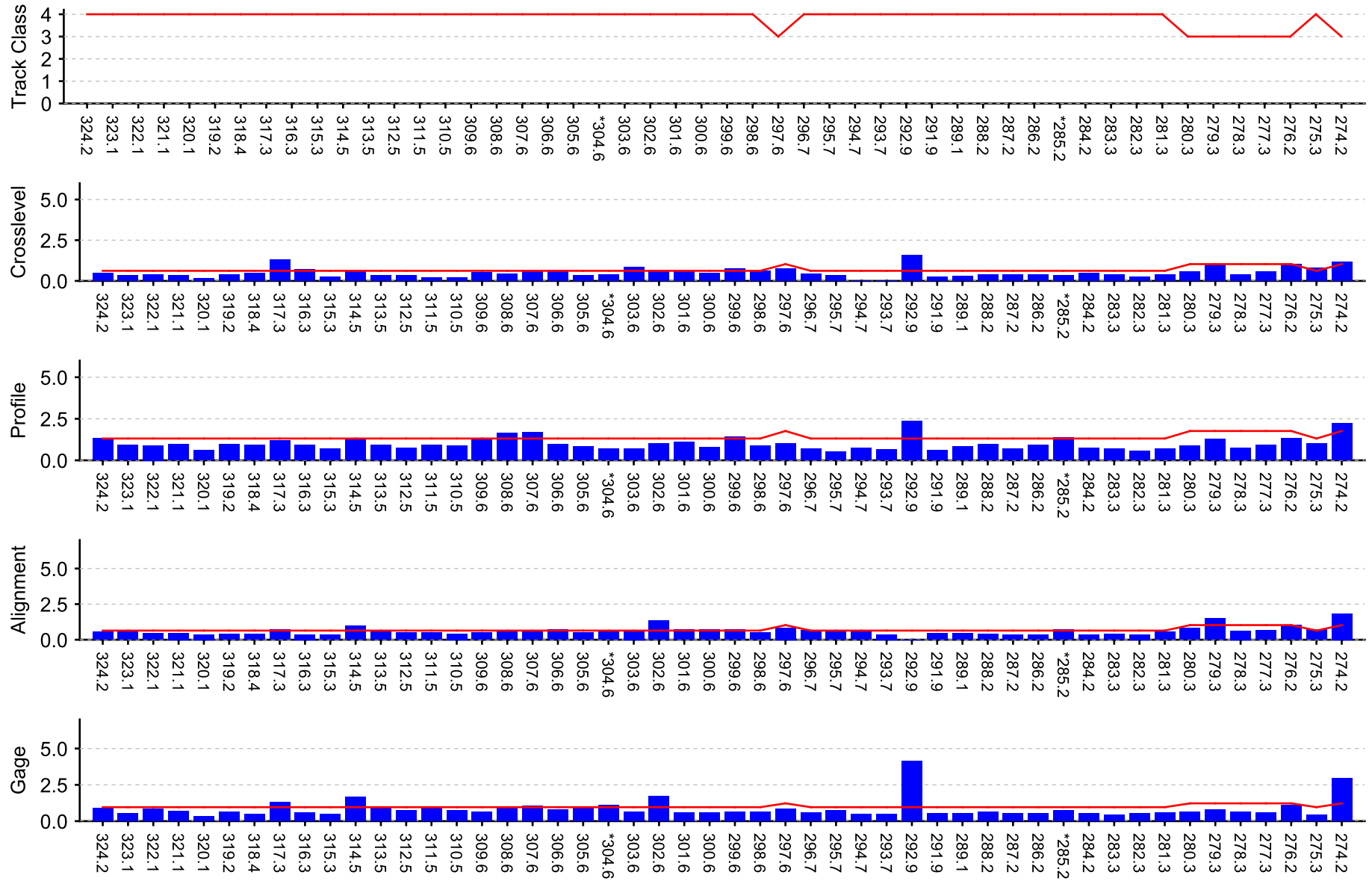
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Milepost 21 to Milepost 105

Duncannon, PA

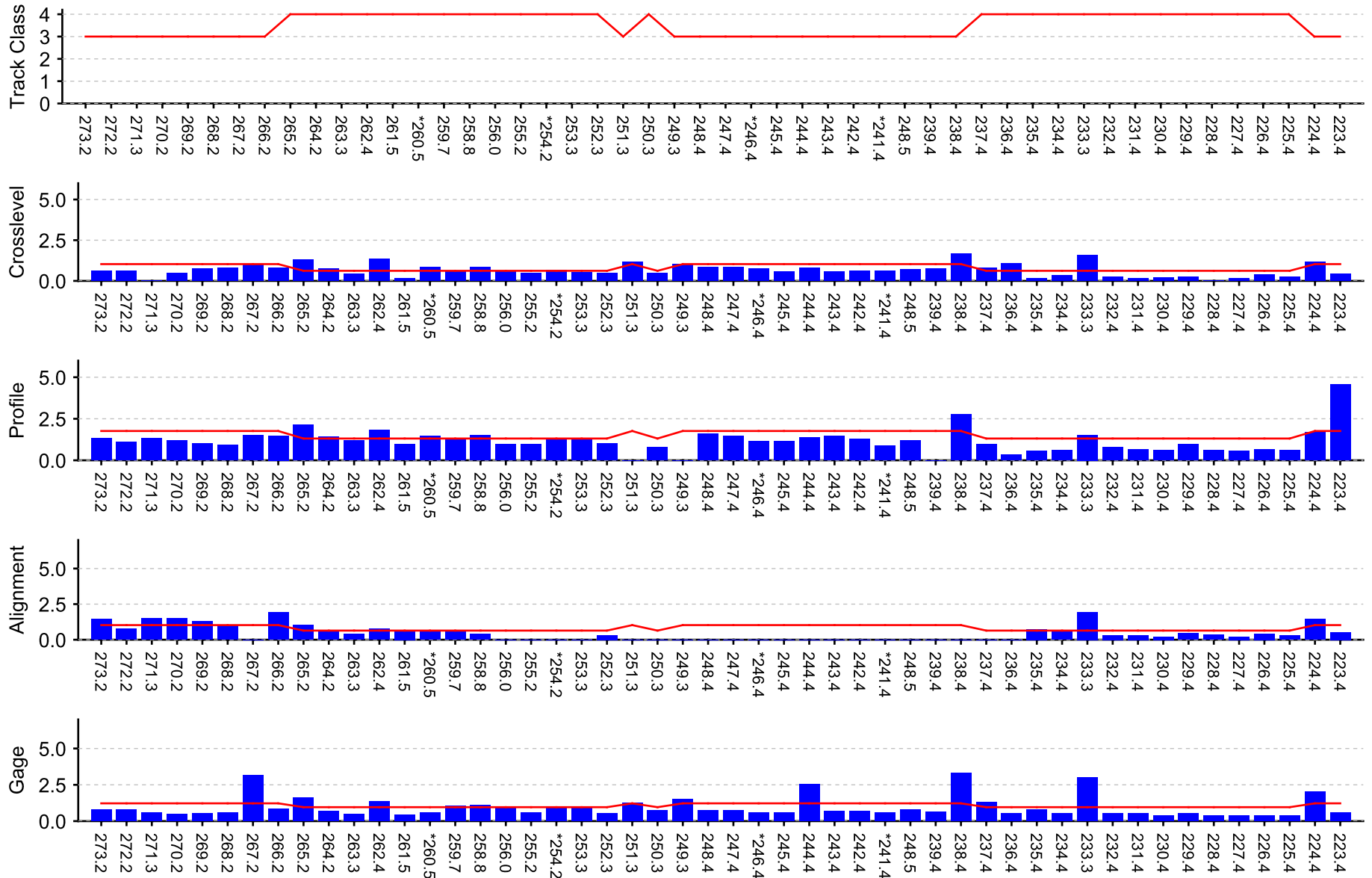
- Harrisburg, PA



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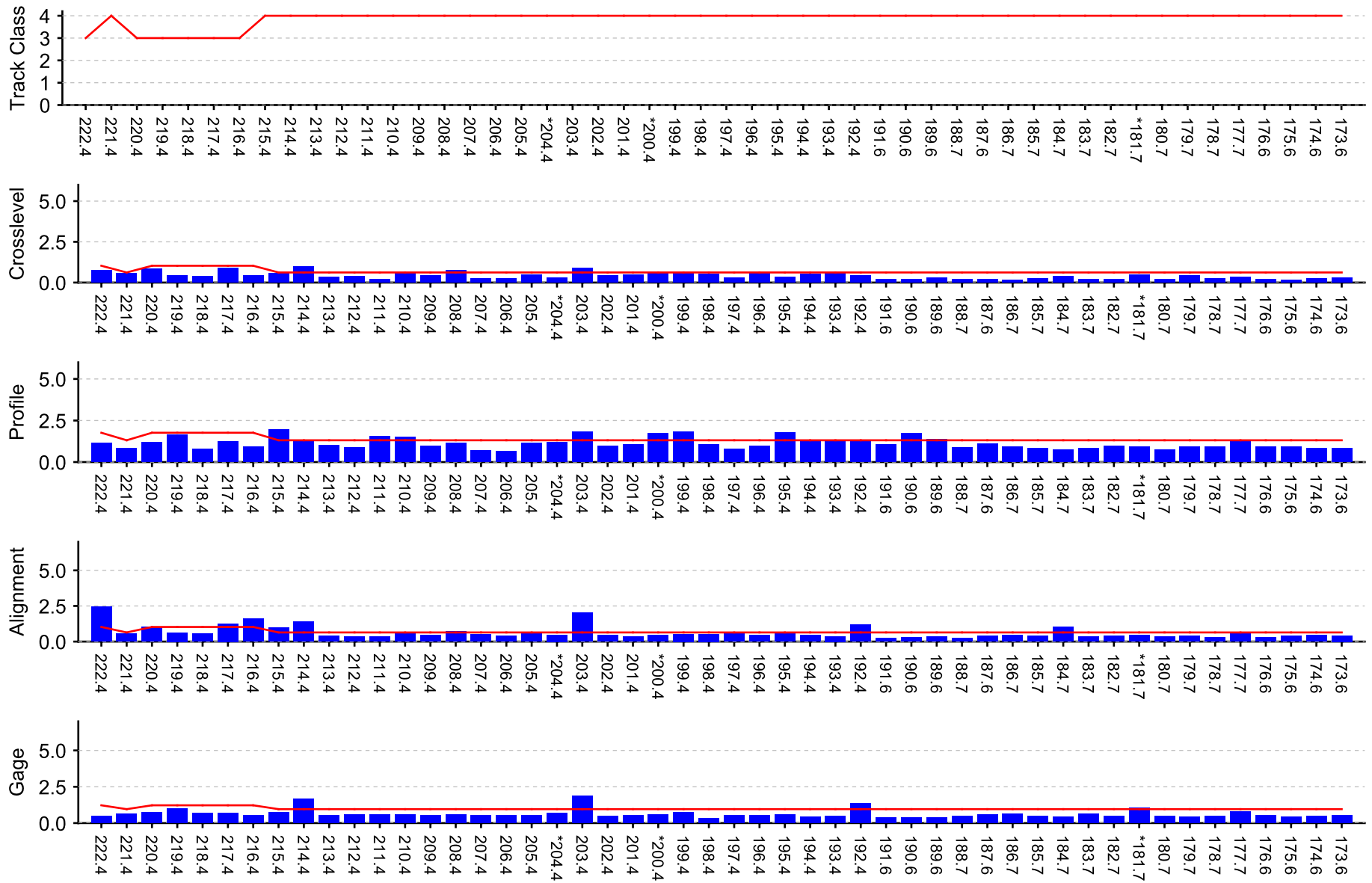


Track Quality Index

Milepost 21 to Milepost 105

Duncannon, PA

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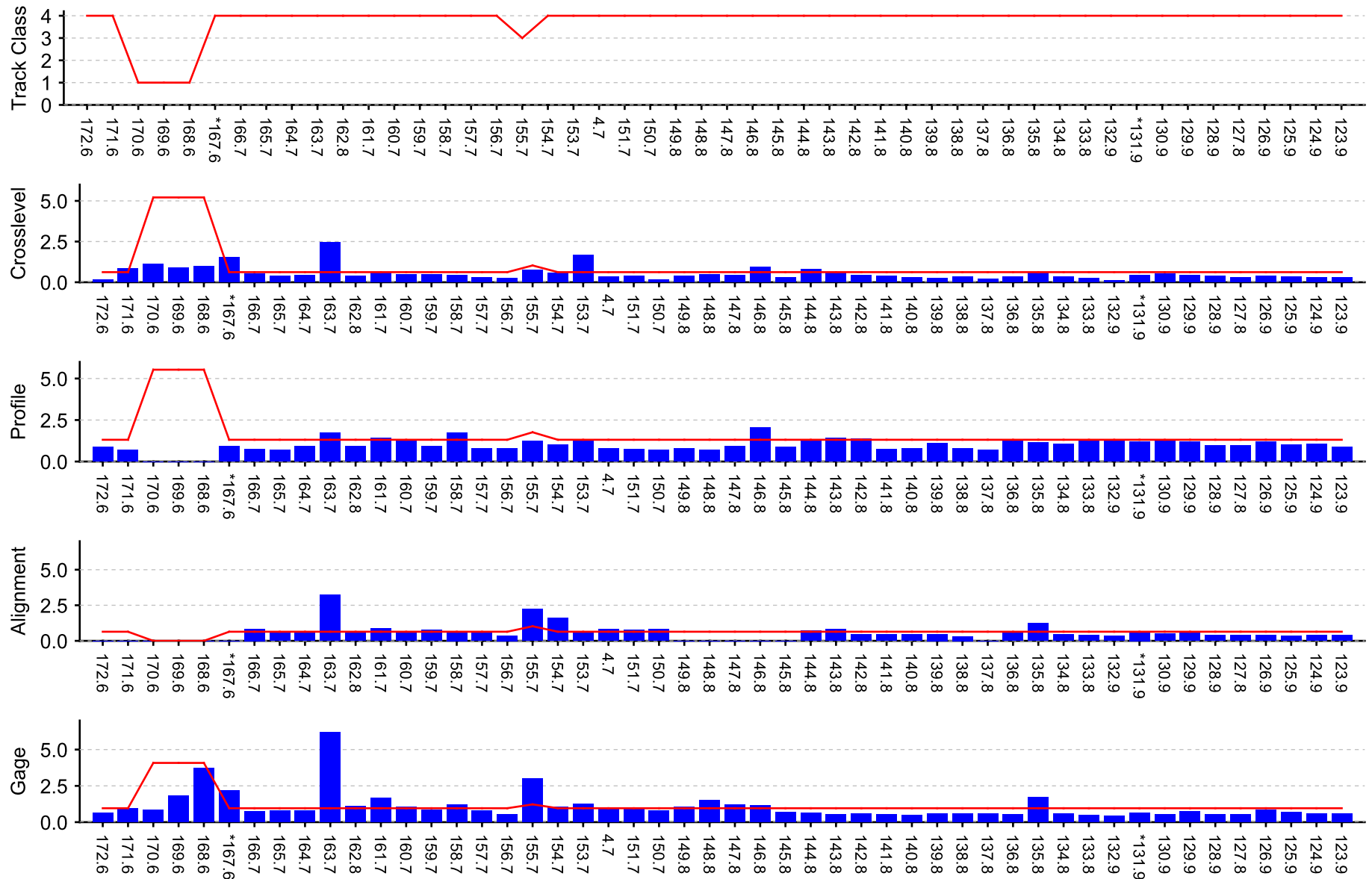
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Milepost 21 to Milepost 105

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Track Quality Index

Milepost 21 to Milepost 105

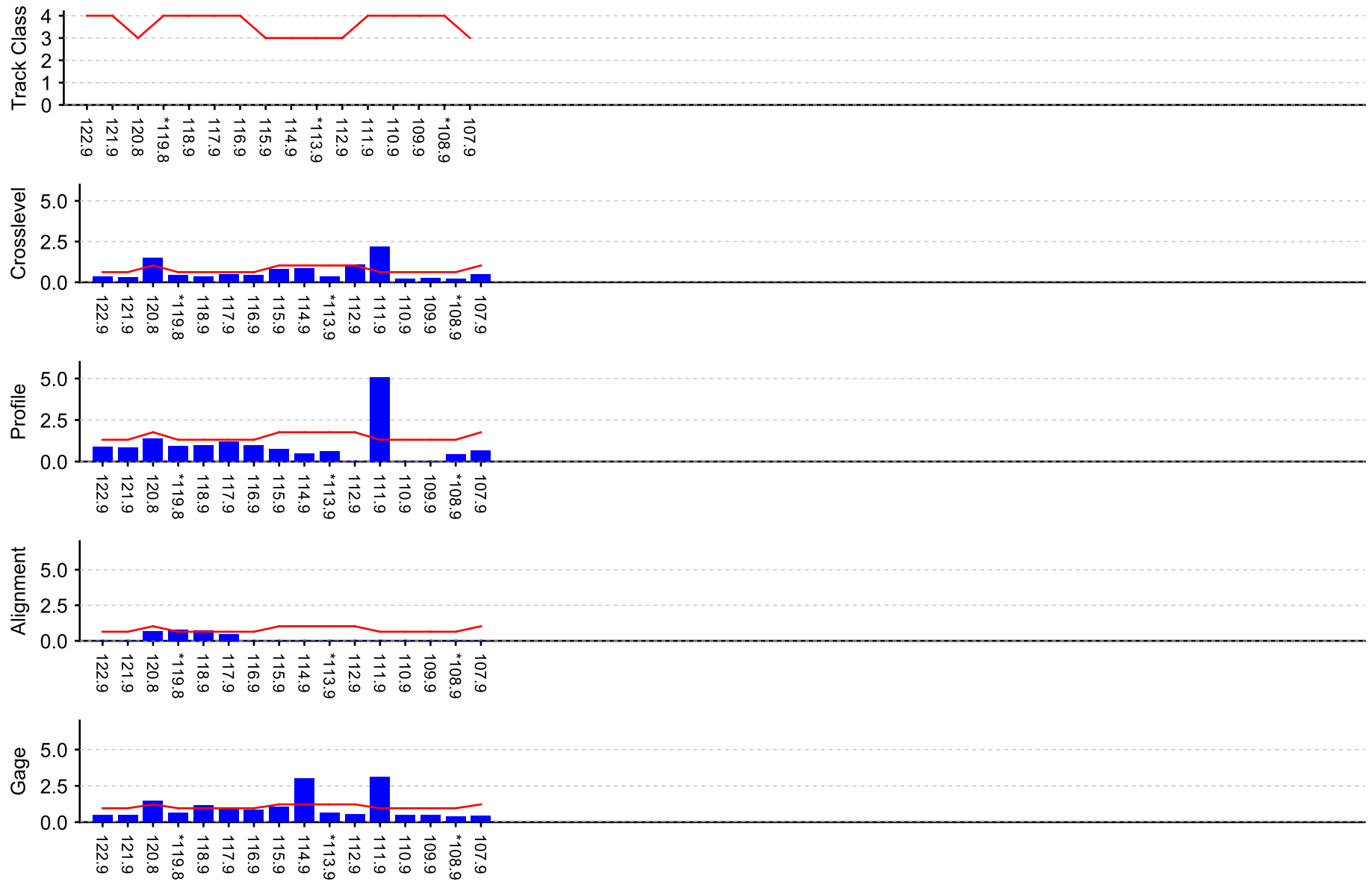
Duncannon, PA

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Exception Report
Class Plus 1 Exception List Section
Milepost 21 to Milepost 105
Duncannon, PA to Harrisburg, PA

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
21	157		Down Milepost	21.00	0	4	T	0	0	7	40.644348	-80.234289
21	529		Track Change	0.00	0	4	T	0	0	7	40.644348	-80.234289
21	529		Class Change	1.00	0	4	T	0	0	7	40.644348	-80.234289
21	529		Posted Speed	10.00	0	4	T	0	0	7	40.644348	-80.234289
21	529		State Line	PA	0	4	T	0	0	7	40.644348	-80.234289
21	530		Railroad	NS -	0	4	T	0	0	7	40.644348	-80.234286
21	531		Subdivision	FORT	0	4	T	0	0	7	40.644348	-80.234282
21	1284		Track Change	0.00	0	8	C	0	0	1	40.642377	-80.233309
21	1427		Class Change	4.00	0	9	E	0	0	1	40.642009	-80.233137
21	1427		Posted Speed	79.00	0	9	E	0	0	1	40.642009	-80.233137
21	3463		Posted Speed	60.00	0	14	B	0	0	1	40.636591	-80.231525
20	4980		Down Milepost	20.00	0	18	T	0	0	1	40.632463	-80.231012
20	1247		Posted Speed	79.00	0	19	E	0	0	1	40.629057	-80.230930
19	5283		Down Milepost	19.00	0	18	T	0	0	1	40.618056	-80.232055
19	3120		Posted Speed	70.00	0	18	T	0	0	1	40.609534	-80.232112
18	5316		Down Milepost	18.00	0	35	E	0	0	1	40.603627	-80.233089
18	1964		Posted Speed	79.00	0	41	E	0	0	1	40.598408	-80.234471
18	5221		Posted Speed	70.00	0	43	T	0	0	1	40.589623	-80.232911
17	5274		Down Milepost	17.00	0	43	C	0	0	1	40.589482	-80.232853
17	5121		Posted Speed	79.00	0	48	T	0	0	1	40.577402	-80.223753
16	5186		Down Milepost	16.00	0	48	T	0	0	1	40.577261	-80.223605
16	2890		Posted Speed	70.00	0	45	T	0	0	1	40.571120	-80.217088
16	4376	33	L Prof 62	-1.43	2	45	T	4	5	1	40.567960	-80.213744
15	5149		Down Milepost	15.00	0	45	T	0	0	1	40.566316	-80.211993
15	1499	38	Twist 31ft*	0.94	7	45	B	4	5	1	40.563128	-80.208617
15	1568	39	R Align 62	0.75	2	45	B	4	5	1	40.562979	-80.208465
15	3118	41	L Align 62	1.01	6	45	T	4	5	1	40.559255	-80.205860
15	3119	42	R Align 62	1.03	3	46	T	4	5	1	40.559253	-80.205858
14	5444		Down Milepost	14.00	0	44	E	0	0	1	40.553446	-80.202505
14	1347	43	R Align 62	-0.88	6	45	T	4	5	1	40.550424	-80.199746
13	5327		Down Milepost	13.00	0	46	T	0	0	1	40.540949	-80.192748
13	393		Posted Speed	60.00	0	46	T	0	0	1	40.539984	-80.192129
13	3267	53	Gage Wide	57.60	1	47	E	3	5	1	40.534066	-80.185646
13	4032		Posted Speed	79.00	0	48	T	0	0	1	40.533272	-80.183112
13	7737		Posted Speed	70.00	0	46	T	0	0	1	40.529715	-80.170687
11	11152		Down Milepost	11.00	0	46	T	0	0	1	40.526316	-80.159307
11	5254		Posted Speed	79.00	0	47	T	0	0	1	40.520627	-80.142065
10	5347		Down Milepost	10.00	0	47	T	0	0	1	40.520516	-80.141761
9	5260		Down Milepost	9.00	0	47	T	0	0	1	40.515996	-80.123925

Exception Report
Class Plus 1 Exception List Section
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Duncannon, PA to Harrisburg, PA

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
8	5310		Down Milepost	8.00	0	46	C	0	0	1	40.511573	-80.105846
8	1593		Posted Speed	70.00	0	46	T	0	0	1	40.509535	-80.100809
7	5235		Down Milepost	7.00	0	44	T	0	0	1	40.505257	-80.089025
7	1557	59	R Align 62	-0.88	22	44	B	4	5	1	40.503543	-80.083920
7	1560	58	L Align 62	-0.79	14	44	B	4	5	1	40.503540	-80.083910
7	1744	60	L Align 62	-0.78	11	44	C	4	5	1	40.503372	-80.083288
7	1747	61	R Align 62	-0.81	11	44	C	4	5	1	40.503369	-80.083278
7	5069		Posted Speed	79.00	0	42	C	0	0	1	40.499015	-80.073000
6	5448		Down Milepost	6.00	0	42	T	0	0	1	40.498299	-80.072011
5	5181		Down Milepost	5.00	0	36	E	0	0	1	40.488307	-80.058862
5	58	72	L Align 62	0.80	2	36	B	4	5	1	40.488197	-80.058711
5	58	73	R Align 62	0.76	7	36	B	4	5	1	40.488197	-80.058711
5	67	74	L Align 62	0.75	1	36	B	4	5	1	40.488180	-80.058688
5	866		Class Change	3.00	0	36	T	0	0	1	40.486685	-80.056596
5	866		Posted Speed	50.00	0	36	T	0	0	1	40.486685	-80.056596
4	5340		Down Milepost	4.00	0	34	T	0	0	1	40.478753	-80.044468
3	5330		Down Milepost	3.00	0	10	B	0	0	1	40.465946	-80.035656
2	5445		Down Milepost	2.00	0	21	T	0	0	1	40.456911	-80.020720
2	371		Class Change	2.00	0	20	T	0	0	1	40.456352	-80.019612
2	371		Posted Speed	30.00	0	20	T	0	0	1	40.456352	-80.019612
2	3650		Posted Speed	25.00	0	17	E	0	0	1	40.451052	-80.010257
2	5180		Posted Speed	30.00	0	16	C	0	0	1	40.449336	-80.005702
1	5208		Down Milepost	1.00	0	17	E	0	0	1	40.449347	-80.005599
1	1765		Posted Speed	25.00	0	15	B	0	0	1	40.450601	-79.999506
1	3538		Posted Speed	30.00	0	17	T	0	0	1	40.447221	-79.995599
1	4699		Subdivision	PITTSBU	0	13	B	0	0	1	40.444891	-79.993039
1	4756		Posted Speed	20.00	0	13	B	0	0	1	40.444850	-79.992841
1	5217	90	L Align 62	2.05	9	9	E	2	3	1	40.445066	-79.991294
1	5221	91	R Align 62	2.11	13	9	E	2	3	1	40.445071	-79.991281
1	9934		Class Change	4.00	0	15	T	0	0	1	40.452938	-79.977908
1	9934		Posted Speed	60.00	0	15	T	0	0	1	40.452938	-79.977908
352	10407		Down Milepost	352.00	0	15	C	0	0	1	40.453734	-79.976569
352	1826		Class Change	3.00	0	21	T	0	0	1	40.456898	-79.971517
352	1826		Posted Speed	40.00	0	21	T	0	0	1	40.456898	-79.971517
352	5384		Posted Speed	35.00	0	26	T	0	0	1	40.460644	-79.960046
351	5422		Down Milepost	351.00	0	26	T	0	0	1	40.460668	-79.959910
351	1230	116	Gage Wide	57.62	3	22	C	3	4	1	40.460328	-79.955776
351	5565		Posted Speed	40.00	0	23	C	0	0	1	40.454638	-79.943023
349	10766		Down Milepost	349.00	0	20	T	0	0	1	40.458703	-79.926676

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Class Plus 1 Exception List Section
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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
349	3021		Class Change	4.00	0	15	T	0	0	1	40.459434	-79.916326
349	3021		Posted Speed	60.00	0	15	T	0	0	1	40.459434	-79.916326
347	10289		Down Milepost	347.00	0	14	C	0	0	1	40.450317	-79.893220
347	2538	130	R Align 62	0.77	4	22	C	4	5	1	40.444834	-79.887931
346	5877		Down Milepost	346.00	0	22	T	0	0	1	40.435873	-79.885668
346	3008		Class Change	3.00	0	14	T	0	0	1	40.427745	-79.885238
346	3008		Posted Speed	40.00	0	14	T	0	0	1	40.427745	-79.885238
345	5098		Down Milepost	345.00	0	16	B	0	0	1	40.422201	-79.887068
344	5111		Down Milepost	344.00	0	24	C	0	0	1	40.413814	-79.874623
343	5283		Down Milepost	343.00	0	27	E	0	0	1	40.402580	-79.864626
343	2585		Posted Speed	45.00	0	23	E	0	0	1	40.398061	-79.857685
343	4542		Posted Speed	40.00	0	24	T	0	0	1	40.396390	-79.851039
342	5237		Down Milepost	342.00	0	25	C	0	0	1	40.395624	-79.848778
341	5308		Down Milepost	341.00	0	16	T	0	0	1	40.395958	-79.833033
341	4163		Posted Speed	45.00	0	11	T	0	0	1	40.402174	-79.823179
340	5214		Down Milepost	340.00	0	15	T	0	0	1	40.400749	-79.819920
340	1583		Posted Speed	30.00	0	17	T	0	0	1	40.397873	-79.815746
340	1773	146	L Align 62	-1.95	6	17	B	2	4	1	40.397481	-79.815302
340	1774	148	R Align 62	-2.12	16	17	B	2	4	1	40.397479	-79.815300
340	2035		Track Change	0.00	0	17	E	0	0	2	40.396958	-79.814660
340	2262		Posted Speed	45.00	0	18	T	0	0	2	40.396489	-79.814127
340	4259		Class Change	4.00	0	25	E	0	0	2	40.393839	-79.808237
340	4259		Posted Speed	60.00	0	25	E	0	0	2	40.393839	-79.808237
339	5243		Down Milepost	339.00	0	29	T	0	0	2	40.393768	-79.804716
338	6722		Down Milepost	338.00	0	36	C	0	0	2	40.400140	-79.783013
338	4730		Posted Speed	75.00	0	37	C	0	0	2	40.392503	-79.771011
337	5100		Down Milepost	337.00	0	37	C	0	0	2	40.391559	-79.770529
337	2988	162	L Align 62	-0.97	12	37	T	4	5	2	40.383822	-79.767104
337	3030	163	R Align 62	0.87	1	38	T	4	5	2	40.383713	-79.767056
336	5458		Down Milepost	336.00	0	42	C	0	0	2	40.377430	-79.764250
335	4765		Down Milepost	335.00	0	43	T	0	0	2	40.367900	-79.752995
334	5307		Down Milepost	334.00	0	46	T	0	0	2	40.358118	-79.739125
333	5292		Down Milepost	333.00	0	45	T	0	0	2	40.346537	-79.727900
332	4964		Down Milepost	332.00	0	42	C	0	0	2	40.337705	-79.714433
331	5048		Down Milepost	331.00	0	50	C	0	0	2	40.332126	-79.698113
331	1260		Posted Speed	60.00	0	48	C	0	0	2	40.331722	-79.693644
331	3306		Posted Speed	75.00	0	42	T	0	0	2	40.332302	-79.686431
330	4774		Down Milepost	330.00	0	38	T	0	0	2	40.333436	-79.681399
330	912		Posted Speed	50.00	0	38	T	0	0	2	40.334140	-79.678279

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
330	3576	166	Twist 31ft*	-0.95	2	41	B	4	5	2	40.333386	-79.669182
329	5660		Down Milepost	329.00	0	42	B	0	0	2	40.333885	-79.662002
329	1337		Posted Speed	75.00	0	43	T	0	0	2	40.333218	-79.657449
329	3722		Posted Speed	57.00	0	45	T	0	0	2	40.330033	-79.650019
328	5022		Down Milepost	328.00	0	47	C	0	0	2	40.328477	-79.645849
328	1377		Posted Speed	75.00	0	47	T	0	0	2	40.328890	-79.641053
327	5290		Down Milepost	327.00	0	39	C	0	0	2	40.331492	-79.627634
326	5326		Down Milepost	326.00	0	44	T	0	0	2	40.325172	-79.610949
326	5208		Posted Speed	60.00	0	46	T	0	0	2	40.316303	-79.596399
325	5398		Down Milepost	325.00	0	46	B	0	0	2	40.315979	-79.595863
325	1438		Posted Speed	70.00	0	45	E	0	0	2	40.314250	-79.591303
324	3780		Down Milepost	324.00	0	46	T	0	0	2	40.312592	-79.583216
323	5683		Down Milepost	323.00	0	50	E	0	0	2	40.307792	-79.563931
322	5420		Down Milepost	322.00	0	45	B	0	0	2	40.305065	-79.545608
321	5088		Down Milepost	321.00	0	43	T	0	0	2	40.308928	-79.528161
320	5191		Down Milepost	320.00	0	46	T	0	0	2	40.311954	-79.510079
319	5161		Down Milepost	319.00	0	46	C	0	0	2	40.317156	-79.493282
319	1705		Posted Speed	79.00	0	47	T	0	0	2	40.317152	-79.487237
318	3977		Down Milepost	318.00	0	45	T	0	0	2	40.316097	-79.479243
318	977		Posted Speed	75.00	0	43	T	0	0	2	40.315646	-79.475806
318	2759		Posted Speed	79.00	0	40	E	0	0	2	40.314832	-79.469533
317	5587		Down Milepost	317.00	0	47	T	0	0	2	40.312381	-79.459963
316	5296		Down Milepost	316.00	0	47	T	0	0	2	40.307193	-79.442303
316	3643	229	L Runoff*	1.60	31	43	T	3	5	2	40.303628	-79.430159
316	3644	228	Crosslevel	-1.25	21	43	T	4	5	2	40.303627	-79.430156
316	5068		Posted Speed	75.00	0	36	B	0	0	2	40.302232	-79.425409
315	5283		Down Milepost	315.00	0	35	B	0	0	2	40.302030	-79.424683
314	4433		Down Milepost	314.00	0	37	C	0	0	2	40.302693	-79.409239
313	5140		Down Milepost	313.00	0	47	C	0	0	2	40.311035	-79.394530
312	5153		Down Milepost	312.00	0	45	T	0	0	2	40.320900	-79.381381
311	5489		Down Milepost	311.00	0	41	C	0	0	2	40.325980	-79.363654
310	5314		Down Milepost	310.00	0	41	T	0	0	2	40.321623	-79.345586
310	1358		Posted Speed	70.00	0	44	T	0	0	2	40.320395	-79.341013
309	4671		Down Milepost	309.00	0	46	T	0	0	2	40.321022	-79.329667
308	5291		Down Milepost	308.00	0	44	B	0	0	2	40.326918	-79.312409
308	2597		Posted Speed	79.00	0	49	E	0	0	2	40.330960	-79.304857
307	5307		Down Milepost	307.00	0	48	T	0	0	2	40.336383	-79.298257
306	5325		Down Milepost	306.00	0	43	T	0	0	2	40.347217	-79.285565
306	2499		Posted Speed	70.00	0	45	C	0	0	2	40.352752	-79.280336

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
305	5182		Down Milepost	305.00	0	47	C	0	0	2	40.357668	-79.273240
303	10523		Down Milepost	303.00	0	46	T	0	0	2	40.381124	-79.251514
302	5429		Down Milepost	302.00	0	47	C	0	0	2	40.393438	-79.240873
302	4568	242	L Align 62	0.88	17	47	E	4	5	2	40.404197	-79.234371
302	4571	243	R Align 62	0.88	16	47	E	4	5	2	40.404201	-79.234362
302	4611	244	R Align 62	-0.76	2	47	E	4	5	2	40.404251	-79.234234
302	4612		Posted Speed	55.00	0	47	E	0	0	2	40.404252	-79.234231
302	4619	245	L Align 62	-0.85	17	47	E	4	5	2	40.404261	-79.234208
302	4621	246	R Align 62	-0.93	21	47	E	4	5	2	40.404263	-79.234202
301	5442		Down Milepost	301.00	0	45	C	0	0	2	40.405529	-79.231793
300	5010		Down Milepost	300.00	0	42	C	0	0	2	40.417990	-79.224516
299	5323		Down Milepost	299.00	0	41	B	0	0	2	40.415590	-79.208991
299	1849		Posted Speed	50.00	0	40	T	0	0	2	40.411911	-79.204478
299	4322	256	Twist 31ft*	1.06	28	39	E	3	5	2	40.410611	-79.196683
299	4358	257	Warp 62	1.63	62	39	E	4	5	2	40.410663	-79.196573
298	5309		Down Milepost	298.00	0	42	T	0	0	2	40.412099	-79.193736
298	2493		Posted Speed	70.00	0	43	E	0	0	2	40.412996	-79.185342
298	2560	260	Warp 62	1.79	62	43	T	3	5	2	40.412933	-79.185117
297	5285		Down Milepost	297.00	0	42	B	0	0	2	40.410356	-79.175968
297	4392		Class Change	3.00	0	38	T	0	0	2	40.409848	-79.160539
297	4392		Posted Speed	45.00	0	38	T	0	0	2	40.409848	-79.160539
296	4842		Down Milepost	296.00	0	37	B	0	0	2	40.410155	-79.158977
295	5137		Down Milepost	295.00	0	38	C	0	0	2	40.399511	-79.154302
295	2824		Class Change	4.00	0	36	T	0	0	2	40.396963	-79.145367
295	2824		Posted Speed	70.00	0	36	T	0	0	2	40.396963	-79.145367
295	4283		Posted Speed	60.00	0	35	T	0	0	2	40.397417	-79.140183
294	5128		Down Milepost	294.00	0	33	C	0	0	2	40.397625	-79.137171
294	1145		Posted Speed	70.00	0	34	E	0	0	2	40.397023	-79.133177
294	2852		Posted Speed	55.00	0	41	T	0	0	2	40.395412	-79.127453
293	5272		Down Milepost	293.00	0	44	C	0	0	2	40.390971	-79.121789
293	1718		Posted Speed	70.00	0	42	T	0	0	2	40.386724	-79.123865
293	1985	270	Crosslevel	-1.19	15	41	T	4	5	2	40.386170	-79.124488
292	4676		Down Milepost	292.00	0	26	C	0	0	2	40.379364	-79.127147
291	5098		Down Milepost	291.00	0	13	T	0	0	2	40.373456	-79.113188
291	1352	272	R Align 62	0.98	9	17	T	4	5	2	40.374510	-79.108556
291	1384	273	R Align 62	-0.95	6	17	T	4	5	2	40.374535	-79.108446
291	1744	275	R Align 62	-1.24	1	18	T	4	5	2	40.374813	-79.107210
291	1905		Class Change	3.00	0	19	B	0	0	2	40.374938	-79.106658
291	1905		Posted Speed	30.00	0	19	B	0	0	2	40.374938	-79.106658

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
291	1989	277	L Align 62	1.98	14	19	B	2	4	2	40.375002	-79.106370
291	2267	285	R Align 62	-1.67	1	21	E	3	4	2	40.375187	-79.105405
291	2268	286	L Align 62	-1.72	16	21	E	3	4	2	40.375187	-79.105402
291	2304	287	L Align 62	1.72	7	21	E	3	4	2	40.375215	-79.105278
291	2315		Track Change	0.00	0	21	E	0	0	1	40.375223	-79.105241
291	2456		Class Change	4.00	0	21	T	0	0	1	40.375332	-79.104757
291	2456		Posted Speed	79.00	0	21	T	0	0	1	40.375332	-79.104757
290	4778		Down Milepost	290.00	0	26	T	0	0	1	40.377131	-79.096796
290	3333		Posted Speed	75.00	0	39	T	0	0	1	40.379734	-79.085381
289	4807		Down Milepost	289.00	0	40	C	0	0	1	40.380487	-79.080221
288	4596		Down Milepost	288.00	0	45	C	0	0	1	40.378567	-79.064037
288	3408		Posted Speed	79.00	0	45	E	0	0	1	40.382131	-79.053073
287	5120		Down Milepost	287.00	0	43	T	0	0	1	40.385317	-79.048586
286	5230		Down Milepost	286.00	0	49	C	0	0	1	40.395318	-79.035233
286	7774		Posted Speed	55.00	0	45	T	0	0	1	40.413914	-79.022027
286	8074	293	Twist 31ft*	0.98	9	45	B	4	5	1	40.414664	-79.021594
284	10591		Down Milepost	284.00	0	45	C	0	0	1	40.418350	-79.014520
284	1395		Posted Speed	79.00	0	45	E	0	0	1	40.417472	-79.009725
284	4301	295	L Prof 62	-1.54	3	42	T	4	5	1	40.413926	-79.000424
284	4431		Posted Speed	60.00	0	41	T	0	0	1	40.413768	-79.000008
283	5017		Down Milepost	283.00	0	37	B	0	0	1	40.413063	-78.998120
283	4897		Posted Speed	79.00	0	32	T	0	0	1	40.406051	-78.984009
282	5323		Down Milepost	282.00	0	33	T	0	0	1	40.405034	-78.983262
281	5256		Down Milepost	281.00	0	40	C	0	0	1	40.392517	-78.974033
281	3534		Posted Speed	60.00	0	38	T	0	0	1	40.383769	-78.968673
280	5247		Down Milepost	280.00	0	30	E	0	0	1	40.379354	-78.966723
280	5322		Class Change	3.00	0	35	T	0	0	1	40.367132	-78.957500
280	5322		Posted Speed	45.00	0	35	T	0	0	1	40.367132	-78.957500
279	5367		Down Milepost	279.00	0	35	T	0	0	1	40.367048	-78.957378
279	2185		Posted Speed	40.00	0	31	E	0	0	1	40.362412	-78.952517
279	4200		Posted Speed	35.00	0	30	E	0	0	1	40.361913	-78.946422
278	5232		Down Milepost	278.00	0	32	C	0	0	1	40.363554	-78.943542
278	1164		Posted Speed	40.00	0	30	E	0	0	1	40.361766	-78.940558
278	3349		Posted Speed	45.00	0	30	E	0	0	1	40.356087	-78.939912
277	5335		Down Milepost	277.00	0	32	C	0	0	1	40.351077	-78.942566
276	5382		Down Milepost	276.00	0	33	C	0	0	1	40.340000	-78.931837
276	2450		Posted Speed	40.00	0	32	E	0	0	1	40.334902	-78.926540
275	5245		Down Milepost	275.00	0	32	B	0	0	1	40.329227	-78.920248
275	3059		Class Change	4.00	0	34	E	0	0	1	40.330056	-78.909766

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
275	3059		Posted Speed	60.00	0	34	E	0	0	1	40.330056	-78.909766
274	5487		Down Milepost	274.00	0	33	T	0	0	1	40.334288	-78.903084
274	1384	304	Twist 31ft*	0.89	8	39	B	4	5	1	40.336624	-78.899192
273	5247		Down Milepost	273.00	0	37	T	0	0	1	40.342985	-78.888170
273	1006		Class Change	3.00	0	36	B	0	0	1	40.344691	-78.885349
273	1006		Posted Speed	45.00	0	36	B	0	0	1	40.344691	-78.885349
273	3178	314	Twist 31ft*	1.24	15	34	E	3	4	1	40.349503	-78.881441
273	5188		Posted Speed	40.00	0	31	C	0	0	1	40.353920	-78.878233
272	5233		Down Milepost	272.00	0	31	C	0	0	1	40.353962	-78.878077
272	4930		Posted Speed	35.00	0	35	B	0	0	1	40.352778	-78.861793
271	5027		Down Milepost	271.00	0	34	B	0	0	1	40.352876	-78.861466
271	5470		Posted Speed	40.00	0	31	E	0	0	1	40.365318	-78.855593
270	5525		Down Milepost	270.00	0	31	T	0	0	1	40.365459	-78.855671
270	1744	329	Gage Wide	57.64	6	34	C	3	4	1	40.370005	-78.856049
270	1781	330	Gage Wide	57.62	2	33	C	3	4	1	40.370093	-78.855983
269	5256		Down Milepost	269.00	0	31	C	0	0	1	40.377519	-78.849382
269	3153	364	Gage Wide	57.62	3	33	C	3	4	1	40.377625	-78.838234
269	3384	365	Gage Wide	57.65	6	34	C	3	4	1	40.377540	-78.837417
268	5286		Down Milepost	268.00	0	30	B	0	0	1	40.374705	-78.831873
268	1536		Posted Speed	35.00	0	28	E	0	0	1	40.372767	-78.827146
267	5334		Down Milepost	267.00	0	27	E	0	0	1	40.367716	-78.816390
267	647		Posted Speed	40.00	0	28	T	0	0	1	40.368518	-78.814337
267	3687		Posted Speed	45.00	0	22	E	0	0	1	40.368902	-78.804154
266	5299		Down Milepost	266.00	0	20	T	0	0	1	40.366873	-78.799030
265	5290		Down Milepost	265.00	0	30	C	0	0	1	40.369529	-78.781272
265	2462	375	Twist 31ft*	1.46	10	32	E	2	4	1	40.369934	-78.772732
265	2609		Class Change	4.00	0	33	T	0	0	1	40.370100	-78.772254
265	2609		Posted Speed	79.00	0	33	T	0	0	1	40.370100	-78.772254
265	2621	376	R Prof 62	-1.63	10	33	T	4	5	1	40.370114	-78.772215
264	5225		Down Milepost	264.00	0	38	T	0	0	1	40.373117	-78.763775
264	1848	378	Twist 31ft*	1.12	19	40	E	3	5	1	40.375235	-78.757778
263	4863		Down Milepost	263.00	0	45	T	0	0	1	40.377803	-78.747547
263	250	382	Crosslevel	1.63	70	45	T	3	5	1	40.377970	-78.746677
263	378	383	Crosslevel	1.13	4	45	T	4	5	1	40.378056	-78.746232
263	715	384	R Prof 62	-1.41	2	45	T	4	5	1	40.378282	-78.745062
262	4892		Down Milepost	262.00	0	48	C	0	0	1	40.381129	-78.730604
261	4867		Down Milepost	261.00	0	47	T	0	0	1	40.387093	-78.715071
261	2343		Posted Speed	60.00	0	47	T	0	0	1	40.390127	-78.707700
261	2736	386	Twist 31ft*	1.11	20	46	B	3	5	1	40.390639	-78.706459

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
261	6867	387	Twist 31ft*	-1.08	6	45	B	3	5	1	40.389419	-78.692388
259	9502		Down Milepost	259.00	0	43	T	0	0	1	40.388833	-78.683081
259	459	388	Twist 31ft*	0.98	3	41	B	4	5	1	40.388860	-78.681439
259	492	389	Twist 31ft*	-0.95	6	41	B	4	5	1	40.388862	-78.681321
259	3412		Posted Speed	79.00	0	37	E	0	0	1	40.391126	-78.671438
258	4571		Down Milepost	258.00	0	39	T	0	0	1	40.392800	-78.667917
257	5317		Down Milepost	257.00	0	25	T	0	0	1	40.400479	-78.651771
256	3936		Down Milepost	256.00	0	23	T	0	0	1	40.406155	-78.639816
256	483		Posted Speed	70.00	0	24	T	0	0	1	40.406849	-78.638349
256	2991		Posted Speed	79.00	0	12	E	0	0	1	40.411298	-78.631595
255	4697		Down Milepost	255.00	0	14	T	0	0	1	40.414992	-78.627868
255	847		Posted Speed	60.00	0	8	T	0	0	1	40.416832	-78.626025
255	8431	393	Twist 31ft*	-0.87	1	21	E	4	5	1	40.436113	-78.618520
255	8463		Posted Speed	79.00	0	21	E	0	0	1	40.436180	-78.618445
253	9801		Down Milepost	253.00	0	22	T	0	0	1	40.438953	-78.615320
252	5309		Down Milepost	252.00	0	26	T	0	0	1	40.449948	-78.602919
252	891	394	Crosslevel	1.14	4	25	T	4	5	1	40.451793	-78.600836
251	5257		Down Milepost	251.00	0	14	T	0	0	1	40.461677	-78.592127
251	2477		Posted Speed	75.00	0	15	T	0	0	1	40.467475	-78.587547
250	5299		Down Milepost	250.00	0	16	T	0	0	1	40.474049	-78.582253
250	684		Class Change	3.00	0	13	T	0	0	1	40.475651	-78.580988
250	684		Posted Speed	45.00	0	13	T	0	0	1	40.475651	-78.580988
250	3102		Class Change	4.00	0	14	T	0	0	1	40.477910	-78.573932
250	3102		Posted Speed	55.00	0	14	T	0	0	1	40.477910	-78.573932
249	5325		Down Milepost	249.00	0	14	T	0	0	1	40.476911	-78.566135
249	2544		Posted Speed	75.00	0	12	T	0	0	1	40.477016	-78.557027
249	3255		Track Change	0.00	0	11	C	0	0	5	40.477050	-78.554482
249	3608		Class Change	3.00	0	11	T	0	0	5	40.477063	-78.553217
249	3608		Posted Speed	30.00	0	11	T	0	0	5	40.477063	-78.553217
248	4569		Down Milepost	248.00	0	12	T	0	0	5	40.477082	-78.549777
248	3531		Track Change	0.00	0	9	T	0	0	1	40.478199	-78.537238
247	5231		Down Milepost	247.00	0	16	C	0	0	1	40.478363	-78.531166
247	3478		Posted Speed	35.00	0	20	T	0	0	1	40.481336	-78.519418
247	4898	424	R Align 62	1.88	13	18	E	2	4	1	40.480894	-78.514968
247	4900	425	L Align 62	1.92	19	18	E	2	4	1	40.480890	-78.514965
245	10667		Down Milepost	245.00	0	18	B	0	0	1	40.477806	-78.497818
244	5293		Down Milepost	244.00	0	17	B	0	0	1	40.475091	-78.480545
243	5204		Down Milepost	243.00	0	21	T	0	0	1	40.488163	-78.475180
243	5096	441	R Align 62	1.81	11	22	C	2	4	1	40.496182	-78.485344

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
243	5100	443	L Align 62	1.98	14	22	C	2	4	1	40.496189	-78.485355
242	5377		Down Milepost	242.00	0	20	C	0	0	1	40.496787	-78.485945
242	1539		Posted Speed	44.00	0	19	E	0	0	1	40.498930	-78.482770
242	6836		Posted Speed	35.00	0	13	B	0	0	1	40.499779	-78.464016
242	8233		Posted Speed	40.00	0	14	E	0	0	1	40.497369	-78.460890
240	10265		Down Milepost	248.00	0	17	T	0	0	1	40.494540	-78.455861
240	5324	451	Crosslevel	1.40	8	9	T	3	4	1	40.490411	-78.438230
240	5378	454	Crosslevel	1.93	101	10	T	2	4	1	40.490373	-78.438044
239	5528		Down Milepost	239.00	0	13	T	0	0	1	40.490265	-78.437522
238	5391		Down Milepost	238.00	0	13	C	0	0	1	40.500128	-78.426400
238	3960		Posted Speed	30.00	0	13	T	0	0	1	40.506709	-78.415183
237	5284		Down Milepost	237.00	0	15	T	0	0	1	40.508819	-78.411329
237	309	458	Crosslevel	-1.50	22	14	T	3	4	1	40.509312	-78.410425
237	353	459	Crosslevel	-1.57	29	14	T	3	4	1	40.509382	-78.410297
237	403	460	Crosslevel	-1.36	3	13	T	3	4	1	40.509461	-78.410151
237	497	461	R Align 62	-1.80	6	13	B	2	4	1	40.509611	-78.409878
237	497	462	Gage Wide	57.74	5	13	B	3	4	1	40.509611	-78.409878
237	717	467	Twist 31ft*	-1.22	23	13	B	3	4	1	40.509985	-78.409259
236	5368		Down Milepost	236.00	0	13	C	0	0	1	40.517645	-78.396016
236	1683		Class Change	4.00	0	6	T	0	0	1	40.521341	-78.392818
236	1683		Posted Speed	70.00	0	6	T	0	0	1	40.521341	-78.392818
235	5305		Down Milepost	235.00	0	23	T	0	0	1	40.529518	-78.385490
234	5277		Down Milepost	234.00	0	31	T	0	0	1	40.541884	-78.375869
234	5401		Posted Speed	65.00	0	36	T	0	0	1	40.555099	-78.367453
233	5441		Down Milepost	233.00	0	36	T	0	0	1	40.555188	-78.367365
233	1687		Posted Speed	70.00	0	35	T	0	0	1	40.559140	-78.364263
233	3386		Posted Speed	79.00	0	37	T	0	0	1	40.563283	-78.361504
232	5007		Down Milepost	232.00	0	42	T	0	0	1	40.567235	-78.358869
231	5358		Down Milepost	231.00	0	46	T	0	0	1	40.580296	-78.350173
231	1217		Posted Speed	70.00	0	46	T	0	0	1	40.583262	-78.348195
231	2464		Posted Speed	79.00	0	47	T	0	0	1	40.586220	-78.345975
230	5308		Down Milepost	230.00	0	46	T	0	0	1	40.592737	-78.340407
229	5312		Down Milepost	229.00	0	49	T	0	0	1	40.604907	-78.330010
229	2881		Posted Speed	60.00	0	48	T	0	0	1	40.611511	-78.324374
228	5211		Down Milepost	228.00	0	49	E	0	0	1	40.617430	-78.321822
228	4989		Posted Speed	79.00	0	49	T	0	0	1	40.628859	-78.315449
227	5025		Down Milepost	227.00	0	49	T	0	0	1	40.628901	-78.315328
226	5243		Down Milepost	226.00	0	49	T	0	0	1	40.634872	-78.298223
226	3617		Posted Speed	65.00	0	47	T	0	0	1	40.638991	-78.286424

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
225	5323		Down Milepost	225.00	0	46	C	0	0	1	40.641496	-78.281318
225	3028		Posted Speed	79.00	0	47	E	0	0	1	40.647787	-78.274424
224	5306		Down Milepost	224.00	0	46	T	0	0	1	40.650999	-78.267414
224	3118		Posted Speed	55.00	0	41	C	0	0	1	40.655475	-78.257897
223	5289		Down Milepost	223.00	0	37	B	0	0	1	40.659571	-78.252257
223	1932		Class Change	3.00	0	36	B	0	0	1	40.662153	-78.246250
223	1932		Posted Speed	40.00	0	36	B	0	0	1	40.662153	-78.246250
222	5354		Down Milepost	222.00	0	15	C	0	0	1	40.668340	-78.237644
221	5186		Down Milepost	221.00	0	33	T	0	0	1	40.662990	-78.220843
221	3425		Class Change	4.00	0	33	E	0	0	1	40.656791	-78.212388
221	3425		Posted Speed	50.00	0	33	E	0	0	1	40.656791	-78.212388
220	5303		Down Milepost	220.00	0	35	C	0	0	1	40.654307	-78.206491
220	5315		Class Change	3.00	0	35	T	0	0	1	40.642057	-78.196961
220	5315		Posted Speed	35.00	0	35	T	0	0	1	40.642057	-78.196961
219	5348		Down Milepost	219.00	0	35	T	0	0	1	40.641966	-78.196938
219	2381		Class Change	4.00	0	34	E	0	0	1	40.637374	-78.191651
219	2381		Posted Speed	50.00	0	34	E	0	0	1	40.637374	-78.191651
218	5218		Down Milepost	218.00	0	32	T	0	0	1	40.631749	-78.184642
218	1375		Class Change	3.00	0	33	T	0	0	1	40.629086	-78.181160
218	1375		Posted Speed	40.00	0	33	T	0	0	1	40.629086	-78.181160
217	5370		Down Milepost	217.00	0	36	T	0	0	1	40.624173	-78.169754
217	534		Posted Speed	35.00	0	37	T	0	0	1	40.622923	-78.168764
217	3504		Posted Speed	40.00	0	32	T	0	0	1	40.615551	-78.164394
216	5205		Down Milepost	216.00	0	30	C	0	0	1	40.611917	-78.161023
215	5377		Down Milepost	215.00	0	34	B	0	0	1	40.612624	-78.142784
215	4529		Class Change	4.00	0	35	T	0	0	1	40.603418	-78.133191
215	4529		Posted Speed	60.00	0	35	T	0	0	1	40.603418	-78.133191
214	5197		Down Milepost	214.00	0	35	T	0	0	1	40.602313	-78.131278
214	4893	522	L Align 62	0.78	10	35	C	4	5	1	40.595782	-78.116001
214	4898	523	R Align 62	0.88	11	35	C	4	5	1	40.595773	-78.115987
214	4941	525	L Align 62	-1.10	26	35	C	4	5	1	40.595694	-78.115872
214	4944	524	R Align 62	-1.07	26	35	C	4	5	1	40.595688	-78.115864
214	4990	526	L Align 62	0.73	2	35	C	4	5	1	40.595603	-78.115743
214	4993	527	R Align 62	0.77	7	35	C	4	5	1	40.595598	-78.115735
213	5213		Down Milepost	213.00	0	35	C	0	0	1	40.595172	-78.115174
213	425		Posted Speed	70.00	0	35	E	0	0	1	40.594290	-78.114184
212	5253		Down Milepost	212.00	0	50	C	0	0	1	40.584667	-78.102488
212	2975		Posted Speed	79.00	0	50	T	0	0	1	40.580675	-78.093196
211	5140		Down Milepost	211.00	0	49	T	0	0	1	40.577772	-78.086429

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
210	5303		Down Milepost	210.00	0	49	T	0	0	1	40.570670	-78.069852
210	755		Posted Speed	75.00	0	49	T	0	0	1	40.569657	-78.067494
210	5285		Posted Speed	58.00	0	51	T	0	0	1	40.567125	-78.052004
209	5325		Down Milepost	209.00	0	50	T	0	0	1	40.567131	-78.051858
208	5299		Down Milepost	208.00	0	39	T	0	0	1	40.558551	-78.038653
207	5274		Down Milepost	207.00	0	44	C	0	0	1	40.544797	-78.035659
207	2589		Posted Speed	50.00	0	45	T	0	0	1	40.539426	-78.029768
207	4595		Posted Speed	65.00	0	43	E	0	0	1	40.534825	-78.026234
206	5288		Down Milepost	206.00	0	43	T	0	0	1	40.532929	-78.026135
205	5282		Down Milepost	205.00	0	49	B	0	0	1	40.518495	-78.025471
205	1408		Posted Speed	60.00	0	49	T	0	0	1	40.514682	-78.024802
203	10511		Down Milepost	203.00	0	49	T	0	0	1	40.490647	-78.020162
202	5408		Down Milepost	202.00	0	46	C	0	0	1	40.481601	-78.005900
202	434	552	R Prof 62	-1.49	5	46	C	4	5	1	40.480929	-78.004620
202	5158		Posted Speed	79.00	0	49	E	0	0	1	40.472540	-77.992037
201	5198		Down Milepost	201.00	0	49	E	0	0	1	40.472453	-77.991945
201	3626		Posted Speed	70.00	0	52	T	0	0	1	40.464651	-77.983946
201	9776		Posted Speed	75.00	0	47	T	0	0	1	40.452581	-77.968837
199	10574		Down Milepost	199.00	0	47	T	0	0	1	40.451256	-77.966566
198	5316		Down Milepost	198.00	0	49	T	0	0	1	40.443840	-77.950321
197	5290		Down Milepost	197.00	0	47	C	0	0	1	40.437082	-77.933955
196	5300		Down Milepost	196.00	0	43	C	0	0	1	40.423158	-77.930007
195	5263		Down Milepost	195.00	0	49	T	0	0	1	40.410296	-77.937732
195	1632		Posted Speed	65.00	0	49	E	0	0	1	40.406410	-77.940535
195	1896	559	Twist 31ft*	0.92	2246	49	E	4	5	1	40.405713	-77.940769
195	4141		Posted Speed	60.00	0	49	T	0	0	1	40.399744	-77.942642
194	5327		Down Milepost	194.00	0	48	C	0	0	1	40.396539	-77.942893
194	3999		Posted Speed	65.00	0	45	E	0	0	1	40.391989	-77.931789
193	5279		Down Milepost	193.00	0	44	C	0	0	1	40.393002	-77.927420
193	2398		Posted Speed	70.00	0	50	T	0	0	1	40.391707	-77.919141
192	5275		Down Milepost	192.00	0	47	C	0	0	1	40.388816	-77.909602
192	2675	566	R Align 62	1.14	19	47	T	4	5	1	40.389435	-77.900180
192	2720	567	R Align 62	-0.99	13	47	T	4	5	1	40.389472	-77.900027
192	3449	569	R Align 62	0.87	11	47	B	4	5	1	40.390084	-77.897543
192	3457	568	R Align 31	0.66	1	48	B	4	5	1	40.390090	-77.897515
191	4209		Down Milepost	191.00	0	49	C	0	0	1	40.390511	-77.894881
191	2594		Posted Speed	79.00	0	50	T	0	0	1	40.388979	-77.886002
190	5288		Down Milepost	190.00	0	49	T	0	0	1	40.385535	-77.877483
190	2390		Posted Speed	70.00	0	47	T	0	0	1	40.382482	-77.869929

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189	5278		Down Milepost	189.00	0	49	C	0	0	1	40.380444	-77.860099
188	4900		Down Milepost	188.00	0	49	T	0	0	1	40.387275	-77.845873
188	3892		Posted Speed	79.00	0	49	T	0	0	1	40.394489	-77.835970
187	5619		Down Milepost	187.00	0	49	T	0	0	1	40.396724	-77.830523
186	4916		Down Milepost	186.00	0	48	T	0	0	1	40.403222	-77.815130
185	5274		Down Milepost	185.00	0	48	C	0	0	1	40.411712	-77.799895
185	4509		Posted Speed	65.00	0	36	T	0	0	1	40.420253	-77.788262
184	5302		Down Milepost	184.00	0	36	C	0	0	1	40.421802	-77.786273
184	4609		Class Change	3.00	0	40	C	0	0	1	40.432703	-77.778165
184	4609		Posted Speed	40.00	0	40	C	0	0	1	40.432703	-77.778165
183	5350		Down Milepost	183.00	0	41	B	0	0	1	40.434151	-77.776309
183	2000		Class Change	4.00	0	37	E	0	0	1	40.435625	-77.769612
183	2000		Posted Speed	79.00	0	37	E	0	0	1	40.435625	-77.769612
182	5225		Down Milepost	182.00	0	47	T	0	0	1	40.441020	-77.760482
182	7352		Posted Speed	65.00	0	42	T	0	0	1	40.453324	-77.739679
180	10674		Down Milepost	180.00	0	25	C	0	0	1	40.461038	-77.733906
180	338		Posted Speed	79.00	0	20	E	0	0	1	40.461941	-77.733623
179	5243		Down Milepost	179.00	0	33	T	0	0	1	40.475073	-77.730013
179	1742		Posted Speed	65.00	0	38	C	0	0	1	40.479766	-77.729079
178	5295		Down Milepost	178.00	0	44	T	0	0	1	40.489252	-77.731793
177	5290		Down Milepost	177.00	0	46	T	0	0	1	40.501938	-77.725488
177	4424	590	L Prof 62	-1.43	2	52	T	4	5	1	40.510402	-77.714173
177	4424	591	R Prof 62	-1.42	2	52	T	4	5	1	40.510402	-77.714173
176	5323		Down Milepost	176.00	0	50	T	0	0	1	40.512125	-77.711872
176	3470		Posted Speed	79.00	0	49	E	0	0	1	40.514683	-77.700615
175	5288		Down Milepost	175.00	0	51	T	0	0	1	40.513407	-77.694313
175	4512		Posted Speed	65.00	0	47	T	0	0	1	40.510285	-77.678680
174	5354		Down Milepost	174.00	0	47	C	0	0	1	40.509826	-77.675720
174	1373		Posted Speed	79.00	0	47	E	0	0	1	40.509977	-77.670852
174	3995		Posted Speed	65.00	0	47	T	0	0	1	40.511742	-77.661748
173	5213		Down Milepost	173.00	0	47	C	0	0	1	40.512938	-77.657693
173	2594		Posted Speed	75.00	0	41	T	0	0	1	40.518470	-77.652060
173	5312		Posted Speed	55.00	0	39	T	0	0	1	40.525209	-77.647973
172	5357		Down Milepost	172.00	0	38	T	0	0	1	40.525322	-77.647904
171	5240		Down Milepost	171.00	0	21	C	0	0	1	40.539073	-77.646791
171	797		Posted Speed	75.00	0	20	E	0	0	1	40.540654	-77.644852
170	5308		Down Milepost	170.00	0	22	T	0	0	1	40.548470	-77.632344
169	5542		Down Milepost	169.00	0	11	T	0	0	1	40.555867	-77.615234
169	299		Class Change	1.00	0	9	B	0	0	1	40.556151	-77.614229

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169	299		Posted Speed	10.00	0	9	B	0	0	1	40.556151	-77.614229
169	630		Track Change	0.00	0	9	C	0	0	2	40.556493	-77.613130
169	862		Track Change	0.00	0	9	E	0	0	6	40.556726	-77.612355
168	5075		Down Milepost	168.00	0	8	C	0	0	6	40.561047	-77.598356
166	10205		Down Milepost	166.00	0	7	C	0	0	6	40.585897	-77.587098
166	1823		Class Change	3.00	0	9	C	0	0	6	40.587791	-77.581136
166	1823		Posted Speed	35.00	0	9	C	0	0	6	40.587791	-77.581136
166	1855		Track Change	0.00	0	9	C	0	0	2	40.587817	-77.581026
166	3552		Class Change	4.00	0	33	E	0	0	2	40.587696	-77.575368
166	3552		Posted Speed	55.00	0	33	E	0	0	2	40.587696	-77.575368
165	5344		Down Milepost	165.00	0	47	E	0	0	2	40.584488	-77.570567
165	3116		Posted Speed	75.00	0	49	T	0	0	2	40.580583	-77.560872
165	4509		Posted Speed	60.00	0	49	T	0	0	2	40.577618	-77.557736
164	5176		Down Milepost	164.00	0	49	C	0	0	2	40.576250	-77.556153
163	5213		Down Milepost	163.00	0	49	B	0	0	2	40.577232	-77.538514
163	957		Posted Speed	70.00	0	49	E	0	0	2	40.578708	-77.535704
163	3881		Posted Speed	75.00	0	50	T	0	0	2	40.582929	-77.527016
162	4987		Down Milepost	162.00	0	50	C	0	0	2	40.583994	-77.523303
161	5419		Down Milepost	161.00	0	49	T	0	0	2	40.592303	-77.507271
160	5321		Down Milepost	160.00	0	49	T	0	0	2	40.598796	-77.490218
160	4885		Posted Speed	70.00	0	50	T	0	0	2	40.602857	-77.473580
159	5258		Down Milepost	159.00	0	50	B	0	0	2	40.603073	-77.472273
159	944		Posted Speed	75.00	0	50	E	0	0	2	40.603847	-77.469044
159	4535		Posted Speed	70.00	0	49	T	0	0	2	40.607434	-77.457056
158	5320		Down Milepost	158.00	0	48	C	0	0	2	40.608154	-77.454403
158	980		Posted Speed	50.00	0	46	T	0	0	2	40.608724	-77.450967
158	3511		Posted Speed	70.00	0	43	T	0	0	2	40.607377	-77.442569
157	5265		Down Milepost	157.00	0	48	T	0	0	2	40.604276	-77.437760
157	2294	700	R Prof 62	-1.91	11	50	B	4	5	2	40.600209	-77.431502
157	2462		Posted Speed	60.00	0	50	C	0	0	2	40.599917	-77.431036
156	5338		Down Milepost	156.00	0	49	C	0	0	2	40.595140	-77.422841
155	5323		Down Milepost	155.00	0	49	E	0	0	2	40.585983	-77.409387
155	3265		Posted Speed	50.00	0	45	C	0	0	2	40.577224	-77.407431
154	5313		Down Milepost	154.00	0	41	E	0	0	2	40.572252	-77.404178
154	365		Posted Speed	75.00	0	41	E	0	0	2	40.571256	-77.404111
154	3052		Class Change	3.00	0	39	T	0	0	2	40.563909	-77.404191
154	3052		Posted Speed	40.00	0	39	T	0	0	2	40.563909	-77.404191
154	3899		Class Change	4.00	0	39	B	0	0	2	40.561608	-77.404430
154	3899		Posted Speed	50.00	0	39	B	0	0	2	40.561608	-77.404430

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
153	5143		Down Milepost	153.00	0	41	T	0	0	2	40.558238	-77.404067
153	1330		Posted Speed	65.00	0	47	C	0	0	2	40.554848	-77.402453
152	5404		Down Milepost	4.00	0	51	T	0	0	2	40.545726	-77.394102
151	5334		Down Milepost	151.00	0	49	B	0	0	2	40.533518	-77.383650
151	2090		Posted Speed	70.00	0	50	T	0	0	2	40.530329	-77.377657
150	5110		Down Milepost	150.00	0	49	C	0	0	2	40.528396	-77.367179
150	1488		Posted Speed	75.00	0	49	E	0	0	2	40.529160	-77.361987
150	3458		Posted Speed	65.00	0	37	B	0	0	2	40.531240	-77.355465
149	4883		Down Milepost	149.00	0	29	C	0	0	2	40.532059	-77.350516
149	1711	720	L Align 62	0.83	16	26	C	4	5	2	40.530773	-77.344695
149	1716	721	R Align 62	0.81	9	26	C	4	5	2	40.530766	-77.344679
149	2432		Posted Speed	75.00	0	26	E	0	0	2	40.529556	-77.342669
149	4584		Posted Speed	60.00	0	16	T	0	0	2	40.525422	-77.337181
148	5297		Down Milepost	148.00	0	19	B	0	0	2	40.524054	-77.335361
148	3390		Posted Speed	75.00	0	21	T	0	0	2	40.523396	-77.324269
147	5101		Down Milepost	147.00	0	21	B	0	0	2	40.525695	-77.318921
147	4568	725	Crosslevel	1.14	1	17	T	4	5	2	40.530266	-77.303718
146	5412		Down Milepost	146.00	0	16	T	0	0	2	40.531011	-77.300856
146	4469		Posted Speed	70.00	0	16	T	0	0	2	40.534959	-77.285708
145	5215		Down Milepost	145.00	0	17	B	0	0	2	40.535634	-77.283180
145	711		Posted Speed	75.00	0	18	T	0	0	2	40.536423	-77.280854
145	2249		Class Change	3.00	0	20	B	0	0	2	40.538243	-77.275891
145	2249		Posted Speed	40.00	0	20	B	0	0	2	40.538243	-77.275891
145	2927		Class Change	4.00	0	20	E	0	0	2	40.538984	-77.273658
145	2927		Posted Speed	75.00	0	20	E	0	0	2	40.538984	-77.273658
145	2988		Track Change	0.00	0	20	E	0	0	1	40.539056	-77.273461
144	5382		Down Milepost	144.00	0	22	T	0	0	1	40.541892	-77.265724
143	5274		Down Milepost	143.00	0	21	T	0	0	1	40.548307	-77.248801
143	763		Posted Speed	60.00	0	23	T	0	0	1	40.549424	-77.246497
142	5291		Down Milepost	142.00	0	31	B	0	0	1	40.553539	-77.231363
142	1026		Posted Speed	75.00	0	30	E	0	0	1	40.554353	-77.227864
142	5280		Posted Speed	70.00	0	31	B	0	0	1	40.560271	-77.214753
141	5316		Down Milepost	141.00	0	31	B	0	0	1	40.560323	-77.214639
141	2002		Posted Speed	75.00	0	34	E	0	0	1	40.561547	-77.207791
140	5101		Down Milepost	140.00	0	37	B	0	0	1	40.560610	-77.196751
140	5350		Posted Speed	55.00	0	37	T	0	0	1	40.562722	-77.177889
139	5387		Down Milepost	139.00	0	37	B	0	0	1	40.562748	-77.177757
139	3947		Posted Speed	75.00	0	41	C	0	0	1	40.557781	-77.166668
138	5154		Down Milepost	138.00	0	43	C	0	0	1	40.554935	-77.164473

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
138	2756	751	R Align 62	-0.80	7	44	C	4	5	1	40.548270	-77.159867
137	5370		Down Milepost	137.00	0	36	T	0	0	1	40.542222	-77.154870
136	5249		Down Milepost	136.00	0	22	T	0	0	1	40.530250	-77.144544
135	5278		Down Milepost	135.00	0	30	C	0	0	1	40.517298	-77.136198
134	5280		Down Milepost	134.00	0	38	T	0	0	1	40.503210	-77.134451
133	5253		Down Milepost	133.00	0	46	C	0	0	1	40.488989	-77.135808
132	5083		Down Milepost	132.00	0	46	C	0	0	1	40.476625	-77.127861
132	1916		Posted Speed	66.00	0	46	B	0	0	1	40.471976	-77.124707
132	3992		Posted Speed	68.00	0	46	C	0	0	1	40.468289	-77.119335
130	10306		Down Milepost	130.00	0	43	T	0	0	1	40.478458	-77.105676
129	5313		Down Milepost	129.00	0	43	C	0	0	1	40.488423	-77.094685
128	5307		Down Milepost	128.00	0	48	T	0	0	1	40.481056	-77.078973
128	4629	787	Gage Wide	57.61	2	48	E	3	5	1	40.474188	-77.065873
127	5504		Down Milepost	127.00	0	47	C	0	0	1	40.474434	-77.062758
126	5090		Down Milepost	126.00	0	45	T	0	0	1	40.475153	-77.045535
126	4524		Posted Speed	79.00	0	44	T	0	0	1	40.466681	-77.034376
125	5293		Down Milepost	125.00	0	45	T	0	0	1	40.464674	-77.033545
124	5309		Down Milepost	124.00	0	45	T	0	0	1	40.450842	-77.027804
123	5309		Down Milepost	123.00	0	46	T	0	0	1	40.437005	-77.022058
122	5313		Down Milepost	122.00	0	46	T	0	0	1	40.422916	-77.017883
122	2447		Posted Speed	75.00	0	40	T	0	0	1	40.416275	-77.016977
122	4008		Posted Speed	65.00	0	28	T	0	0	1	40.412151	-77.015573
121	5322		Down Milepost	121.00	0	27	C	0	0	1	40.408610	-77.014839
121	3579		Posted Speed	75.00	0	24	T	0	0	1	40.399837	-77.019671
120	5403		Down Milepost	120.00	0	20	T	0	0	1	40.396221	-77.024167
120	829		Posted Speed	65.00	0	18	B	0	0	1	40.394577	-77.026208
120	4476		Posted Speed	75.00	0	15	E	0	0	1	40.385338	-77.028948
120	6026		Class Change	3.00	0	28	T	0	0	1	40.381299	-77.027273
120	6026		Posted Speed	35.00	0	28	T	0	0	1	40.381299	-77.027273
120	9323		Posted Speed	55.00	0	34	T	0	0	1	40.373261	-77.023262
118	10005		Down Milepost	118.00	0	34	B	0	0	1	40.371408	-77.023533
118	2726		Class Change	4.00	0	35	T	0	0	1	40.364446	-77.020779
117	5206		Down Milepost	117.00	0	36	C	0	0	1	40.359670	-77.014628
117	4923	806	L Align 62	-0.80	10	38	B	4	5	1	40.356213	-76.997696
117	5001	807	L Align 62	0.98	17	38	B	4	5	1	40.356186	-76.997420
117	5007	808	R Align 62	0.79	14	38	C	4	5	1	40.356184	-76.997399
117	5056	809	R Align 62	-0.93	24	38	C	4	5	1	40.356170	-76.997225
116	5280		Down Milepost	116.00	0	38	E	0	0	1	40.356142	-76.996420
116	330		Posted Speed	75.00	0	38	T	0	0	1	40.356133	-76.995240

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
115	5321		Down Milepost	115.00	0	23	T	0	0	1	40.356071	-76.977401
114	5283		Down Milepost	114.00	0	22	T	0	0	1	40.357306	-76.958620
114	799		Posted Speed	55.00	0	22	T	0	0	1	40.357586	-76.955788
114	3944		Posted Speed	79.00	0	13	C	0	0	1	40.357327	-76.944628
114	4516		Class Change	3.00	0	14	B	0	0	1	40.357367	-76.942584
114	4516		Posted Speed	40.00	0	14	B	0	0	1	40.357367	-76.942584
114	5220		Track Change	0.00	0	14	C	0	0	2	40.357519	-76.940074
114	5461		Posted Speed	79.00	0	14	B	0	0	2	40.357511	-76.939213
114	6179		Class Change	3.00	0	14	C	0	0	2	40.357124	-76.936707
114	6179		Posted Speed	45.00	0	14	C	0	0	2	40.357124	-76.936707
112	10679		Down Milepost	112.00	0	16	T	0	0	2	40.346802	-76.929203
112	5255		Posted Speed	35.00	0	14	T	0	0	2	40.334084	-76.921789
111	5269		Down Milepost	111.00	0	14	T	0	0	2	40.334055	-76.921752
111	2302		Posted Speed	45.00	0	14	C	0	0	2	40.332169	-76.914801
111	4567		Posted Speed	35.00	0	12	T	0	0	2	40.334376	-76.907242
110	5465		Down Milepost	110.00	0	11	C	0	0	2	40.335094	-76.904187
110	3617		Class Change	4.00	0	12	B	0	0	2	40.328389	-76.895131
110	3617		Posted Speed	55.00	0	12	B	0	0	2	40.328389	-76.895131
109	5397		Down Milepost	109.00	0	12	C	0	0	2	40.323884	-76.893260
109	1553		Posted Speed	79.00	0	12	T	0	0	2	40.319659	-76.893720
109	7512		Class Change	3.00	0	12	B	0	0	2	40.303360	-76.893812
109	7512		Posted Speed	30.00	0	12	B	0	0	2	40.303360	-76.893812
109	8497		Class Change	4.00	0	11	C	0	0	2	40.300676	-76.893523
109	8497		Posted Speed	79.00	0	11	C	0	0	2	40.300676	-76.893523
107	10577		Down Milepost	107.00	0	6	T	0	0	2	40.295150	-76.891737
107	3963		Posted Speed	60.00	0	15	T	0	0	2	40.284651	-76.888199
106	5296		Down Milepost	106.00	0	18	T	0	0	2	40.281081	-76.887295
106	1314		Class Change	3.00	0	15	C	0	0	2	40.277597	-76.886173
106	1314		Posted Speed	30.00	0	15	C	0	0	2	40.277597	-76.886173
106	2968		Posted Speed	35.00	0	11	E	0	0	2	40.273690	-76.883263
105	5261		Down Milepost	105.00	0	18	T	0	0	2	40.267999	-76.879800

Notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Rail Impact Values are unitless; indicating a location with a large vertical axle acceleration

Rail Cant Exceptions values indicate degrees.

(RSA) indicates possible Rail Seat Abrasion. The following fields are irrelevant for Cant Exceptions: LC, PC

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Milepost 21 to Milepost 105
Duncannon, PA to Harrisburg, PA

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		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot			
MP	FT	Exc	FT	Drop	Exc	FT	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	Cls	Cls	Trk
16	5186	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	4	5	1
15	5149	-	-	-	-	-	3	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	-	-	4	5	1
14	5444	-	-	-	-	-	1	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
13	5327	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	5	1	
7	5235	-	-	-	-	-	4	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
5	5181	-	-	-	-	-	3	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
1	5208	-	-	-	-	-	2	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	1	
351	5422	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	1	
347	10289	-	-	-	-	-	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
340	5214	-	-	-	-	-	2	22	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	1	
337	5100	-	-	-	-	-	2	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	2	
330	4774	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	4	5	2	
316	5296	-	-	-	-	-	-	-	-	1	21	-	-	-	-	-	-	-	1	31	1	-	-	-	-	-	-	3	5	2	
302	5429	-	-	-	-	-	5	73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	2	
299	5323	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	62	-	1	28	1	-	3	5	2	
298	5309	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	62	1	-	-	-	-	3	5	2	
293	5272	-	-	-	-	-	-	-	-	1	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	2	
291	5098	-	-	-	-	-	3	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	2	
291	1905	-	-	-	-	-	4	38	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	2	
286	5230	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	9	-	-	4	5	1	
284	10591	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	-	-	-	-	-	-	-	-	4	5	1	
274	5487	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	8	-	-	4	5	1	
273	1006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	15	-	-	3	4	1	
270	5525	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	1	
269	5256	2	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	1	
265	5290	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	10	1	-	2	4	1	
265	2609	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	10	-	-	-	-	-	-	-	-	-	-	4	5	1	
264	5225	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	19	1	-	3	5	1	

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		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl		Tot	Lim	Pst
MP	FT	Exc	FT	Drop	Exc	FT	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	Cls	Cls	Trk
263	4863	-	-	-	-	-	-	-	-	2	74	1	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	3	5	1	
261	4867	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	26	2	-	3	5	1
259	9502	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	9	-	-	4	5	1	
255	4697	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	4	5	1	
252	5309	-	-	-	-	-	-	-	-	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
247	5231	-	-	-	-	-	2	32	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	1	
243	5204	-	-	-	-	-	2	25	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	1	
240	10265	-	-	-	-	-	-	-	-	2	109	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	1	
237	5284	1	5	-	-	-	1	6	1	3	54	-	-	-	-	-	-	-	-	-	-	-	-	1	23	-	-	2	4	1	
214	5197	-	-	-	-	-	6	82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
202	5408	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5	-	-	-	-	-	-	-	-	-	-	4	5	1	
195	5263	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2246	-	-	4	5	1	
192	5275	-	-	-	-	-	4	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
177	5290	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	-	-	-	-	-	-	-	-	-	-	4	5	1	
157	5265	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	11	-	-	-	-	-	-	-	-	-	-	4	5	2	
149	4883	-	-	-	-	-	2	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	2	
147	5101	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	2	
138	5154	-	-	-	-	-	1	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
128	5307	1	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	5	1	
117	5206	-	-	-	-	-	4	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
		8	28	2	-	-	52	559	8	11	278	2	-	-	-	8	37	-	1	31	1	2	124	1	15	2403	5	-			

Total Miles: 266.30
Exceptions per 100 Miles: 36.43
CY17 National Average Exceptions per 100 miles: 7.1

GRMS Exception Report
Exception List Section
Milepost 21 to Milepost 105
Duncannon, PA to Harrisburg, PA

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Run Date: 12/17/2018
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MP	FT	Parameter	Value	Length	UGage	LGage	PLG	GW	Latitude	Longitude
13	2768	PLG24 Maint*	58.03	3	57.16	57.72	58.03	0.49	40.534790	-80.187164
13	2982	PLG24 Maint*	58.08	3	57.24	57.78	58.08	0.47	40.534454	-80.186537
13	3008	PLG24 Maint*	58.26	9	57.29	57.87	58.26	0.55	40.534416	-80.186458
13	3177	PLG24 Maint*	58.14	4	57.19	57.76	58.14	0.54	40.534181	-80.185937
13	3277	PLG24 Maint*	58.18	12	57.35	57.86	58.17	0.48	40.534056	-80.185620
13	3317	PLG24 Maint*	58.12	7	57.34	57.82	58.12	0.44	40.534009	-80.185491
13	10279	PLG24 Maint*	58.04	4	57.11	57.67	58.04	0.53	40.527314	-80.162159
13	10528	PLG24 Maint*	58.13	6	57.21	57.76	58.13	0.53	40.527059	-80.161332
1	2694	PLG24 Maint*	58.03	3	57.11	57.69	58.03	0.51	40.449298	-79.996974
1	2717	PLG24 Maint*	58.06	5	57.03	57.69	58.06	0.58	40.449242	-79.996936
1	3154	PLG24 Maint*	58.14	4	57.11	57.72	58.14	0.58	40.448174	-79.996234
1	3462	PLG24 Maint*	58.04	4	57.15	57.7	58.04	0.53	40.447418	-79.995725
1	3662	PLG24 Maint*	58.16	6	56.74	57.64	58.16	0.79	40.446924	-79.995410
1	5553	PLG24 Maint*	58.18	5	57.24	57.81	58.18	0.54	40.445607	-79.990457
1	5694	PLG24 Maint*	58.15	5	57.39	57.86	58.15	0.43	40.445799	-79.990079
351	529	PLG24 Maint*	58.04	3	57.02	57.7	58.04	0.57	40.460953	-79.958062
351	591	PLG24 Maint*	58.02	3	57.22	57.74	58.02	0.45	40.460959	-79.957841
351	773	PLG24 Maint*	58.13	4	57.07	57.72	58.13	0.6	40.460904	-79.957197
351	856	PLG24 Maint*	58.02	3	57.15	57.66	58.02	0.49	40.460846	-79.956911
351	933	PLG24 Maint*	58.02	3	57.14	57.72	58.02	0.49	40.460771	-79.956655
351	1242	PLG24 Maint*	58.27	16	57.49	57.88	58.27	0.61	40.460309	-79.955751
351	1334	PLG24 Maint*	58.07	3	57.28	57.78	58.07	0.44	40.460124	-79.955529
278	1161	PLG24 Maint*	58.28	6	57.25	57.88	58.27	0.58	40.361779	-78.940565
278	1455	PLG24 Maint*	58.07	6	57.09	57.73	58.07	0.54	40.361029	-78.940187
270	682	PLG24 Maint*	58.08	5	57.21	57.75	58.08	0.52	40.367189	-78.856555
270	1331	PLG24 Maint*	58.06	5	57.18	57.74	58.06	0.49	40.368946	-78.856572
270	1483	PLG24 Maint*	58.08	7	57.28	57.78	58.08	0.46	40.369348	-78.856427
270	1489	PLG24 Maint*	58.11	5	57.28	57.83	58.11	0.47	40.369363	-78.856420
270	1617	PLG24 Maint*	58.09	5	57.22	57.76	58.09	0.51	40.369689	-78.856254
270	1647	PLG24 Maint*	58.13	3	57.22	57.76	58.13	0.51	40.369764	-78.856210
270	1665	PLG24 Maint*	58.09	6	57.32	57.81	58.09	0.45	40.369808	-78.856182
270	1675	PLG24 Maint*	58.01	3	57.38	57.78	58.01	0.35	40.369833	-78.856166
270	1718	PLG24 Maint*	58.20	9	57.26	57.85	58.2	0.54	40.369938	-78.856096
270	1736	PLG24 Maint*	58.12	5	57.23	57.76	58.12	0.53	40.369981	-78.856066
270	1757	PLG24 Maint*	58.44	13	57.44	58.05	58.44	0.58	40.370031	-78.856030
270	1776	PLG24 Maint*	58.16	6	57.47	57.88	58.16	0.39	40.370076	-78.855996
270	1785	PLG24 Maint*	58.22	8	57.37	57.89	58.22	0.53	40.370097	-78.855979
270	1801	PLG24 Maint*	58.04	3	57.25	57.74	58.04	0.44	40.370135	-78.855949
270	2751	PLG24 Maint*	58.08	4	57.4	57.81	58.08	0.38	40.372218	-78.853929
270	2849	PLG24 Maint*	58.29	9	57.34	57.93	58.28	0.55	40.372460	-78.853778
270	2883	PLG24 Maint*	58.26	13	57.45	57.96	58.26	0.54	40.372547	-78.853732
270	2911	PLG24 Maint*	58.05	3	57.27	57.75	58.05	0.43	40.372618	-78.853697
270	2987	PLG24 Maint*	58.01	3	57.42	57.8	58.01	0.33	40.372815	-78.853611
270	2995	PLG24 Maint*	58.03	3	57.42	57.79	58.03	0.34	40.372836	-78.853603
270	3003	PLG24 Maint*	58.09	6	57.42	57.84	58.09	0.4	40.372857	-78.853596
270	3022	PLG24 Maint*	58.18	7	57.36	57.86	58.18	0.48	40.372907	-78.853577
270	3051	PLG24 Maint*	58.02	3	57.24	57.74	58.02	0.44	40.372984	-78.853552
270	3825	PLG24 Maint*	58.09	6	57.37	57.82	58.09	0.43	40.375066	-78.853066
270	3873	PLG24 Maint*	58.05	5	57.41	57.8	58.05	0.4	40.375190	-78.853011
270	3915	PLG24 Maint*	58.26	14	57.41	57.93	58.26	0.52	40.375297	-78.852958
270	3990	PLG24 Maint*	58.19	9	57.39	57.86	58.19	0.5	40.375486	-78.852851

GRMS Exception Report
Exception List Section
Milepost 21 to Milepost 105
Duncannon, PA to Harrisburg, PA

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Run Date: 12/17/2018
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MP	FT	Parameter	Value	Length	UGage	LGage	PLG	GW	Latitude	Longitude
270	4346	PLG24 Maint*	58.03	3	57.21	57.72	58.02	0.46	40.376300	-78.852164
270	4451	PLG24 Maint*	58.15	4	57.02	57.69	58.15	0.65	40.376509	-78.851907
270	4461	PLG24 Maint*	58.11	4	57.09	57.7	58.11	0.58	40.376528	-78.851881
270	4538	PLG24 Maint*	58.17	5	57.11	57.78	58.17	0.59	40.376669	-78.851678
270	4575	PLG24 Maint*	58.06	4	57.2	57.73	58.05	0.48	40.376733	-78.851576
270	4586	PLG24 Maint*	58.16	3	57.2	57.8	58.16	0.53	40.376752	-78.851546
270	4831	PLG24 Maint*	58.04	4	57.09	57.71	58.04	0.54	40.377115	-78.850814
270	4848	PLG24 Maint*	58.04	3	57.19	57.74	58.04	0.47	40.377137	-78.850760
270	4945	PLG24 Maint*	58.08	3	57.24	57.76	58.08	0.47	40.377249	-78.850446
270	4959	PLG24 Maint*	58.09	3	57.3	57.77	58.09	0.45	40.377264	-78.850400
270	4969	PLG24 Maint*	58.18	9	57.29	57.84	58.18	0.51	40.377274	-78.850367
269	638	PLG24 Maint*	58.03	3	57.15	57.72	58.03	0.49	40.377668	-78.847127
269	3124	PLG24 Maint*	58.10	6	57.27	57.8	58.1	0.47	40.377630	-78.838344
269	3168	PLG24 Maint*	58.04	4	57.2	57.73	58.04	0.47	40.377622	-78.838188
269	3190	PLG24 Maint*	58.12	4	57.25	57.76	58.12	0.49	40.377617	-78.838109
269	3200	PLG24 Maint*	58.04	4	57.27	57.74	58.04	0.43	40.377615	-78.838074
269	3391	PLG24 Maint*	58.21	7	57.33	57.84	58.21	0.5	40.377537	-78.837400
269	3398	PLG24 Maint*	58.00	3	57.23	57.73	58.0	0.43	40.377533	-78.837375
244	1225	PLG24 Maint*	58.12	4	57.37	57.84	58.12	0.41	40.477476	-78.477714
243	5108	PLG24 Maint*	58.02	4	57.05	57.69	58.02	0.56	40.496200	-78.485371
221	4032	PLG24 Maint*	58.02	3	56.97	57.65	58.02	0.59	40.656012	-78.210470
219	4043	PLG24 Maint*	58.17	4	56.71	57.62	58.17	0.86	40.634032	-78.187624
168	4178	PLG24 Maint*	58.07	3	57.17	57.74	58.07	0.51	40.569743	-77.589357
168	4890	PLG24 Maint*	58.12	5	57.13	57.74	58.12	0.58	40.571661	-77.588933
168	4960	PLG24 Maint*	58.14	7	57.29	57.83	58.14	0.48	40.571852	-77.588911
168	5077	PLG24 Maint*	58.14	4	57.16	57.79	58.14	0.54	40.572172	-77.588882
168	5099	PLG24 Maint*	58.56	6	57.09	57.99	58.56	0.85	40.572232	-77.588877
168	9186	PLG24 Maint*	58.26	8	57.11	57.81	58.26	0.69	40.583402	-77.588563
168	9209	PLG24 Maint*	58.05	3	57.14	57.7	58.05	0.51	40.583465	-77.588556
168	9219	PLG24 Maint*	58.19	9	57.14	57.79	58.19	0.6	40.583492	-77.588553
168	9295	PLG24 Maint*	58.14	6	57.18	57.78	58.14	0.56	40.583698	-77.588522
168	9378	PLG24 Maint*	58.37	7	57.19	57.9	58.37	0.69	40.583922	-77.588473
168	9626	PLG24 Maint*	58.20	6	57.29	57.87	58.2	0.53	40.584571	-77.588226
168	9631	PLG24 Maint*	58.07	4	57.28	57.77	58.07	0.44	40.584583	-77.588220
168	9787	PLG24 Maint*	58.06	3	57.24	57.76	58.06	0.46	40.584972	-77.587986
168	9821	PLG24 Maint*	58.28	20	57.41	57.93	58.28	0.55	40.585054	-77.587928
168	9904	PLG24 Maint*	58.04	3	57.21	57.73	58.04	0.46	40.585249	-77.587776
168	9920	PLG24 Maint*	58.18	8	57.14	57.78	58.18	0.59	40.585286	-77.587745
168	9938	PLG24 Maint*	58.12	4	57.22	57.78	58.12	0.53	40.585327	-77.587709
168	9958	PLG24 Maint*	58.03	3	57.35	57.79	58.03	0.38	40.585372	-77.587669
168	10009	PLG24 Maint*	58.07	7	57.16	57.73	58.07	0.53	40.585485	-77.587562
168	10036	PLG24 Maint*	58.12	5	57.21	57.78	58.12	0.51	40.585544	-77.587504
166	94	PLG24 Maint*	58.00	3	57.22	57.72	58.0	0.44	40.586070	-77.586859
166	109	PLG24 Maint*	58.15	5	57.22	57.79	58.15	0.53	40.586097	-77.586819
166	613	PLG24 Maint*	58.39	14	57.14	57.87	58.39	0.74	40.586817	-77.585287
166	623	PLG24 Maint*	58.08	4	57.13	57.74	58.08	0.54	40.586828	-77.585254
166	2600	PLG24 Maint*	58.11	6	56.55	57.54	58.11	0.89	40.588432	-77.578487
166	2675	PLG24 Maint*	58.25	4	56.63	57.63	58.25	0.91	40.588468	-77.578223
166	2712	PLG24 Maint*	58.27	3	56.69	57.67	58.27	0.89	40.588482	-77.578091
164	1885	PLG24 Maint*	58.02	3	57.08	57.68	58.02	0.53	40.574626	-77.549944
160	3991	PLG24 Maint*	58.13	5	57.18	57.79	58.13	0.53	40.602330	-77.476719

GRMS Exception Report
Exception List Section
Milepost 21 to Milepost 105
Duncannon, PA to Harrisburg, PA

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MP	FT	Parameter	Value	Length	UGage	LGage	PLG	GW	Latitude	Longitude
128	2100	PLG24 Maint*	58.08	7	56.93	57.65	58.08	0.65	40.476689	-77.074107
128	2297	PLG24 Maint*	58.01	3	56.95	57.6	58.01	0.6	40.476329	-77.073582
128	2455	PLG24 Maint*	58.20	6	56.99	57.73	58.2	0.68	40.476061	-77.073138
128	2802	PLG24 Maint*	58.37	6	57.18	57.89	58.37	0.7	40.475535	-77.072105
128	4633	PLG24 Maint*	58.14	7	57.3	57.8	58.14	0.48	40.474189	-77.065865
128	5156	PLG24 Maint*	58.04	3	56.99	57.63	58.04	0.59	40.474282	-77.063998
117	4909	PLG24 Maint*	58.05	3	57.15	57.72	58.05	0.51	40.356220	-76.997753
112	3859	PLG24 Maint*	58.00	3	57.3	57.74	58.0	0.4	40.336834	-76.925256

Maintenance:	592	Feet at	110	Locations
PLG24:	0	Feet at	0	Locations
Gage Widening (Safety):	0	Feet at	0	Locations
Gage (Safety):	0	Feet at	0	Locations
Total Exceptions:	592	Feet at	110	Locations

Exception Report
Alignment 62 MCO Stations
Milepost 21 to Milepost 105
Duncannon, PA to Harrisburg, PA

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Run Date: 12/17/2018
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MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
340	1773	L Align 62	-1.95	2	17	B	2	3	1	40.397481	-79.815302

	MP	FT	LAlign62	LAlignMCO	RAlign62	RAlignMCO	Curve	Xlevel	Gage
1	340	1711	0.32	-0.33			-0.48	0.04	56.84
2	340	1727	0.95	-0.06			-0.86	-0.05	56.79
3	340	1742	1.48	0.18			-1.3	-0.22	56.82
4	340	1758	-0.04	-1.62			-1.81	0.22	57.06
5	340	1773	-1.95	-3.73			-2.2	0.13	56.86
6	340	1788	-1.32	-3.29			-2.6	-0.02	56.99
7	340	1804	-0.46	-2.61			-2.86	-0.0	56.74
8	340	1819	-0.13	-2.47			-2.92	0.1	56.7
9	340	1835	0.06	-2.19			-2.83	-0.02	56.63

AVG -1.79

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
340	1774	R Align 62	-2.12	10	17	B	2	3	1	40.397479	-79.815300

	MP	FT	LAlign62	LAlignMCO	RAlign62	RAlignMCO	Curve	Xlevel	Gage
1	340	1712			0.35	-0.32	-0.5	0.04	56.83
2	340	1728			1.17	0.13	-0.88	-0.05	56.78
3	340	1743			1.52	0.19	-1.34	-0.28	56.81
4	340	1759			-0.42	-2.01	-1.83	0.23	57.08
5	340	1774			-2.12	-3.89	-2.23	0.09	56.98
6	340	1789			-1.34	-3.3	-2.63	-0.02	56.89
7	340	1805			-0.38	-2.56	-2.87	0.07	56.72
8	340	1820			0.1	-2.27	-2.93	0.08	56.72
9	340	1836			0.25	-1.97	-2.81	-0.04	56.67

AVG -1.78

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
291	1989	L Align 62	1.98	10	19	B	2	3	2	40.375002	-79.106370

	MP	FT	LAlign62	LAlignMCO	RAlign62	RAlignMCO	Curve	Xlevel	Gage
1	291	1927	-0.58	-0.01			0.38	-0.15	56.77
2	291	1943	-1.16	-0.16			0.72	-0.1	56.54
3	291	1958	-1.56	-0.28			1.17	0.03	56.5
4	291	1974	-0.01	1.62			1.71	-0.12	56.74
5	291	1989	1.98	3.96			2.16	0.05	57.11
6	291	2004	1.46	3.74			2.57	0.64	57.03
7	291	2020	0.39	2.89			2.85	0.41	56.85
8	291	2035	0.43	3.08			2.87	-0.16	57.09
9	291	2051	0.55	3.05			2.71	-0.16	56.99

AVG 1.99

Exception Report
Alignment 62 MCO Stations
Milepost 21 to Milepost 105
Duncannon, PA to Harrisburg, PA

Page 2 of 2
Run Date: 12/17/2018
Run ID: 2018121701

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
247	4898	R Align 62	1.88	2	18	E	2	3	1	40.480894	-78.514968

	MP	FT	LAlign62	LAlignMCO	RAlign62	RAlignMCO	Curve	Xlevel	Gage
1	247	4836			-0.47	6.41	8.35	3.38	57.14
2	247	4852			-0.34	6.48	8.18	3.36	57.07
3	247	4867			0.4	6.92	7.88	3.21	57.08
4	247	4883			1.35	7.42	7.45	3.23	57.13
5	247	4898			1.88	7.52	6.91	3.05	57.06
6	247	4913			1.06	6.31	6.26	2.81	57.2
7	247	4929			-0.71	4.1	5.52	2.92	57.02
8	247	4944			-1.4	2.91	4.78	2.89	56.86
9	247	4960			-0.87	2.77	3.99	2.59	56.8

AVG 5.65

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
247	4900	L Align 62	1.92	7	18	E	2	3	1	40.480890	-78.514965

	MP	FT	LAlign62	LAlignMCO	RAlign62	RAlignMCO	Curve	Xlevel	Gage
1	247	4838	-0.5	6.4			8.33	3.37	57.14
2	247	4854	-0.42	6.41			8.15	3.35	57.06
3	247	4869	0.49	6.99			7.84	3.2	57.03
4	247	4885	1.44	7.46			7.39	3.23	57.18
5	247	4900	1.92	7.5			6.83	3.0	57.09
6	247	4915	1.08	6.27			6.17	2.81	57.16
7	247	4931	-0.86	3.89			5.42	2.96	56.97
8	247	4946	-1.51	2.72			4.68	2.84	56.87
9	247	4962	-0.86	2.71			3.89	2.59	56.78

AVG 5.59

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
243	5100	L Align 62	1.98	8	22	C	2	3	1	40.496189	-78.485355

	MP	FT	LAlign62	LAlignMCO	RAlign62	RAlignMCO	Curve	Xlevel	Gage
1	243	5038	-0.54	8.97			9.12	4.35	56.96
2	243	5054	-1.08	8.6			9.31	4.48	56.98
3	243	5069	-0.84	8.87			9.48	4.53	56.67
4	243	5085	0.89	10.58			9.62	4.47	56.87
5	243	5100	1.98	11.66			9.71	4.28	57.14
6	243	5115	1.02	10.69			9.76	4.25	57.18
7	243	5131	-0.18	9.53			9.7	4.22	57.02
8	243	5146	-0.57	9.19			9.64	4.21	56.73
9	243	5162	-0.59	9.08			9.54	4.2	56.96

AVG 9.69

DOTX 219 Geometry Car

United States Department of Transportation

AUTOMATED TRACK INSPECTION PROGRAM

TRACK GEOMETRY INSPECTION REPORT

Cleveland, OH to Buffalo, NY

Railroad: NORFOLK SOUTHERN CORPORATION (NS)

Survey Number: 1924

Mile Post 182 to Mile Post 418



Prepared for:

United States Department of Transportation
Federal Railroad Administration
Office of Safety
Washington, D.C.

Prepared by:

ENSCO, Inc.
5400 Port Royal Rd
Springfield, VA 22151



Testing Cert. 2411.01

Approved By:

Survey Director:

CLAYTON SHANK

Signature

Date

Under the U.S. Department of Transportation, Federal Railroad Administration (FRA), Office of Safety Assurance and Compliance, Automated Track Inspection Program and in accordance with 49 CFR 213 Federal Track Safety Standards, this Track Geometry Inspection Report provides a list of exceptions that relate only to the time and date the track was inspected and the required remedial action taken. This compliance report is offered only to the track owner and is not to be reproduced to others in whole or part without the expressed written consent of the FRA and the track owner. FRA requests any reprinting be labeled as a copy of the original.

NOTES

An Automated Track Inspection Program (ATIP) Track Geometry Inspection Report (TGIR) is generated for each ATIP survey. The TGIR summarizes the data collected and can be used in conjunction with the strip chart. The TGIR is generated electronically onboard the car and hard copies are distributed as follows:

1. One (1) copy is provided to onboard railroad representative, as requested
2. One (1) copy is provided to onboard FRA Inspector, as requested
3. One (1) copy is archived for FRA management

Following ATIP Compliance survey operations, electronic copies of TGIRs are distributed via email, to a list of recipients designated by FRA and railroad management.

The TGIR may consist of ten (10) parts;

1. Cover,
2. Notes,
3. Exception List,
4. Curve Analysis,
5. Exception Summary,
6. Track Quality Index (TQI),
7. GRMS Exception List (if equipped),
8. Class+1 (C+1) Exception List,
9. C+1 Exception Summary,
10. Alinement MCO worksheet.

Track measurement sample frequency is once per foot.

Exceptions may not be reported for Alinement and Profile parameters when ATIP car speed is less than fifteen (15) and five (5) miles per hour, respectively.

Exception List symbols/notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49CFR 213.57(b).

Rail Impact Values are unit-less; indicating a location with a large vertical axle acceleration.

Rail Cant Exception denoted with (RSA) indicates possible Rail Seat Abrasion.

The following fields are not applicable for Limited Speed, Ride Quality [in classes 1-5], and Rail Cant:

Limited Class (LC); Posted Class (PC).

All Exception Parameter values are reported in inches, except for the following:

- Limiting Speed (Vmax) expressed in: MPH
- Ride Quality; Carbody Lateral, Carbody Vertical, Truck Lateral expressed in: g (gravitational acceleration)
- Rail Cant; Left (L) and Right (R), NEG[ative] and POS[itive] expressed in: angular degrees (°)

For Alinement exceptions: Negative (-) values indicate rail shifting to the right and Positive (+) values indicate rail shifting to the left, referencing direction of ATIP car travel during testing.

Alinement exceptions reported in turnout paths are considered Federal Track Safety Standard Advisory.

For Rail Cant exceptions: Negative (-) values indicate an outward shift in the rail angle, and Positive (+) values indicate an inward shift in the rail angle. Rail Cant exceptions have a minimum length of 15 feet.

A complete description of the information provided in the TGIR is available at

<https://www.fra.dot.gov/eLib/Details/L04545>

ATIP survey exceptions are available for review the next business day, and ATIP track measurement foot by foot data is available the following week at: https://tdms.fra.dot.gov/tdms_lite

Exception Report
Exception List Section
Milepost 182 to Milepost 418
Cleveland, OH to Buffalo, NY

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Run Date: 04/09/2019
Run ID: 2019040901

MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	0		Track Change	0.00	0	1	T	0	0	7		
0	142		State Line	OH	0	4	T	0	0	7		
0	143		Railroad	NS -	0	4	T	0	0	7		
0	144		Subdivision	LAKE	0	4	T	0	0	7		
0	185		Track Change	0.00	0	5	B	0	0	7	41.483239	-81.657959
0	185		Class Change	1.00	0	5	B	0	0	7	41.483239	-81.657959
0	185		Posted Speed	10.00	0	5	B	0	0	7	41.483239	-81.657959
0	670	1	L Cant NEG*(100DY)	-4.50	19	6	B		1	7	41.482513	-81.656496
0	698	2	R Cant NEG*(110REHF)	-5.70	15	6	B		1	7	41.482470	-81.656412
0	1765		Class Change	1.00	0	5	B	0	0	7	41.481682	-81.652745
0	1765		Posted Speed	10.00	0	5	B	0	0	7	41.481682	-81.652745
0	2584	6	L Cant NEG*(124BCR)	-2.90	32	6	B		1	7	41.482100	-81.649849
0	2743	7	R Cant NEG*(124BCR)	-2.60	18	2	B		1	7	41.482268	-81.649314
182	3457		Down Milepost	182.00	0	8	T	0	0	7	41.482939	-81.646872
182	2217		Class Change	2.00	0	1	E	0	0	7	41.485095	-81.639338
182	2217		Posted Speed	25.00	0	1	E	0	0	7	41.485095	-81.639338
182	2233		Track Change	0.00	0	1	T	0	0	2	41.485110	-81.639284
182	2366		Class Change	3.00	0	5	E	0	0	2	41.485234	-81.638830
182	2366		Posted Speed	60.00	0	5	E	0	0	2	41.485234	-81.638830
182	2384		Posted Speed	40.00	0	5	T	0	0	2	41.485250	-81.638769
181	5522		Down Milepost	181.00	0	13	T	0	0	2	41.487528	-81.627934
180	5350		Down Milepost	180.00	0	10	T	0	0	2	41.495900	-81.611980
179	5118		Down Milepost	179.00	0	23	C	0	0	2	41.506748	-81.600979
179	1752		Class Change	4.00	0	19	T	0	0	2	41.511524	-81.600749
179	1752		Posted Speed	60.00	0	19	T	0	0	2	41.511524	-81.600749
179	2072		Posted Speed	5.00	0	19	B	0	0	2	41.512398	-81.600729
179	2528		Posted Speed	45.00	0	19	C	0	0	2	41.513612	-81.600386
179	2788		Posted Speed	60.00	0	20	E	0	0	2	41.514262	-81.600004
179	3789		Posted Speed	45.00	0	22	T	0	0	2	41.516714	-81.598387
179	4481		Posted Speed	60.00	0	23	E	0	0	2	41.518337	-81.597102
179	6645		Posted Speed	45.00	0	25	B	0	0	2	41.523114	-81.592454
179	7070		Posted Speed	60.00	0	26	E	0	0	2	41.524065	-81.591572
179	7810		Posted Speed	45.00	0	26	B	0	0	2	41.525750	-81.590075
179	8168		Posted Speed	60.00	0	26	C	0	0	2	41.526549	-81.589323
177	10675		Down Milepost	177.00	0	22	T	0	0	2	41.532070	-81.583907
177	720	26	Crosslevel	-1.58	34	21	T	3	4	2	41.533659	-81.582360
176	5271		Down Milepost	176.00	0	24	T	0	0	2	41.543692	-81.572566
175	5255		Down Milepost	175.00	0	18	T	0	0	2	41.555285	-81.561257
175	733		Posted Speed	50.00	0	18	T	0	0	2	41.556901	-81.559681

Exception Report
Exception List Section
Milepost 182 to Milepost 418
Cleveland, OH to Buffalo, NY

Page 2 of 8
Run Date: 04/09/2019
Run ID: 2019040901

MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
175	857		Posted Speed	60.00	0	17	T	0	0	2	41.557174	-81.559414
175	1286		Posted Speed	50.00	0	17	T	0	0	2	41.558120	-81.558491
175	2197		Posted Speed	60.00	0	15	E	0	0	2	41.559997	-81.556325
174	5761		Down Milepost	174.00	0	21	T	0	0	2	41.566298	-81.546428
173	5786		Down Milepost	173.00	0	18	T	0	0	2	41.576526	-81.530352
172	4460		Down Milepost	172.00	0	36	T	0	0	2	41.584405	-81.517956
172	143		Track Change	0.00	0	36	T	0	0	5	41.584658	-81.517559
171	5246		Down Milepost	171.00	0	39	T	0	0	5	41.593678	-81.503380
170	5265		Down Milepost	170.00	0	34	T	0	0	5	41.602979	-81.488739
169	5340		Down Milepost	169.00	0	38	T	0	0	5	41.612420	-81.473898
169	1806	36	Lmt Speed 3+	57.00	667	40	C		4	5	41.615599	-81.468865
168	5290		Down Milepost	168.00	0	39	T	0	0	5	41.620967	-81.458379
167	5302		Down Milepost	167.00	0	37	T	0	0	5	41.629113	-81.442393
167	1092		Class Change	3.00	0	38	T	0	0	5	41.630790	-81.439100
167	1092		Posted Speed	40.00	0	38	T	0	0	5	41.630790	-81.439100
167	3628		Class Change	4.00	0	41	T	0	0	5	41.634680	-81.431455
167	3628		Posted Speed	60.00	0	41	T	0	0	5	41.634680	-81.431455
166	5146		Down Milepost	166.00	0	41	T	0	0	5	41.637014	-81.426875
166	411		Subdivision	LAKE	0	42	T	0	0	5	41.637645	-81.425635
166	3942		Posted Speed	50.00	0	52	B	0	0	5	41.643066	-81.414987
165	5414		Down Milepost	165.00	0	49	T	0	0	5	41.644301	-81.409995
165	4040	37	Twist 31ft*	1.17	4	44	E	3	4	5	41.645441	-81.395615
165	4086	40	Warp 62	2.05	62	44	E	2	4	5	41.645515	-81.395480
165	4247		Posted Speed	60.00	0	44	T	0	0	5	41.645781	-81.395012
163	10646		Down Milepost	163.00	0	50	T	0	0	5	41.656478	-81.376557
162	5851		Down Milepost	162.00	0	56	T	0	0	5	41.666258	-81.359675
161	4726		Down Milepost	161.00	0	53	T	0	0	5	41.673905	-81.345795
160	5273		Down Milepost	160.00	0	58	T	0	0	5	41.681714	-81.329624
159	5332		Down Milepost	159.00	0	58	T	0	0	5	41.689608	-81.313274
158	5275		Down Milepost	158.00	0	54	T	0	0	5	41.697418	-81.297088
157	5193		Down Milepost	157.00	0	57	T	0	0	5	41.703236	-81.279880
156	4965		Down Milepost	156.00	0	50	T	0	0	5	41.708076	-81.262955
155	5759		Down Milepost	155.00	0	44	T	0	0	5	41.713686	-81.243323
154	5301		Down Milepost	154.00	0	50	T	0	0	5	41.716686	-81.224544
154	1632		Posted Speed	50.00	0	45	C	0	0	5	41.717182	-81.218627
154	2702		Posted Speed	60.00	0	44	T	0	0	5	41.718484	-81.215157
152	10795		Down Milepost	152.00	0	46	T	0	0	5	41.730603	-81.190454
151	5123		Down Milepost	151.00	0	42	T	0	0	5	41.738280	-81.174818
150	5273		Down Milepost	150.00	0	38	T	0	0	5	41.746173	-81.158712

Exception Report
Exception List Section
Milepost 182 to Milepost 418
Cleveland, OH to Buffalo, NY

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Run Date: 04/09/2019
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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
149	5333		Down Milepost	149.00	0	14	T	0	0	5	41.754154	-81.142421
149	1431		Class Change	1.00	0	11	T	0	0	5	41.756326	-81.138079
149	1431		Posted Speed	10.00	0	11	T	0	0	5	41.756326	-81.138079
149	1657		Track Change	0.00	0	10	T	0	0	7	41.756665	-81.137385
149	1730		Track Change	0.00	0	10	B	0	0	6	41.756773	-81.137161
148	4998		Down Milepost	148.00	0	7	T	0	0	6	41.759478	-81.125832
148	3316		Track Change	0.00	0	11	E	0	0	5	41.761758	-81.114111
148	3458		Class Change	4.00	0	12	T	0	0	5	41.761856	-81.113610
148	3458		Posted Speed	60.00	0	12	T	0	0	5	41.761856	-81.113610
147	5526		Down Milepost	147.00	0	23	T	0	0	5	41.763300	-81.106308
146	5346		Down Milepost	146.00	0	23	T	0	0	5	41.767028	-81.087435
145	5291		Down Milepost	145.00	0	27	T	0	0	5	41.770713	-81.068755
144	5532		Down Milepost	144.00	0	21	T	0	0	5	41.774417	-81.049173
143	5248		Down Milepost	143.00	0	23	T	0	0	5	41.778326	-81.030725
142	5137		Down Milepost	142.00	0	19	T	0	0	5	41.782687	-81.012885
141	5171		Down Milepost	141.00	0	27	T	0	0	5	41.787181	-80.994966
141	2486		Class Change	2.00	0	19	T	0	0	5	41.789335	-80.986354
141	2486		Posted Speed	25.00	0	19	T	0	0	5	41.789335	-80.986354
140	5298		Down Milepost	140.00	0	20	T	0	0	5	41.791770	-80.976605
139	5305		Down Milepost	139.00	0	22	T	0	0	5	41.796360	-80.958212
139	2278		Class Change	4.00	0	20	T	0	0	5	41.798325	-80.950317
139	2278		Posted Speed	60.00	0	20	T	0	0	5	41.798325	-80.950317
137	10657		Down Milepost	137.00	0	25	T	0	0	5	41.805539	-80.921245
136	5394		Down Milepost	136.00	0	60	T	0	0	5	41.810176	-80.902533
135	5246		Down Milepost	135.00	0	58	T	0	0	5	41.816708	-80.885589
134	5246		Down Milepost	134.00	0	58	T	0	0	5	41.824457	-80.869457
133	5226		Down Milepost	133.00	0	55	T	0	0	5	41.832170	-80.853379
132	5548		Down Milepost	132.00	0	50	T	0	0	5	41.840358	-80.836305
131	5004		Down Milepost	131.00	0	41	T	0	0	5	41.847738	-80.820897
130	5484		Down Milepost	130.00	0	30	T	0	0	5	41.855824	-80.804013
130	565		Class Change	3.00	0	30	T	0	0	5	41.856655	-80.802272
130	565		Posted Speed	35.00	0	30	T	0	0	5	41.856655	-80.802272
129	5270		Down Milepost	129.00	0	28	B	0	0	5	41.863221	-80.787507
129	5280		Class Change	4.00	0	29	T	0	0	5	41.863813	-80.769059
129	5280		Posted Speed	60.00	0	29	T	0	0	5	41.863813	-80.769059
128	5312		Down Milepost	128.00	0	29	T	0	0	5	41.863854	-80.768952
127	5357		Down Milepost	127.00	0	63	T	0	0	5	41.870547	-80.751517
126	5200		Down Milepost	126.00	0	57	T	0	0	5	41.877034	-80.734589
125	5830		Down Milepost	125.00	0	58	T	0	0	5	41.884302	-80.715606

Exception Report
Exception List Section
Milepost 182 to Milepost 418
Cleveland, OH to Buffalo, NY

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Run Date: 04/09/2019
Run ID: 2019040901

MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
124	4771		Down Milepost	124.00	0	58	T	0	0	5	41.890245	-80.700067
123	5328		Down Milepost	123.00	0	39	T	0	0	5	41.896882	-80.682712
122	5287		Down Milepost	122.00	0	31	T	0	0	5	41.904687	-80.666441
121	4853		Down Milepost	121.00	0	4	T	0	0	5	41.912076	-80.651687
121	1260		Class Change	2.00	0	15	B	0	0	5	41.913994	-80.647862
121	1260		Posted Speed	25.00	0	15	B	0	0	5	41.913994	-80.647862
120	5742		Down Milepost	120.00	0	26	T	0	0	5	41.920845	-80.634256
119	5151		Down Milepost	119.00	0	27	T	0	0	5	41.928682	-80.618583
118	5508		Down Milepost	118.00	0	22	T	0	0	5	41.936559	-80.601414
118	4639		Class Change	1.00	0	9	B	0	0	5	41.942410	-80.586367
118	4639		Posted Speed	10.00	0	9	B	0	0	5	41.942410	-80.586367
118	4782		Track Change	0.00	0	9	E	0	0	7	41.942559	-80.585883
116	11004		Down Milepost	116.00	0	7	B	0	0	7	41.945628	-80.563560
116	642		Track Change	0.00	0	5	T	0	0	5	41.945826	-80.561224
116	642		Class Change	2.00	0	5	T	0	0	5	41.945826	-80.561224
116	642		Posted Speed	20.00	0	5	T	0	0	5	41.945826	-80.561224
116	829		Class Change	4.00	0	8	T	0	0	5	41.945899	-80.560547
116	829		Posted Speed	60.00	0	8	T	0	0	5	41.945899	-80.560547
114	10522		Down Milepost	114.00	0	59	T	0	0	5	41.949683	-80.525408
113	5299		Down Milepost	113.00	0	59	T	0	0	5	41.952925	-80.506571
112	4912		Down Milepost	112.00	0	58	T	0	0	5	41.957428	-80.489620
111	5298		Down Milepost	111.00	0	56	T	0	0	5	41.962285	-80.471330
110	5321		Down Milepost	110.00	0	49	T	0	0	5	41.967168	-80.452966
109	5264		Down Milepost	109.00	0	49	T	0	0	5	41.971989	-80.434797
108	5320		Down Milepost	108.00	0	47	T	0	0	5	41.976854	-80.416430
107	5413		Down Milepost	107.00	0	47	C	0	0	5	41.984960	-80.399967
106	5165		Down Milepost	106.00	0	42	T	0	0	5	41.989634	-80.382120
105	5287		Down Milepost	105.00	0	32	T	0	0	5	41.994279	-80.363770
105	332		Posted Speed	50.00	0	31	T	0	0	5	41.994570	-80.362617
105	1928		Posted Speed	60.00	0	33	T	0	0	5	41.996798	-80.357694
104	5125		Down Milepost	104.00	0	35	T	0	0	5	42.002967	-80.349391
104	2300		Posted Speed	50.00	0	31	B	0	0	5	42.007401	-80.343414
104	3579		Posted Speed	60.00	0	28	E	0	0	5	42.009260	-80.339521
103	5394		Down Milepost	103.00	0	34	T	0	0	5	42.010501	-80.333082
103	1376		Posted Speed	50.00	0	41	T	0	0	5	42.011435	-80.328189
103	3152		Posted Speed	60.00	0	45	T	0	0	5	42.013108	-80.322121
102	5399		Down Milepost	102.00	0	34	T	0	0	5	42.016263	-80.315052
101	5294		Down Milepost	101.00	0	33	T	0	0	5	42.023696	-80.298392
100	5340		Down Milepost	100.00	0	34	T	0	0	5	42.031637	-80.281962

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
99	5290		Down Milepost	99.00	0	35	T	0	0	5	42.038839	-80.265158
98	5263		Down Milepost	98.00	0	37	T	0	0	5	42.045611	-80.248123
97	5057		Down Milepost	97.00	0	36	T	0	0	5	42.052116	-80.231753
97	2089		State Line	PA	0	37	T	0	0	5	42.054685	-80.224910
97	2603		Posted Speed	50.00	0	36	T	0	0	5	42.055306	-80.223219
97	4070		Posted Speed	4.00	0	36	E	0	0	5	42.057214	-80.218497
97	4408		Posted Speed	60.00	0	36	T	0	0	5	42.057792	-80.217529
96	5040		Down Milepost	96.00	0	36	T	0	0	5	42.058879	-80.215727
95	5789		Down Milepost	95.00	0	43	C	0	0	5	42.068837	-80.199213
94	5577		Down Milepost	94.00	0	27	T	0	0	5	42.076373	-80.181432
93	4143		Down Milepost	93.00	0	28	T	0	0	5	42.081860	-80.168133
92	6088		Down Milepost	92.00	0	25	T	0	0	5	42.089925	-80.148589
91	5670		Down Milepost	91.00	0	38	T	0	0	5	42.097905	-80.130783
90	5282		Down Milepost	90.00	0	40	T	0	0	5	42.106645	-80.115349
90	3365		Class Change	3.00	0	39	T	0	0	5	42.112213	-80.105516
90	3365		Posted Speed	40.00	0	39	T	0	0	5	42.112213	-80.105516
89	5252		Down Milepost	89.00	0	38	B	0	0	5	42.115143	-80.099815
88	5360		Down Milepost	88.00	0	35	T	0	0	5	42.120477	-80.081483
87	5302		Down Milepost	87.00	0	32	T	0	0	5	42.125654	-80.063469
87	2859		Class Change	4.00	0	35	C	0	0	5	42.127503	-80.053429
87	2859		Posted Speed	60.00	0	35	C	0	0	5	42.127503	-80.053429
86	5303		Down Milepost	86.00	0	39	T	0	0	5	42.131332	-80.046075
85	4721		Down Milepost	85.00	0	41	T	0	0	5	42.138332	-80.031534
84	5866		Down Milepost	84.00	0	44	T	0	0	5	42.145463	-80.012232
83	5363		Down Milepost	83.00	0	46	T	0	0	5	42.151970	-79.994581
82	5287		Down Milepost	82.00	0	41	T	0	0	5	42.158374	-79.977161
81	5219		Down Milepost	81.00	0	37	T	0	0	5	42.164460	-79.959822
80	5273		Down Milepost	80.00	0	43	T	0	0	5	42.171068	-79.942616
79	5366		Down Milepost	79.00	0	50	T	0	0	5	42.177560	-79.924936
78	5277		Down Milepost	78.00	0	51	T	0	0	5	42.183939	-79.907542
77	5297		Down Milepost	77.00	0	49	T	0	0	5	42.190341	-79.890080
76	5315		Down Milepost	76.00	0	49	T	0	0	5	42.196763	-79.872553
75	5302		Down Milepost	75.00	0	55	T	0	0	5	42.203169	-79.855069
73	10591		Down Milepost	73.00	0	56	T	0	0	5	42.216068	-79.820207
72	5296		Down Milepost	72.00	0	49	T	0	0	5	42.222507	-79.802760
72	3882		Posted Speed	50.00	0	45	T	0	0	5	42.227608	-79.790247
72	5261		Posted Speed	60.00	0	40	E	0	0	5	42.228944	-79.785571
71	5308		Down Milepost	71.00	0	40	E	0	0	5	42.228953	-79.785395
71	2369		Posted Speed	50.00	0	35	T	0	0	5	42.229336	-79.776696

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
71	4007		Class Change	3.00	0	34	E	0	0	5	42.230440	-79.770967
71	4007		Posted Speed	40.00	0	34	E	0	0	5	42.230440	-79.770967
71	4893		Class Change	4.00	0	34	T	0	0	5	42.231939	-79.768409
71	4893		Posted Speed	60.00	0	34	T	0	0	5	42.231939	-79.768409
70	5395		Down Milepost	70.00	0	33	T	0	0	5	42.232801	-79.766966
70	2186		State Line	NY	0	34	T	0	0	5	42.236551	-79.760705
69	5326		Down Milepost	69.00	0	26	T	0	0	5	42.241936	-79.751710
68	5175		Down Milepost	68.00	0	25	T	0	0	5	42.250812	-79.736873
67	5558		Down Milepost	67.00	0	21	T	0	0	5	42.259930	-79.720539
66	5045		Down Milepost	66.00	0	32	T	0	0	5	42.267129	-79.704690
65	5293		Down Milepost	65.00	0	58	T	0	0	5	42.274670	-79.688054
64	5267		Down Milepost	64.00	0	59	T	0	0	5	42.282357	-79.671657
63	5322		Down Milepost	63.00	0	58	T	0	0	5	42.290604	-79.655507
62	5306		Down Milepost	62.00	0	59	T	0	0	5	42.298821	-79.639390
61	5300		Down Milepost	61.00	0	56	T	0	0	5	42.307023	-79.623301
60	5299		Down Milepost	60.00	0	53	T	0	0	5	42.315230	-79.607215
59	5400		Down Milepost	59.00	0	47	T	0	0	5	42.323456	-79.590702
58	5245		Down Milepost	58.00	0	52	T	0	0	5	42.331180	-79.574530
57	5239		Down Milepost	57.00	0	56	T	0	0	5	42.339929	-79.559251
56	5290		Down Milepost	56.00	0	57	T	0	0	5	42.348172	-79.543228
55	5306		Down Milepost	55.00	0	58	T	0	0	5	42.356434	-79.527150
54	5305		Down Milepost	54.00	0	59	T	0	0	5	42.364692	-79.511067
53	5258		Down Milepost	53.00	0	56	T	0	0	5	42.372874	-79.495124
52	5337		Down Milepost	52.00	0	57	T	0	0	5	42.381174	-79.478939
51	5275		Down Milepost	51.00	0	58	T	0	0	5	42.389372	-79.462928
50	5291		Down Milepost	50.00	0	55	T	0	0	5	42.397587	-79.446864
49	5302		Down Milepost	49.00	0	57	T	0	0	5	42.406607	-79.431704
48	5308		Down Milepost	48.00	0	59	T	0	0	5	42.417761	-79.419178
47	5285		Down Milepost	47.00	0	58	T	0	0	5	42.428867	-79.406709
46	5341		Down Milepost	46.00	0	54	T	0	0	5	42.440102	-79.394122
45	5276		Down Milepost	45.00	0	48	T	0	0	5	42.451200	-79.381687
44	5299		Down Milepost	44.00	0	48	T	0	0	5	42.462351	-79.369198
44	3944		Posted Speed	50.00	0	47	T	0	0	5	42.470648	-79.359905
43	5285		Down Milepost	43.00	0	46	C	0	0	5	42.473206	-79.356403
43	1321		Posted Speed	60.00	0	43	T	0	0	5	42.473871	-79.351680
43	5114		Class Change	3.00	0	40	T	0	0	5	42.473801	-79.337676
43	5114		Posted Speed	40.00	0	40	T	0	0	5	42.473801	-79.337676
42	5278		Down Milepost	42.00	0	40	T	0	0	5	42.473798	-79.337067
42	3823	191	Twist 31ft*	1.51	2	35	E	2	3	5	42.475643	-79.323762

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
41	5397		Down Milepost	41.00	0	38	T	0	0	5	42.479115	-79.320322
41	4431		Class Change	4.00	0	38	C	0	0	5	42.488338	-79.310263
41	4431		Posted Speed	60.00	0	38	C	0	0	5	42.488338	-79.310263
40	5221		Down Milepost	40.00	0	36	T	0	0	5	42.489441	-79.307744
39	5297		Down Milepost	39.00	0	54	T	0	0	5	42.495419	-79.289932
38	5283		Down Milepost	38.00	0	59	T	0	0	5	42.501453	-79.272211
37	5293		Down Milepost	37.00	0	52	T	0	0	5	42.508433	-79.255080
36	5322		Down Milepost	36.00	0	25	T	0	0	5	42.515449	-79.237856
35	5346		Down Milepost	35.00	0	26	T	0	0	5	42.522491	-79.220552
34	5268		Down Milepost	34.00	0	25	T	0	0	5	42.529438	-79.203491
33	5213		Down Milepost	33.00	0	24	T	0	0	5	42.538160	-79.188611
32	5184		Down Milepost	32.00	0	36	T	0	0	5	42.546436	-79.173538
32	2392		Posted Speed	50.00	0	33	T	0	0	5	42.549617	-79.165818
31	5283		Down Milepost	31.00	0	35	C	0	0	5	42.551372	-79.155804
31	4233		Posted Speed	60.00	0	24	T	0	0	5	42.553797	-79.141931
30	5667		Down Milepost	30.00	0	23	T	0	0	5	42.556316	-79.137868
30	3894		Class Change	2.00	0	21	T	0	0	5	42.562887	-79.126557
30	3894		Posted Speed	25.00	0	21	T	0	0	5	42.562887	-79.126557
30	4401		Class Change	4.00	0	21	T	0	0	5	42.563653	-79.124996
30	4401		Posted Speed	60.00	0	21	T	0	0	5	42.563653	-79.124996
29	4629		Down Milepost	29.00	0	21	T	0	0	5	42.563999	-79.124291
28	5733		Down Milepost	28.00	0	49	T	0	0	5	42.574123	-79.108320
27	5212		Down Milepost	27.00	0	52	T	0	0	5	42.584266	-79.094785
25	10741		Down Milepost	26.00	0	49	T	0	0	5	42.604771	-79.066345
24	5259		Down Milepost	24.00	0	53	T	0	0	5	42.614436	-79.051936
23	5330		Down Milepost	23.00	0	50	T	0	0	5	42.624243	-79.037343
22	5265		Down Milepost	22.00	0	56	C	0	0	5	42.634815	-79.024196
21	5301		Down Milepost	21.00	0	54	B	0	0	5	42.647688	-79.015208
20	5229		Down Milepost	20.00	0	57	T	0	0	5	42.658833	-79.003124
19	5359		Down Milepost	19.00	0	57	T	0	0	5	42.669937	-78.990177
18	5262		Down Milepost	18.00	0	59	T	0	0	5	42.680522	-78.976986
17	5343		Down Milepost	17.00	0	57	T	0	0	5	42.691287	-78.963600
16	5282		Down Milepost	16.00	0	39	T	0	0	5	42.701937	-78.950380
15	5339		Down Milepost	15.00	0	44	T	0	0	5	42.712693	-78.937005
14	4984		Down Milepost	14.00	0	46	T	0	0	5	42.722698	-78.924463
14	5167	214	R Cant POS*(132RE)	5.60	27	33	T		4	5	42.732541	-78.910733
13	5701		Down Milepost	13.00	0	33	T	0	0	5	42.733560	-78.909315
12	5188		Down Milepost	12.00	0	38	T	0	0	5	42.743446	-78.895519
11	5434		Down Milepost	11.00	0	34	T	0	0	5	42.753545	-78.880742

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
10	5150		Down Milepost	10.00	0	30	T	0	0	5	42.763049	-78.866651
9	5344		Down Milepost	9.00	0	24	T	0	0	5	42.772915	-78.852028
8	5268		Down Milepost	8.00	0	28	C	0	0	5	42.783537	-78.839049
7	5288		Down Milepost	7.00	0	28	T	0	0	5	42.797015	-78.832069
7	257		Class Change	3.00	0	28	T	0	0	5	42.797688	-78.831791
7	257		Posted Speed	35.00	0	28	T	0	0	5	42.797688	-78.831791
7	3442		Track Change	0.00	0	25	T	0	0	2	42.806330	-78.832105
6	5309		Down Milepost	6.00	0	23	T	0	0	2	42.811419	-78.832686
6	4958		Class Change	4.00	0	21	C	0	0	2	42.824906	-78.834413
6	4958		Posted Speed	60.00	0	21	C	0	0	2	42.824906	-78.834413
5	5315		Down Milepost	5.00	0	20	E	0	0	2	42.825869	-78.834645
5	5161		Class Change	3.00	0	16	T	0	0	2	42.839246	-78.840583
5	5161		Posted Speed	35.00	0	16	T	0	0	2	42.839246	-78.840583
4	5607		Down Milepost	4.00	0	15	T	0	0	2	42.840387	-78.841177
3	5286		Down Milepost	3.00	0	13	T	0	0	2	42.853940	-78.848010
3	2126		Class Change	1.00	0	13	T	0	0	2	42.859412	-78.848923
3	2126		Posted Speed	10.00	0	13	T	0	0	2	42.859412	-78.848923
3	6365		Subdivision	SOUTHE	0	12	T	0	0	2	42.869798	-78.841942
3	9021		Track Change	0.00	0	13	T	0	0	7	42.875618	-78.836573
422	9205		Down Milepost	422.00	0	10	B	0	0	7	42.875833	-78.835950
422	410		Class Change	2.00	0	8	C	0	0	7	42.876334	-78.834584
422	410		Posted Speed	15.00	0	8	C	0	0	7	42.876334	-78.834584
421	5147		Down Milepost	421.00	0	14	T	0	0	7	42.882707	-78.819596
420	5635		Down Milepost	420.00	0	12	T	0	0	7	42.885178	-78.799119
420	930		Track Change	0.00	0	12	T	0	0	5	42.886096	-78.795898
420	1083		Class Change	3.00	0	12	T	0	0	5	42.886235	-78.795361
420	1083		Posted Speed	35.00	0	12	T	0	0	5	42.886235	-78.795361
420	1405		Posted Speed	40.00	0	13	T	0	0	5	42.886527	-78.794233
419	5227		Down Milepost	419.00	0	13	T	0	0	5	42.889993	-78.780830
418	5203		Down Milepost	418.00	0	12	T	0	0	5	42.894746	-78.762601
418	1125		Class Change	1.00	0	5	B	0	0	5	42.895767	-78.758655
418	1125		Posted Speed	10.00	0	5	B	0	0	5	42.895767	-78.758655
418	1230		Track Change	0.00	0	6	B	0	0	7	42.895871	-78.758292

Notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Rail Impact Values are unitless; indicating a location with a large vertical axle acceleration

Rail Cant Exceptions values indicate degrees.

(RSA) indicates possible Rail Seat Abrasion. The following fields are irrelevant for Cant Exceptions: LC, PC

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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

						Average					Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
7	0	172	0	266	95	6	-0/17	0.51	10	101	0	213	-0/18	0.78	0	0	101	123	141	157	172	185	197	
7	0	353	0	433	81	5	-0/21	-0.39	10	105	0	394	-0/24	-0.19	0	0	105	122	136	148	160	171	181	
7	0	433	0	610	178	5	5/25	-0.18	10	26	0	546	5/29	-0.37	0	0	26	30	34	38	41	44	47	
7	0	610	0	805	196	6	-5/33	-0.79	10	29	0	685	-5/41	-0.35	0	0	29	33	36	39	42	45	48	
7	0	856	0	1335	480	5	-11/19	0.36	10	18	0	1138	-11/21	0.4	0	0	18	21	24	26	28	30	32	
7	0	1608	0	2210	422	4	-4/40	0.14	10	29	0	1887	-4/49	0.16	0	0	29	33	37	41	45	48	51	
7	0	2210	0	2423	150	0	-327/41	-40	10	400	0	0	0/00	0	0	0	400	0	0	0	0	0	0	
7	0	2464	0	2670	207	6	-5/30	-0.26	10	29	0	2604	-5/35	-0.31	0	0	29	33	36	40	43	46	48	
7	0	2670	0	2850	125	0	-327/41	-40	10	400	0	0	0/00	0	0	0	400	0	0	0	0	0	0	
7	182	1320	182	1571	252	5	-5/04	-0.12	10	29	182	1455	-5/12	-0.11	0	0	29	33	37	40	44	47	50	
7	182	1658	182	1882	169	4	5/29	-0.49	10	24	182	1769	5/35	-0.71	0	0	24	29	33	36	40	43	46	
7	182	1882	182	2051	170	6	-5/00	-0.85	10	32	182	1980	-5/05	-0.63	0	0	32	36	39	43	46	49	51	
7	182	2051	182	2231	136	4	4/26	-0.23	25	29	182	2119	4/30	-0.37	0	0	29	33	38	42	45	49	52	
2	182	2302	182	2367	66	4	-0/15	-0.44	60	139	182	2304	-0/15	-0.5	0	0	139	160	177	192	207	220	232	
2	182	2482	182	3485	1004	8	1/49	1.53	40	59	182	2893	1/51	1.51	0	0	59	65	70	76	81	85	90	
2	182	4315	182	5355	1041	9	-4/28	-3.16	40	44	182	4838	-4/31	-3.15	0	0	44	47	50	53	56	59	62	
2	181	2113	181	2853	741	11	-0/40	-1.01	40	87	181	2559	-0/44	-0.96	0	0	87	97	107	115	123	131	138	
2	181	2853	181	3279	427	12	1/16	0.47	40	61	181	3026	1/16	0.36	0	0	61	70	77	84	90	96	102	
2	180	718	180	976	259	11	0/34	0.62	40	83	180	865	0/44	0.58	0	0	83	94	103	112	121	128	136	
2	180	1153	180	2253	1101	11	-3/58	-2.17	40	43	180	1922	-4/04	-2.19	0	0	43	46	50	53	56	59	62	
2	180	4478	179	674	1316	26	-2/56	-1.96	40	47	179	151	-3/08	-1.77	0	0	47	51	55	59	63	66	70	
2	179	1829	179	2842	1014	19	3/37	2.2	60	44	179	2132	3/42	1.93	0	0	44	47	51	55	58	61	64	
2	179	3836	179	4582	747	22	2/00	1.98	60	59	179	4276	2/01	1.94	0	0	59	64	70	74	79	83	87	
2	179	6635	179	7094	460	26	-0/45	-1.03	60	85	179	6788	-0/46	-0.92	0	0	85	96	105	114	122	129	136	
2	179	7700	179	8234	535	26	0/31	0.39	60	74	179	7915	0/49	0.13	0	0	74	85	95	103	112	119	126	
2	175	1481	175	2280	800	15	2/16	2.86	60	57	175	1799	2/19	2.27	0	0	57	62	67	71	75	79	83	
5	169	1475	169	2142	668	40	1/29	0.8	60	57	169	1806	1/37	0.72	100	1	57	64	71	77	82	87	92	
5	166	3916	166	5391	1476	51	3/01	3.99	50	56	166	4512	3/13	3.95	0	0	56	59	63	66	69	72	75	
5	165	2596	165	4232	1637	45	-2/59	-3.99	50	57	165	3592	-3/02	-3.95	0	0	57	61	64	68	71	74	78	
5	162	3068	162	3739	672	54	0/55	0.94	60	77	162	3503	0/57	0.95	0	0	77	86	94	102	109	115	122	
5	158	1035	158	1904	870	54	1/42	2.5	60	67	158	1691	1/45	2.46	0	0	67	72	78	83	87	92	96	
5	155	1838	155	2769	932	52	2/12	3.06	60	60	155	2493	2/13	2.55	8	-1	60	64	69	74	78	82	86	
5	154	1127	154	2547	1421	45	-2/31	-4.21	50	62	154	1947	-2/39	-4.07	0	0	62	65	69	73	77	80	83	
5	149	862	149	1126	265	7	-2/32	0.09	60	40	149	1050	-2/34	0.07	29	-1	40	46	52	57	62	66	70	
5	149	1126	149	1372	247	10	2/25	0.32	60	43	149	1213	2/29	0.17	37	-1	43	48	54	59	64	68	72	
6	149	1675	149	2812	1138	10	1/58	1.02	10	52	149	2569	2/06	1.04	0	0	52	58	64	69	73	78	82	
6	148	2874	148	3145	272	9	2/21	0.42	10	44	148	3044	2/24	0.19	0	0	44	49	55	60	65	69	73	
5	148	3145	148	3389	245	11	-2/29	-0.03	10	39	148	3239	-2/37	0.14	0	0	39	45	51	56	61	65	69	
5	144	1234	144	1676	443	18	-1/01	-0.94	60	71	144	1391	-1/07	-1.01	0	0	71	79	87	94	101	107	112	
5	143	1063	143	1453	391	22	-0/32	-0.25	60	74	143	1198	-0/49	-0.16	0	0	74	85	94	103	111	119	126	
5	136	1197	136	2845	1649	59	-0/54	-0.99	60	75	136	1399	-1/01	-1	0	0	75	83	91	99	105	112	118	
5	130	3907	130	5149	1243	30	0/58	0.92	35	63	130	4138	1/16	0.54	0	0	63	71	79	86	92	98	104	
5	130	5149	129	327	450	28	3/07	1.94	35	45	129	65	3/23	1.89	0	0	45	49	53	57	61	64	67	
5	129	327	129	570	244	28	4/22	1.6	35	38	129	430	4/26	1.56	0	0	38	42	45	49	52	55	58	
5	129	570	129	1344	775	28	1/46	1.13	35	43	129	618	3/28	1.59	0	0	43	47	52	55	59	62	66	
5	129	2628	129	4262	1635	30	-2/58	-1.89	35	47	129	2929	-2/58	-1.64	0	0	47	52	56	60	64	68	71	

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						Average					Limiting Point														
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at								
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0		
5	123	217	123	1576	1360	38	-0/29	-0.79	60	101	123	1473	-0/31	-0.77	0	0	101	114	125	136	146	155	163		
5	121	1255	121	1546	292	15	-1/46	0.21	25	47	121	1400	-1/47	0.25	0	0	47	54	61	67	73	78	83		
5	121	1546	121	1825	280	16	1/29	0.42	25	52	121	1638	1/43	0.28	0	0	52	59	66	72	77	83	88		
5	119	2444	119	3443	1000	24	0/28	0.92	25	101	119	2583	0/32	0.84	0	0	101	113	124	134	144	152	161		
5	118	2922	118	3712	791	12	0/26	1	25	101	118	3057	0/32	0.81	0	0	101	113	125	135	145	154	162		
5	118	3712	118	4544	793	11	0/30	0.65	25	92	118	4465	0/35	0.51	0	0	92	104	115	125	134	143	151		
7	118	4635	118	4829	195	10	-3/34	0.08	10	32	118	4736	-3/43	0.31	0	0	32	37	42	46	50	54	57		
7	118	4829	118	4954	126	9	0/33	0.2	10	74	118	4863	0/43	-0.27	0	0	74	85	96	106	115	123	131		
7	118	4954	118	5068	115	9	-0/23	-0.15	10	105	118	5027	-0/24	-0.17	0	0	105	122	135	148	160	170	181		
7	118	5187	118	7152	1966	10	0/30	0.99	10	41	118	5388	3/50	1.47	0	0	41	45	49	52	56	59	62		
7	118	10410	118	10646	179	3	5/18	0.26	10	30	118	10526	5/19	0.26	0	0	30	33	37	41	44	47	49		
7	118	10879	116	170	297	7	-3/57	0.13	10	30	116	32	-4/00	0.53	0	0	30	35	39	44	48	51	55		
7	116	170	116	327	158	7	4/47	0.26	10	30	116	254	4/49	0.08	0	0	30	34	38	42	45	48	51		
7	116	327	116	539	180	7	-4/31	-0.22	10	30	116	397	-4/38	0.03	0	0	30	34	39	42	46	49	52		
5	114	2325	114	3752	1428	60	-0/56	-0.96	60	73	114	3048	-1/01	-0.81	0	0	73	82	90	98	105	111	117		
5	108	478	108	1677	1200	47	-1/59	-2.74	60	62	108	1198	-2/07	-2.68	0	0	62	67	72	76	80	85	88		
5	108	4871	107	722	1266	47	1/52	2.96	60	65	108	5297	1/58	2.87	0	0	65	70	75	80	84	89	93		
5	105	521	105	1837	1317	32	-3/02	-4.12	50	56	105	984	-3/10	-4.04	0	0	56	60	63	67	70	73	76		
5	104	2274	104	3725	1452	29	3/01	4.23	60	56	104	2915	3/14	4.22	0	0	56	60	63	67	70	73	76		
5	103	2120	103	2944	825	44	-2/53	-4.03	50	58	103	2462	-3/01	-4.04	0	0	58	61	65	69	72	75	78		
5	101	129	101	635	507	34	-0/29	-0.9	60	96	101	381	-0/37	-0.99	0	0	96	108	118	127	136	145	152		
5	100	1565	100	2210	646	36	0/55	1.17	60	79	100	2059	0/57	1.18	0	0	79	88	96	103	110	117	123		
5	97	356	97	803	448	37	0/25	0.91	60	114	97	742	0/26	0.95	0	0	114	128	140	152	162	172	181		
5	97	3465	97	4218	754	36	-2/59	-3.64	4	55	97	3818	-3/05	-3.59	0	0	55	59	63	66	70	73	76		
5	96	5541	95	938	1188	43	0/57	0.76	60	66	95	15	1/08	0.42	0	0	66	74	82	90	96	103	109		
5	92	2469	92	2790	322	30	-0/28	-0.97	60	101	92	2657	-0/34	-1.13	0	0	101	114	125	134	143	152	160		
5	92	2996	92	3331	336	31	0/28	0.78	60	103	92	3115	0/30	0.69	0	0	103	115	127	138	148	157	166		
5	92	3840	92	4833	994	34	-0/57	-1.01	60	74	92	4537	-1/03	-1	0	0	74	82	90	97	104	110	116		
5	90	4101	90	4605	505	39	0/42	1	40	89	90	4604	0/43	1.04	0	0	89	99	109	118	126	133	141		
5	90	4605	90	5199	595	39	1/12	0.85	40	66	90	4792	1/16	0.91	0	0	66	74	81	88	94	100	105		
5	90	5199	89	421	476	38	2/29	0.16	40	40	89	180	2/35	-0.12	7	-1	40	46	51	57	61	66	70		
5	89	1817	89	2170	354	37	0/29	0.8	40	88	89	1987	0/40	0.63	0	0	88	99	109	118	127	135	143		
5	89	2552	89	2885	334	37	-0/25	-0.88	40	107	89	2761	-0/31	-1.12	0	0	107	119	130	141	150	159	168		
5	89	3492	89	3835	344	36	0/22	0.5	40	110	89	3695	0/25	0.57	0	0	110	124	137	149	160	170	180		
5	89	4348	89	4662	315	36	-0/26	-0.97	40	110	89	4566	-0/28	-1.01	0	0	110	123	135	145	156	165	174		
5	88	65	88	613	549	35	-1/29	-0.93	40	58	88	360	-1/37	-0.82	0	0	58	65	71	77	83	88	93		
5	88	975	88	1362	388	35	0/32	0.74	40	88	88	1122	0/43	0.91	0	0	88	98	108	117	125	132	140		
5	88	2337	88	2927	591	35	-0/28	-0.93	40	104	88	2701	-0/32	-1.04	0	0	104	116	127	137	147	156	164		
5	88	3921	88	4668	748	34	4/25	3.46	40	44	88	4195	4/34	3.21	0	0	44	47	50	53	56	59	61		
5	87	1265	87	1971	707	32	-4/04	-3.45	40	46	87	1559	-4/17	-3.45	0	0	46	49	53	56	59	61	64		
5	87	2208	87	2981	774	35	-1/54	-1	50	52	87	2652	-2/02	-0.93	19	-1	52	58	64	69	74	79	83		
5	86	3187	86	3934	748	41	1/34	2.63	60	70	86	3490	1/38	2.59	0	0	70	76	81	86	91	96	100		
5	82	2370	82	2881	512	36	0/26	0.71	60	99	82	2586	0/33	0.74	0	0	99	111	122	132	141	150	159		
5	81	1709	81	2500	792	38	-0/59	-1.17	60	75	81	1985	-1/01	-1.07	0	0	75	84	92	99	106	112	118		
5	81	4702	81	5230	529	42	0/47	1.03	60	80	81	4860	0/51	0.82	0	0	80	90	98	107	114	121	128		
5	75	5416	75	5726	311	53	-0/55	-0.76	60	75	75	5643	-0/56	-0.76	0	0	75	85	93	101	108	115	121		

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							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	75	6258	75	6572	315	53	0/52	0.87	60	78	75	6402	0/55	0.91	0	0	78	87	95	103	110	117	124	
5	72	1151	72	1681	531	49	-0/52	-1.09	60	81	72	1305	-0/53	-1.12	0	0	81	90	99	106	114	120	127	
5	72	4186	71	119	1243	41	3/10	4.03	60	53	72	4710	3/29	3.74	0	0	53	56	59	63	66	69	72	
5	71	2673	71	3025	353	34	-1/34	-4.64	50	82	71	2947	-1/30	-4.05	0	0	82	87	92	97	102	107	111	
5	71	3025	71	4331	1307	34	-2/57	-4.27	40	56	71	3162	-3/13	-4.05	0	0	56	59	63	66	70	73	76	
5	68	3628	68	4544	917	21	0/58	1.05	60	76	68	3974	1/01	1.13	0	0	76	85	93	100	107	113	119	
5	65	3261	65	3412	152	59	-0/16	0.13	60	124	65	3343	-0/16	0.1	0	0	124	146	164	180	194	208	221	
5	65	3529	65	4276	748	59	-0/24	-1	60	109	65	3697	-0/29	-1.07	0	0	109	122	134	145	154	164	173	
5	60	4667	60	5360	694	47	1/50	3.72	60	71	60	4967	1/53	3.65	0	0	71	76	81	85	89	94	98	
5	59	2078	59	2780	703	47	-2/45	-4.14	60	61	59	2449	-2/45	-4.13	0	0	61	64	68	72	76	79	82	
5	58	4122	58	4623	502	56	0/50	0.83	60	79	58	4247	0/49	0.57	0	0	79	89	98	106	114	122	129	
5	50	3401	50	4462	1062	56	-1/55	-2.44	60	61	50	3626	-2/00	-2.28	0	0	61	66	72	76	81	85	89	
5	45	1080	45	1357	278	47	0/18	0.69	60	117	45	1160	0/19	-0.05	0	0	117	134	150	165	178	191	203	
5	45	4645	45	5024	380	48	0/20	1	60	121	45	4791	0/23	1	0	0	121	135	148	160	171	181	191	
5	45	5024	45	5280	257	48	-0/20	-1	60	121	45	5072	-0/22	-0.78	0	0	121	137	151	164	175	186	196	
5	44	4389	43	1209	2107	46	2/55	3.93	50	57	44	4894	3/08	4.03	0	0	57	60	64	67	70	74	77	
5	42	1492	42	1904	413	37	-1/18	-1.08	40	66	42	1683	-1/19	-1.04	0	0	66	73	80	87	93	98	104	
5	42	2324	42	3935	1612	36	-3/55	-2.87	40	44	42	2794	-4/19	-2.92	0	0	44	47	51	54	57	60	62	
5	41	104	41	807	704	37	-3/12	-1.17	40	43	41	546	-3/16	-1.18	0	0	43	47	51	56	59	63	66	
5	41	1089	41	1565	477	36	1/58	0.76	40	50	41	1337	2/04	0.64	0	0	50	56	62	67	72	77	81	
5	41	1729	41	2694	966	36	2/55	1.18	40	44	41	2567	2/55	1.03	0	0	44	49	54	58	62	66	70	
5	41	3949	41	4711	763	38	1/34	1.02	60	59	41	4457	1/40	1.03	82	-1	59	65	72	77	83	88	92	
5	40	470	40	1054	585	35	1/32	2.38	60	68	40	675	1/38	2.26	0	0	68	73	79	84	89	94	99	
5	39	3700	39	4338	639	58	-1/05	-1.04	60	70	39	4009	-1/11	-1.06	0	0	70	78	85	92	98	104	110	
5	34	1970	34	4221	2252	25	-1/07	-1.45	60	71	34	3922	-1/11	-1.29	0	0	71	79	86	93	99	105	111	
5	33	1120	33	3508	2389	24	1/25	1.28	60	63	33	2683	1/29	1.2	0	0	63	70	77	83	88	93	98	
5	33	3601	33	4267	667	32	-2/02	-3.01	60	63	33	3841	-2/07	-2.88	0	0	63	68	72	77	81	85	89	
5	32	3178	31	454	2561	35	2/25	3.32	50	57	32	3560	2/45	3.19	0	0	57	61	65	69	72	76	79	
5	31	454	31	3168	2715	36	-2/37	-4.02	50	59	31	1077	-2/50	-3.95	0	0	59	63	67	70	74	77	80	
5	31	3603	31	3853	251	24	-0/17	-1.02	50	140	31	3752	-0/17	-1.02	0	0	140	159	175	189	202	214	226	
5	30	2453	30	3196	744	24	1/00	0.96	60	72	30	2940	1/04	0.88	0	0	72	81	89	96	103	109	115	
5	29	2524	29	3616	1093	45	-1/50	-3.73	60	71	29	3264	-1/53	-3.72	0	0	71	76	81	85	89	94	98	
5	28	563	28	1152	590	49	0/59	0.91	60	73	28	892	1/04	0.99	0	0	73	81	89	97	103	110	116	
5	27	8698	27	9195	498	49	0/33	0.79	60	95	27	9118	0/36	0.78	0	0	95	106	117	127	136	144	152	
5	23	1950	23	2751	802	56	-1/25	-1.65	60	67	23	2514	-1/28	-1.58	0	0	67	73	79	85	91	96	101	
5	23	5032	22	1033	1268	56	-0/59	-1.24	60	76	23	5183	-1/01	-1.16	0	0	76	85	92	100	106	113	119	
5	22	5072	21	1355	1586	54	0/58	0.92	60	69	21	66	1/06	0.69	0	0	69	78	85	93	99	106	112	
5	21	3361	21	3573	213	57	-0/21	-1.18	60	119	21	3447	-0/24	-1.05	0	0	119	134	146	158	169	179	189	
5	21	3758	21	3991	234	57	0/20	0.8	60	118	21	3892	0/24	0.9	0	0	118	132	145	156	167	178	188	
5	20	3921	20	4567	647	58	0/20	0.84	60	121	20	4283	0/23	1	0	0	121	135	148	160	171	181	191	
5	15	4428	15	4913	486	47	0/55	0.91	60	77	15	4616	0/58	0.96	0	0	77	85	94	101	108	115	121	
5	12	816	12	1203	388	37	0/19	0.96	60	119	12	1026	0/24	0.96	0	0	119	133	145	157	168	178	188	
5	9	2330	9	2733	404	27	-0/25	-0.88	60	100	9	2480	-0/34	-1.07	0	0	100	112	123	133	142	150	158	
5	9	2802	8	98	2566	28	-0/49	-1.13	60	80	9	3001	-0/53	-1	0	0	80	90	98	106	113	120	127	
5	8	2213	8	3177	965	23	-0/54	-0.99	60	77	8	3067	-0/55	-0.85	0	0	77	87	95	103	110	117	124	
5	7	395	7	1104	710	27	-4/31	-1.94	35	39	7	779	-4/32	-1.93	0	0	39	43	46	49	52	55	58	

Exception Report
Curve Analysis Section
Milepost 182 to Milepost 418
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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	7	1316	7	1658	343	27	-0/19	-0.95	35	130	7	1552	-0/19	-0.96	0	0	130	148	163	176	188	200	210	
5	7	2793	7	3093	301	26	-1/31	0.15	35	49	7	2970	-1/38	0.2	0	0	49	57	64	71	77	82	87	
5	7	3093	7	3352	260	25	1/27	1.11	35	59	7	3197	1/35	0.91	0	0	59	66	73	79	84	89	94	
2	6	3627	5	2	1692	22	-0/19	-1.01	60	114	6	5137	-0/26	-0.99	0	0	114	128	141	152	162	172	182	
2	5	47	5	2412	2366	20	-0/23	-1.04	60	107	5	1307	-0/29	-0.99	0	0	107	120	132	142	152	161	170	
2	5	2412	5	2664	253	18	-0/22	-1.01	60	111	5	2532	-0/27	-0.96	0	0	111	125	137	148	158	168	177	
2	4	1621	4	2020	400	13	1/58	1.05	35	52	4	1831	2/04	0.96	0	0	52	58	64	69	74	78	82	
2	4	2020	4	2434	415	12	-1/46	-0.86	35	56	4	2232	-1/46	-0.85	0	0	56	62	68	74	79	84	89	
2	3	1064	3	2016	953	11	5/12	1.25	35	25	3	1386	9/04	0.88	208	-1	25	27	30	32	35	37	39	
2	3	2724	3	3054	331	13	-0/57	0.01	10	62	3	2867	-1/03	0.19	0	0	62	71	80	88	96	103	109	
2	3	3069	3	3459	391	14	1/40	-0.07	10	50	3	3374	1/40	-0.07	0	0	50	58	64	71	77	82	87	
2	3	3459	3	3699	241	14	-2/28	0.65	10	36	3	3561	-2/32	0.7	0	0	36	43	49	54	59	64	68	
2	3	8167	3	8747	581	10	10/29	1.31	10	24	3	8571	10/30	1.31	0	0	24	26	29	31	33	35	37	
7	3	9123	422	221	305	8	-1/29	-0.71	10	56	422	88	-1/38	-0.65	0	0	56	63	70	76	81	86	91	
7	422	267	422	576	288	8	5/00	0.92	15	33	422	410	5/07	0.92	0	0	33	37	40	43	47	49	52	
7	422	1378	422	2175	798	15	-2/58	-1.16	15	31	422	1903	-6/05	-1.1	0	0	31	34	37	40	43	46	48	
7	422	2175	422	2563	389	14	-1/51	-1.12	15	56	422	2372	-1/52	-1.13	0	0	56	62	68	73	78	83	87	
7	422	3068	422	4588	1521	14	1/57	1.27	15	53	422	3398	2/07	1.14	0	0	53	59	64	69	74	78	82	
7	421	1164	421	1941	778	11	2/43	0.87	15	42	421	1398	3/00	0.65	0	0	42	47	51	56	60	64	67	
7	421	4646	421	5502	857	11	-3/37	-0.78	15	36	421	5151	-4/31	-1.13	0	0	36	40	44	47	50	53	56	
7	420	86	420	596	511	12	1/28	1.22	15	61	420	348	1/37	1.22	0	0	61	68	74	80	85	90	95	
5	419	3447	419	3876	430	13	-0/46	-0.97	40	85	419	3600	-0/46	-0.9	0	0	85	95	104	113	121	128	135	
5	419	3876	419	4168	293	12	0/32	0.68	40	88	419	4027	0/44	0.97	0	0	88	98	108	116	124	132	139	

Notes:

+ Maximum curve speed is limited at qualified cant deficiency.
However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Exception Report
Exception Summary Section
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		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Lim	Pst	
MP	FT	EXC	FT	Drop	EXC	FT	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	Cls	Cls	Trk
177	10675	-	-	-	-	-	-	-	-	1	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	2	
169	5340	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	4	5	
165	5414	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	62	1	1	4	-	-	2	4	5
42	5278	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	2	3	5
		-	-	-	-	-	-	-	-	1	34	-	-	-	-	-	-	-	-	-	-	-	1	62	1	2	6	-	1		

Total Miles: 186.50
Exceptions per 100 Miles: 2.68
CY18 National Average Exceptions per 100 miles: 5.0

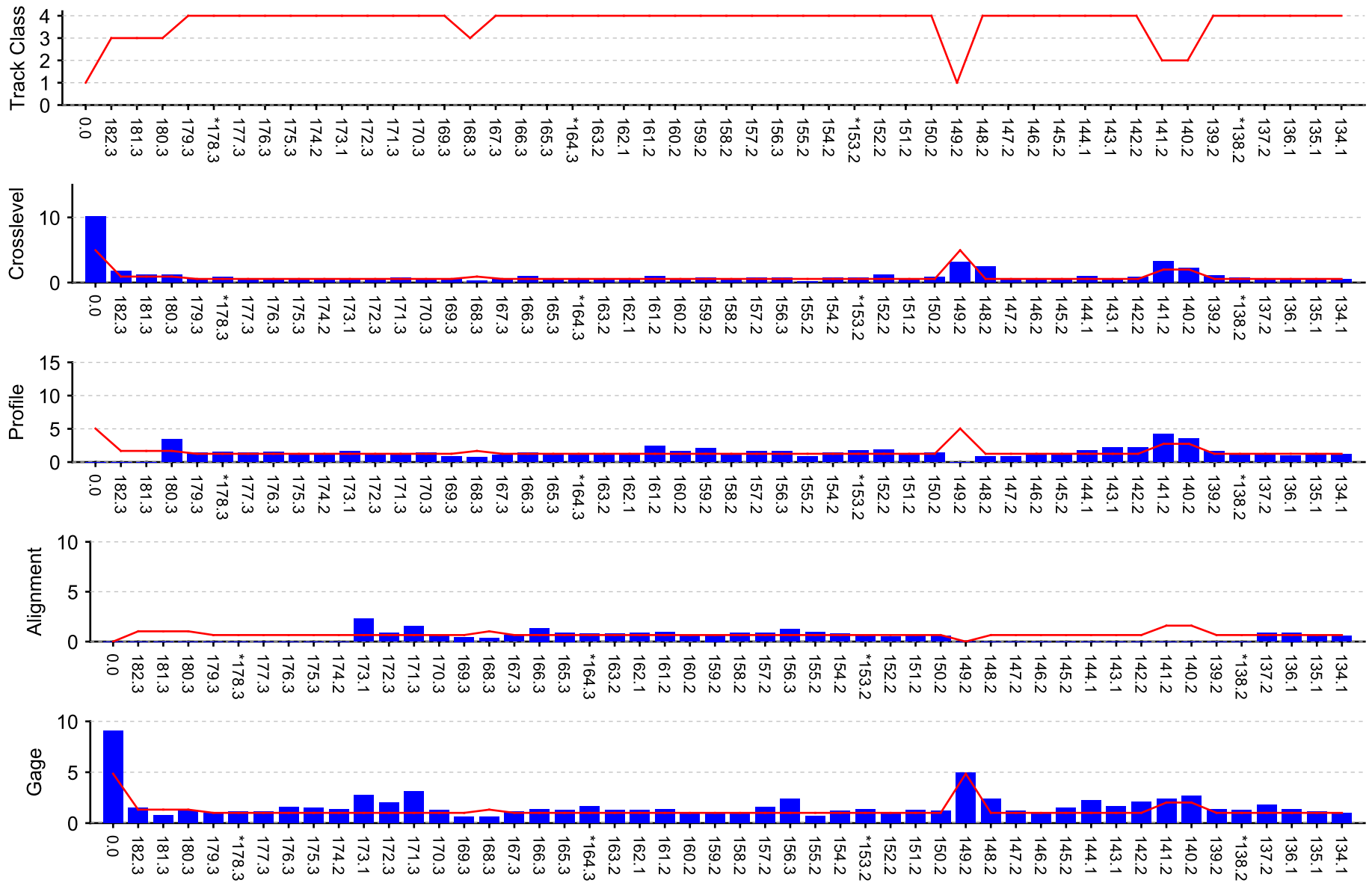
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Milepost 182 to Milepost 418

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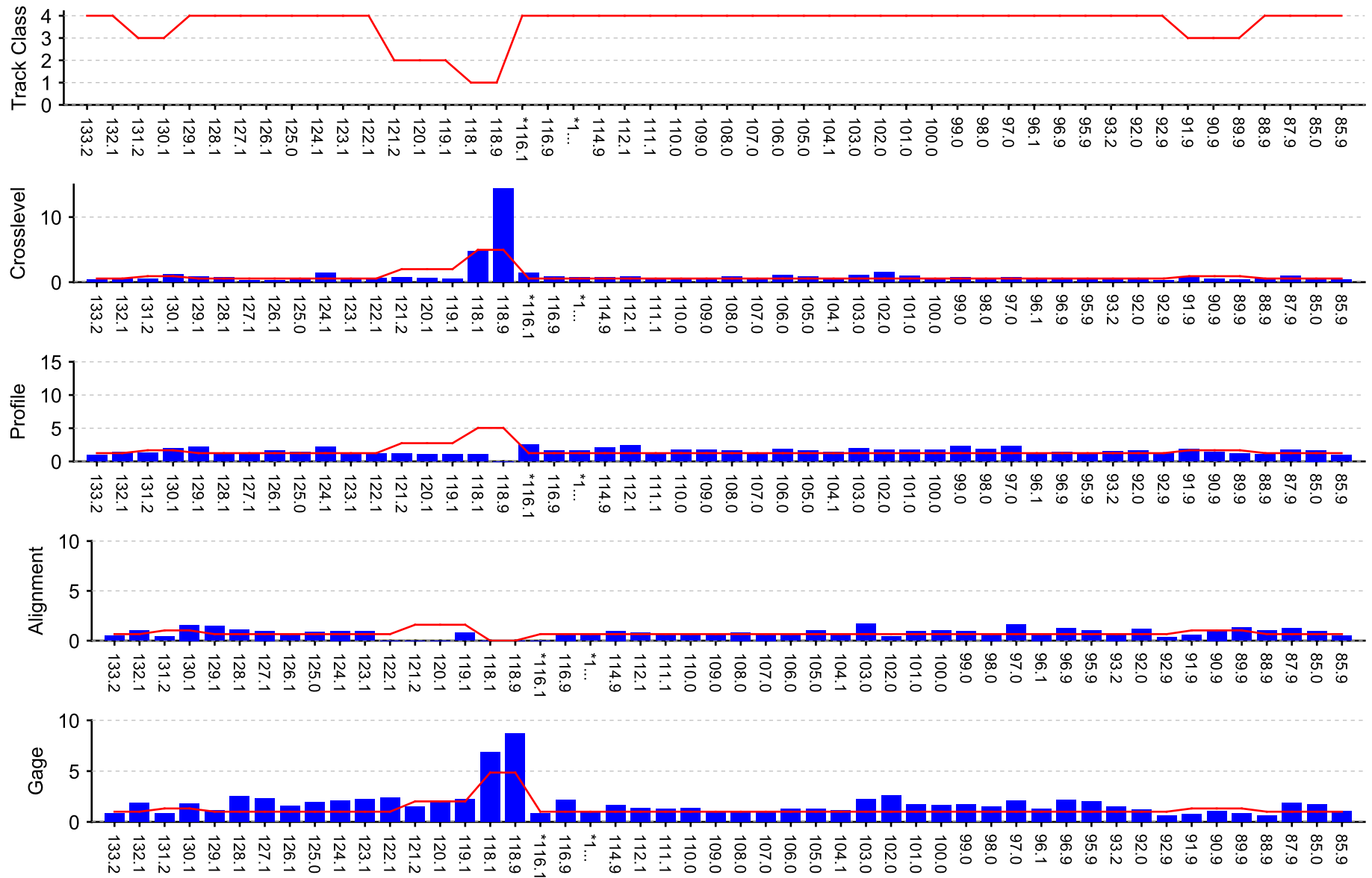
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Milepost 182 to Milepost 418

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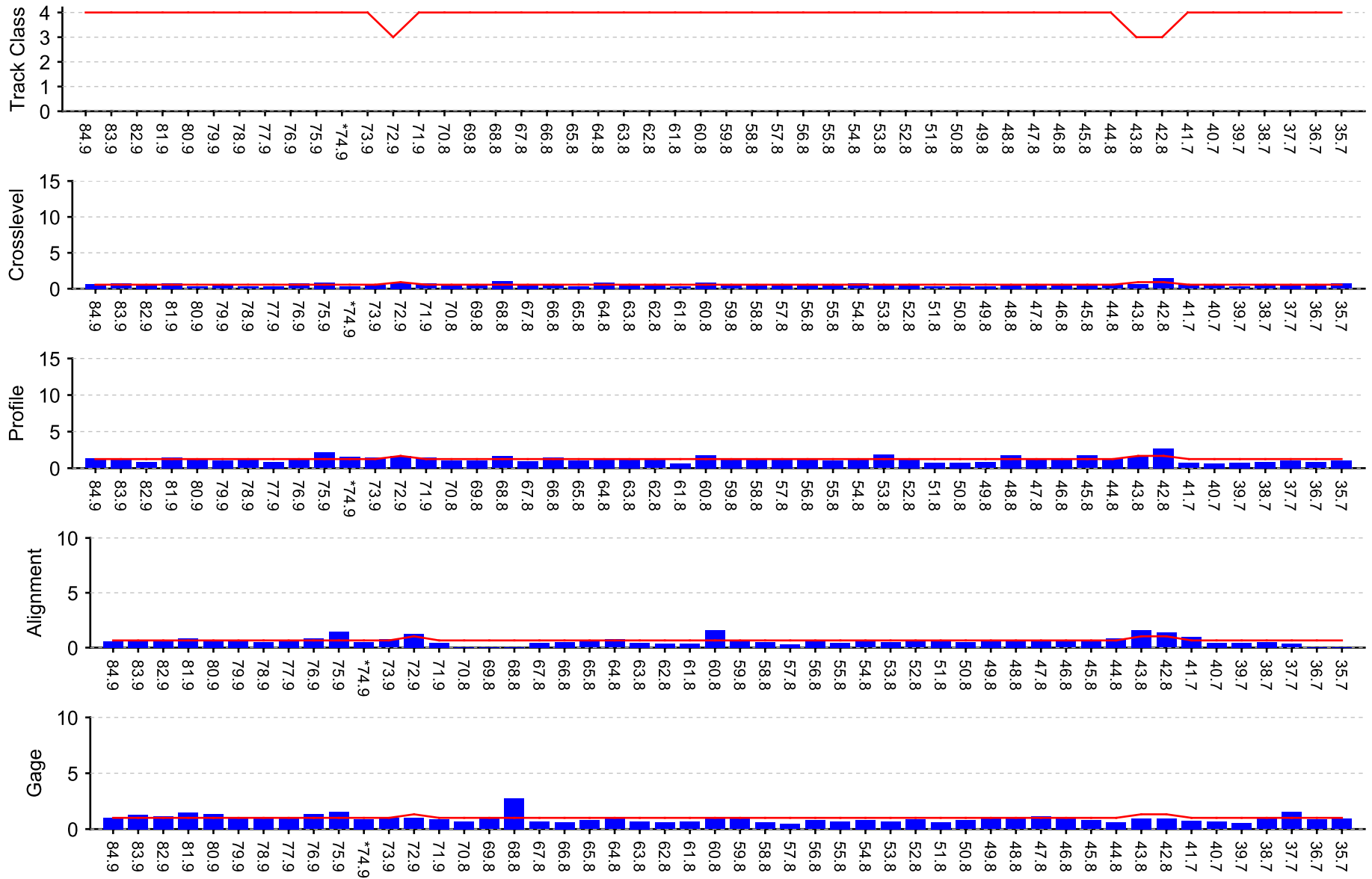
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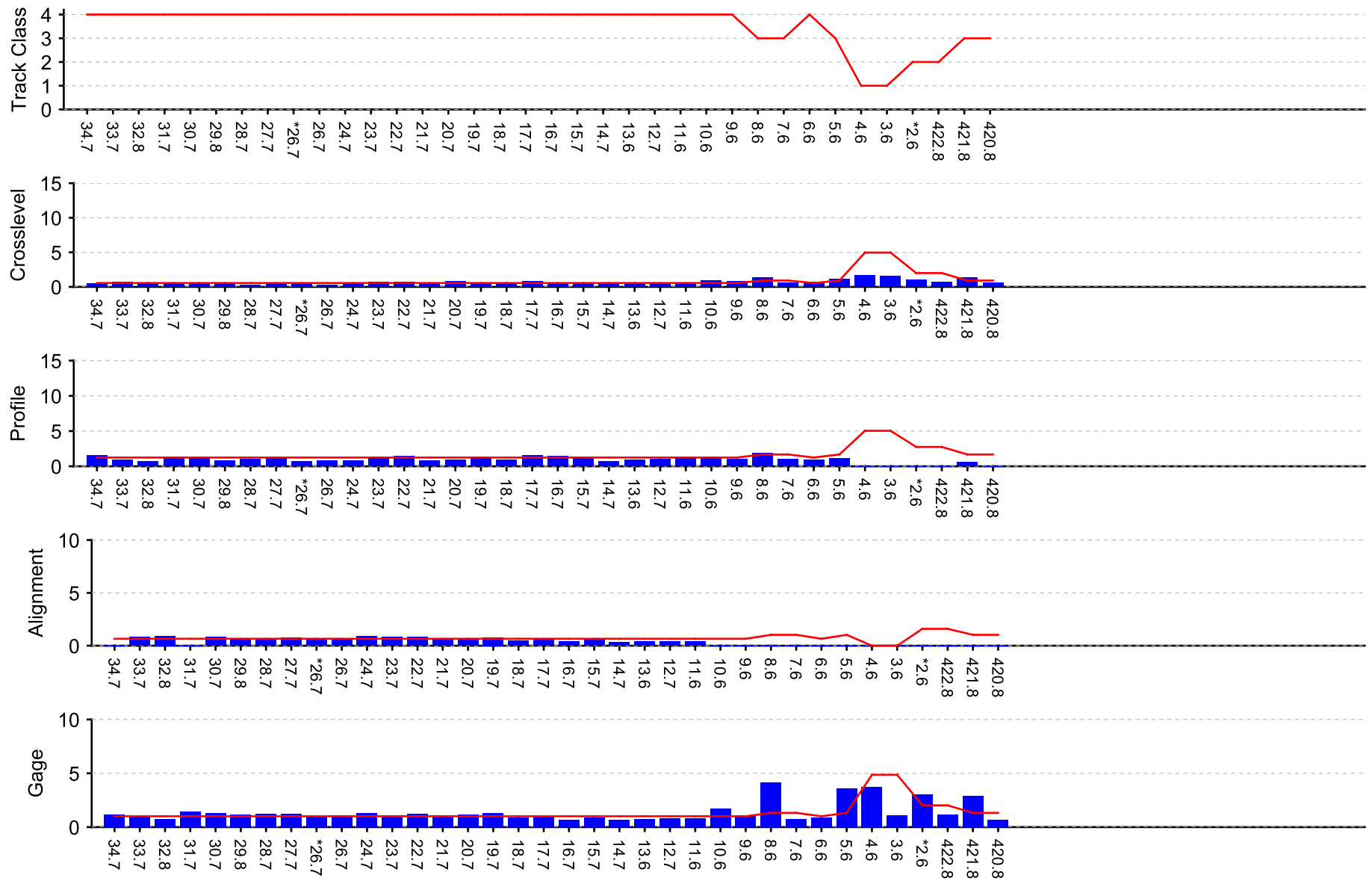
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Class Plus 1 Exception List Section
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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	0		Track Change	0.00	0	1	T	0	0	7		
0	142		State Line	OH	0	4	T	0	0	7		
0	143		Railroad	NS -	0	4	T	0	0	7		
0	144		Subdivision	LAKE	0	4	T	0	0	7		
0	185		Track Change	0.00	0	5	B	0	0	7	41.483239	-81.657959
0	185		Class Change	1.00	0	5	B	0	0	7	41.483239	-81.657959
0	185		Posted Speed	10.00	0	5	B	0	0	7	41.483239	-81.657959
0	695	3	Gage Wide	57.99	7	6	C	1	2	7	41.482472	-81.656415
0	1765		Class Change	1.00	0	5	B	0	0	7	41.481682	-81.652745
0	1765		Posted Speed	10.00	0	5	B	0	0	7	41.481682	-81.652745
182	3457		Down Milepost	182.00	0	8	T	0	0	7	41.482939	-81.646872
182	2217		Class Change	2.00	0	1	E	0	0	7	41.485095	-81.639338
182	2217		Posted Speed	25.00	0	1	E	0	0	7	41.485095	-81.639338
182	2233		Track Change	0.00	0	1	T	0	0	2	41.485110	-81.639284
182	2366		Class Change	3.00	0	5	E	0	0	2	41.485234	-81.638830
182	2366		Posted Speed	60.00	0	5	E	0	0	2	41.485234	-81.638830
182	2384		Posted Speed	40.00	0	5	T	0	0	2	41.485250	-81.638769
181	5522		Down Milepost	181.00	0	13	T	0	0	2	41.487528	-81.627934
180	5350		Down Milepost	180.00	0	10	T	0	0	2	41.495900	-81.611980
180	4560	15	Twist 31ft*	-1.20	11	27	B	3	4	2	41.505336	-81.601760
179	5118		Down Milepost	179.00	0	23	C	0	0	2	41.506748	-81.600979
179	1752		Class Change	4.00	0	19	T	0	0	2	41.511524	-81.600749
179	1752		Posted Speed	60.00	0	19	T	0	0	2	41.511524	-81.600749
179	1903	16	R Align 62	-0.75	9	19	B	4	5	2	41.511937	-81.600748
179	1906	17	L Align 62	-0.79	13	19	B	4	5	2	41.511945	-81.600748
179	2072		Posted Speed	5.00	0	19	B	0	0	2	41.512398	-81.600729
179	2109	18	R Align 62	1.02	27	19	B	4	5	2	41.512499	-81.600719
179	2114	19	L Align 62	1.04	31	19	B	4	5	2	41.512513	-81.600717
179	2155	21	L Align 62	-0.93	19	19	C	4	5	2	41.512624	-81.600702
179	2155	20	R Align 62	-0.83	12	19	C	4	5	2	41.512624	-81.600702
179	2528		Posted Speed	45.00	0	19	C	0	0	2	41.513612	-81.600386
179	2788		Posted Speed	60.00	0	20	E	0	0	2	41.514262	-81.600004
179	3789		Posted Speed	45.00	0	22	T	0	0	2	41.516714	-81.598387
179	4481		Posted Speed	60.00	0	23	E	0	0	2	41.518337	-81.597102
179	6645		Posted Speed	45.00	0	25	B	0	0	2	41.523114	-81.592454
179	7070		Posted Speed	60.00	0	26	E	0	0	2	41.524065	-81.591572
179	7810		Posted Speed	45.00	0	26	B	0	0	2	41.525750	-81.590075
179	8168		Posted Speed	60.00	0	26	C	0	0	2	41.526549	-81.589323
177	10675		Down Milepost	177.00	0	22	T	0	0	2	41.532070	-81.583907

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
177	720	27	Crosslevel	-1.58	53	21	T	3	5	2	41.533659	-81.582360
176	5271		Down Milepost	176.00	0	24	T	0	0	2	41.543692	-81.572566
175	5255		Down Milepost	175.00	0	18	T	0	0	2	41.555285	-81.561257
175	733		Posted Speed	50.00	0	18	T	0	0	2	41.556901	-81.559681
175	857		Posted Speed	60.00	0	17	T	0	0	2	41.557174	-81.559414
175	1286		Posted Speed	50.00	0	17	T	0	0	2	41.558120	-81.558491
175	2197		Posted Speed	60.00	0	15	E	0	0	2	41.559997	-81.556325
174	5761		Down Milepost	174.00	0	21	T	0	0	2	41.566298	-81.546428
173	5786		Down Milepost	173.00	0	18	T	0	0	2	41.576526	-81.530352
173	3971	29	L Prof 62	-1.38	1	33	T	4	5	2	41.583540	-81.519317
172	4460		Down Milepost	172.00	0	36	T	0	0	2	41.584405	-81.517956
172	143		Track Change	0.00	0	36	T	0	0	5	41.584658	-81.517559
171	5246		Down Milepost	171.00	0	39	T	0	0	5	41.593678	-81.503380
170	5265		Down Milepost	170.00	0	34	T	0	0	5	41.602979	-81.488739
169	5340		Down Milepost	169.00	0	38	T	0	0	5	41.612420	-81.473898
168	5290		Down Milepost	168.00	0	39	T	0	0	5	41.620967	-81.458379
167	5302		Down Milepost	167.00	0	37	T	0	0	5	41.629113	-81.442393
167	1092		Class Change	3.00	0	38	T	0	0	5	41.630790	-81.439100
167	1092		Posted Speed	40.00	0	38	T	0	0	5	41.630790	-81.439100
167	3628		Class Change	4.00	0	41	T	0	0	5	41.634680	-81.431455
167	3628		Posted Speed	60.00	0	41	T	0	0	5	41.634680	-81.431455
166	5146		Down Milepost	166.00	0	41	T	0	0	5	41.637014	-81.426875
166	411		Subdivision	LAKE	0	42	T	0	0	5	41.637645	-81.425635
166	3942		Posted Speed	50.00	0	52	B	0	0	5	41.643066	-81.414987
165	5414		Down Milepost	165.00	0	49	T	0	0	5	41.644301	-81.409995
165	4040	38	Twist 31ft*	1.17	11	44	E	3	5	5	41.645441	-81.395615
165	4074	39	Twist 31ft*	0.91	13	44	E	4	5	5	41.645496	-81.395515
165	4086	41	Warp 62	2.05	62	44	E	2	5	5	41.645515	-81.395480
165	4247		Posted Speed	60.00	0	44	T	0	0	5	41.645781	-81.395012
163	10646		Down Milepost	163.00	0	50	T	0	0	5	41.656478	-81.376557
162	5851		Down Milepost	162.00	0	56	T	0	0	5	41.666258	-81.359675
161	4726		Down Milepost	161.00	0	53	T	0	0	5	41.673905	-81.345795
161	3233	42	L Prof 62	-1.48	4	56	T	4	5	5	41.678694	-81.335883
160	5273		Down Milepost	160.00	0	58	T	0	0	5	41.681714	-81.329624
159	5332		Down Milepost	159.00	0	58	T	0	0	5	41.689608	-81.313274
158	5275		Down Milepost	158.00	0	54	T	0	0	5	41.697418	-81.297088
157	5193		Down Milepost	157.00	0	57	T	0	0	5	41.703236	-81.279880
157	368	43	L Align 62	0.85	1	56	T	4	5	5	41.703595	-81.278625
156	4965		Down Milepost	156.00	0	50	T	0	0	5	41.708076	-81.262955

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156	1287	44	L Prof 62	-1.48	2	48	T	4	5	5	41.709329	-81.258567
156	1288	45	R Prof 62	-1.60	4	48	T	4	5	5	41.709330	-81.258564
156	5509	46	R Align 62	-0.90	5	44	T	4	5	5	41.713442	-81.244179
156	5556	47	R Align 62	1.22	11	44	T	4	5	5	41.713488	-81.244019
155	5759		Down Milepost	155.00	0	44	T	0	0	5	41.713686	-81.243323
154	5301		Down Milepost	154.00	0	50	T	0	0	5	41.716686	-81.224544
154	167	49	L Prof 62	-1.44	6	49	T	4	5	5	41.716728	-81.223937
154	195	50	R Prof 62	1.86	12	49	T	4	5	5	41.716735	-81.223835
154	196	51	L Prof 62	2.09	14	49	T	3	5	5	41.716736	-81.223832
154	1632		Posted Speed	50.00	0	45	C	0	0	5	41.717182	-81.218627
154	2702		Posted Speed	60.00	0	44	T	0	0	5	41.718484	-81.215157
152	10795		Down Milepost	152.00	0	46	T	0	0	5	41.730603	-81.190454
152	255	52	L Align 62	0.89	3	46	T	4	5	5	41.730983	-81.189674
151	5123		Down Milepost	151.00	0	42	T	0	0	5	41.738280	-81.174818
150	5273		Down Milepost	150.00	0	38	T	0	0	5	41.746173	-81.158712
150	1599	53	L Prof 62	-1.39	1	36	T	4	5	5	41.748564	-81.153828
149	5333		Down Milepost	149.00	0	14	T	0	0	5	41.754154	-81.142421
149	1431		Class Change	1.00	0	11	T	0	0	5	41.756326	-81.138079
149	1431		Posted Speed	10.00	0	11	T	0	0	5	41.756326	-81.138079
149	1657		Track Change	0.00	0	10	T	0	0	7	41.756665	-81.137385
149	1730		Track Change	0.00	0	10	B	0	0	6	41.756773	-81.137161
148	4998		Down Milepost	148.00	0	7	T	0	0	6	41.759478	-81.125832
148	3316		Track Change	0.00	0	11	E	0	0	5	41.761758	-81.114111
148	3458		Class Change	4.00	0	12	T	0	0	5	41.761856	-81.113610
148	3458		Posted Speed	60.00	0	12	T	0	0	5	41.761856	-81.113610
147	5526		Down Milepost	147.00	0	23	T	0	0	5	41.763300	-81.106308
146	5346		Down Milepost	146.00	0	23	T	0	0	5	41.767028	-81.087435
145	5291		Down Milepost	145.00	0	27	T	0	0	5	41.770713	-81.068755
144	5532		Down Milepost	144.00	0	21	T	0	0	5	41.774417	-81.049173
144	726	97	R Align 62	-1.12	14	20	T	4	5	5	41.774886	-81.046594
144	767	98	R Align 62	1.14	10	20	T	4	5	5	41.774912	-81.046448
144	770	99	L Align 62	1.13	19	20	T	4	5	5	41.774914	-81.046438
144	1370	100	Twist 31ft*	-0.92	2	18	B	4	5	5	41.775306	-81.044313
143	5248		Down Milepost	143.00	0	23	T	0	0	5	41.778326	-81.030725
142	5137		Down Milepost	142.00	0	19	T	0	0	5	41.782687	-81.012885
141	5171		Down Milepost	141.00	0	27	T	0	0	5	41.787181	-80.994966
141	2486		Class Change	2.00	0	19	T	0	0	5	41.789335	-80.986354
141	2486		Posted Speed	25.00	0	19	T	0	0	5	41.789335	-80.986354
140	5298		Down Milepost	140.00	0	20	T	0	0	5	41.791770	-80.976605

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139	5305		Down Milepost	139.00	0	22	T	0	0	5	41.796360	-80.958212
139	2278		Class Change	4.00	0	20	T	0	0	5	41.798325	-80.950317
139	2278		Posted Speed	60.00	0	20	T	0	0	5	41.798325	-80.950317
137	10657		Down Milepost	137.00	0	25	T	0	0	5	41.805539	-80.921245
136	5394		Down Milepost	136.00	0	60	T	0	0	5	41.810176	-80.902533
136	2752	101	R Align 62	-0.76	1	59	E	4	5	5	41.813018	-80.893257
135	5246		Down Milepost	135.00	0	58	T	0	0	5	41.816708	-80.885589
134	5246		Down Milepost	134.00	0	58	T	0	0	5	41.824457	-80.869457
133	5226		Down Milepost	133.00	0	55	T	0	0	5	41.832170	-80.853379
132	5548		Down Milepost	132.00	0	50	T	0	0	5	41.840358	-80.836305
131	5004		Down Milepost	131.00	0	41	T	0	0	5	41.847738	-80.820897
130	5484		Down Milepost	130.00	0	30	T	0	0	5	41.855824	-80.804013
130	565		Class Change	3.00	0	30	T	0	0	5	41.856655	-80.802272
130	565		Posted Speed	35.00	0	30	T	0	0	5	41.856655	-80.802272
129	5270		Down Milepost	129.00	0	28	B	0	0	5	41.863221	-80.787507
129	726	102	Twist 31ft*	-1.12	1	28	E	3	4	5	41.863421	-80.784888
129	5280		Class Change	4.00	0	29	T	0	0	5	41.863813	-80.769059
129	5280		Posted Speed	60.00	0	29	T	0	0	5	41.863813	-80.769059
128	5312		Down Milepost	128.00	0	29	T	0	0	5	41.863854	-80.768952
127	5357		Down Milepost	127.00	0	63	T	0	0	5	41.870547	-80.751517
126	5200		Down Milepost	126.00	0	57	T	0	0	5	41.877034	-80.734589
125	5830		Down Milepost	125.00	0	58	T	0	0	5	41.884302	-80.715606
124	4771		Down Milepost	124.00	0	58	T	0	0	5	41.890245	-80.700067
123	5328		Down Milepost	123.00	0	39	T	0	0	5	41.896882	-80.682712
122	5287		Down Milepost	122.00	0	31	T	0	0	5	41.904687	-80.666441
121	4853		Down Milepost	121.00	0	4	T	0	0	5	41.912076	-80.651687
121	1260		Class Change	2.00	0	15	B	0	0	5	41.913994	-80.647862
121	1260		Posted Speed	25.00	0	15	B	0	0	5	41.913994	-80.647862
120	5742		Down Milepost	120.00	0	26	T	0	0	5	41.920845	-80.634256
119	5151		Down Milepost	119.00	0	27	T	0	0	5	41.928682	-80.618583
118	5508		Down Milepost	118.00	0	22	T	0	0	5	41.936559	-80.601414
118	4639		Class Change	1.00	0	9	B	0	0	5	41.942410	-80.586367
118	4639		Posted Speed	10.00	0	9	B	0	0	5	41.942410	-80.586367
118	4782		Track Change	0.00	0	9	E	0	0	7	41.942559	-80.585883
118	5705	115	Rockoff Hazard	2.17	93	9	C	1	2	7	41.943482	-80.582743
116	11004		Down Milepost	116.00	0	7	B	0	0	7	41.945628	-80.563560
116	642		Track Change	0.00	0	5	T	0	0	5	41.945826	-80.561224
116	642		Class Change	2.00	0	5	T	0	0	5	41.945826	-80.561224
116	642		Posted Speed	20.00	0	5	T	0	0	5	41.945826	-80.561224

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116	829		Class Change	4.00	0	8	T	0	0	5	41.945899	-80.560547
116	829		Posted Speed	60.00	0	8	T	0	0	5	41.945899	-80.560547
114	10522		Down Milepost	114.00	0	59	T	0	0	5	41.949683	-80.525408
114	2781	127	L Prof 62	-1.53	6	60	C	4	5	5	41.950786	-80.515330
114	4144	128	R Prof 62	-1.37	1	59	T	4	5	5	41.951864	-80.510563
113	5299		Down Milepost	113.00	0	59	T	0	0	5	41.952925	-80.506571
112	4912		Down Milepost	112.00	0	58	T	0	0	5	41.957428	-80.489620
112	3872	129	R Prof 62	-1.48	5	56	T	4	5	5	41.960979	-80.476255
112	3902	131	R Prof 62	1.92	18	56	T	4	5	5	41.961006	-80.476151
112	3904	130	L Prof 62	1.55	9	56	T	4	5	5	41.961008	-80.476144
111	5298		Down Milepost	111.00	0	56	T	0	0	5	41.962285	-80.471330
110	5321		Down Milepost	110.00	0	49	T	0	0	5	41.967168	-80.452966
110	1571	132	R Prof 62	-1.49	4	47	T	4	5	5	41.968607	-80.447549
109	5264		Down Milepost	109.00	0	49	T	0	0	5	41.971989	-80.434797
108	5320		Down Milepost	108.00	0	47	T	0	0	5	41.976854	-80.416430
108	580	133	L Align 31	-0.82	8	47	B	4	5	5	41.977388	-80.414429
107	5413		Down Milepost	107.00	0	47	C	0	0	5	41.984960	-80.399967
106	5165		Down Milepost	106.00	0	42	T	0	0	5	41.989634	-80.382120
106	3187	134	L Prof 62	-1.55	4	39	T	4	5	5	41.992437	-80.371063
105	5287		Down Milepost	105.00	0	32	T	0	0	5	41.994279	-80.363770
105	332		Posted Speed	50.00	0	31	T	0	0	5	41.994570	-80.362617
105	1928		Posted Speed	60.00	0	33	T	0	0	5	41.996798	-80.357694
104	5125		Down Milepost	104.00	0	35	T	0	0	5	42.002967	-80.349391
104	2300		Posted Speed	50.00	0	31	B	0	0	5	42.007401	-80.343414
104	3254	135	L Align 62	0.88	13	29	C	4	5	5	42.008966	-80.340649
104	3293	136	R Align 62	-1.05	21	29	C	4	5	5	42.009006	-80.340518
104	3298	137	L Align 62	-1.03	22	28	C	4	5	5	42.009012	-80.340501
104	3579		Posted Speed	60.00	0	28	E	0	0	5	42.009260	-80.339521
103	5394		Down Milepost	103.00	0	34	T	0	0	5	42.010501	-80.333082
103	1376		Posted Speed	50.00	0	41	T	0	0	5	42.011435	-80.328189
103	1915	141	R Prof 62	-1.52	4	43	T	4	5	5	42.011803	-80.326276
103	3152		Posted Speed	60.00	0	45	T	0	0	5	42.013108	-80.322121
102	5399		Down Milepost	102.00	0	34	T	0	0	5	42.016263	-80.315052
102	3161	145	R Align 62	1.07	11	29	T	4	5	5	42.020699	-80.305113
101	5294		Down Milepost	101.00	0	33	T	0	0	5	42.023696	-80.298392
100	5340		Down Milepost	100.00	0	34	T	0	0	5	42.031637	-80.281962
99	5290		Down Milepost	99.00	0	35	T	0	0	5	42.038839	-80.265158
99	470	146	L Prof 62	-1.44	1	35	T	4	5	5	42.039442	-80.263635
98	5263		Down Milepost	98.00	0	37	T	0	0	5	42.045611	-80.248123

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98	1241	147	L Prof 62	-1.47	3	37	T	4	5	5	42.047207	-80.244107
97	5057		Down Milepost	97.00	0	36	T	0	0	5	42.052116	-80.231753
97	2089		State Line	PA	0	37	T	0	0	5	42.054685	-80.224910
97	2151	148	L Align 62	0.87	1	37	T	4	5	5	42.054760	-80.224706
97	2239	149	R Prof 62	-1.44	3	37	T	4	5	5	42.054866	-80.224416
97	2240	150	L Prof 62	-1.47	7	37	T	4	5	5	42.054867	-80.224413
97	2603		Posted Speed	50.00	0	36	T	0	0	5	42.055306	-80.223219
97	4070		Posted Speed	4.00	0	36	E	0	0	5	42.057214	-80.218497
97	4126	151	Twist 31ft*	1.02	8	36	E	3	5	5	42.057309	-80.218335
97	4148	152	Twist 31ft*	0.92	5	36	E	4	5	5	42.057346	-80.218272
97	4408		Posted Speed	60.00	0	36	T	0	0	5	42.057792	-80.217529
97	4949	156	L Prof 62	-1.85	10	37	T	4	5	5	42.058720	-80.215989
96	5040		Down Milepost	96.00	0	36	T	0	0	5	42.058879	-80.215727
95	5789		Down Milepost	95.00	0	43	C	0	0	5	42.068837	-80.199213
94	5577		Down Milepost	94.00	0	27	T	0	0	5	42.076373	-80.181432
93	4143		Down Milepost	93.00	0	28	T	0	0	5	42.081860	-80.168133
92	6088		Down Milepost	92.00	0	25	T	0	0	5	42.089925	-80.148589
91	5670		Down Milepost	91.00	0	38	T	0	0	5	42.097905	-80.130783
90	5282		Down Milepost	90.00	0	40	T	0	0	5	42.106645	-80.115349
90	2727	157	L Prof 62	-1.52	6	40	T	4	5	5	42.111160	-80.107378
90	2727	158	R Prof 62	-1.51	7	40	T	4	5	5	42.111160	-80.107378
90	3365		Class Change	3.00	0	39	T	0	0	5	42.112213	-80.105516
90	3365		Posted Speed	40.00	0	39	T	0	0	5	42.112213	-80.105516
89	5252		Down Milepost	89.00	0	38	B	0	0	5	42.115143	-80.099815
88	5360		Down Milepost	88.00	0	35	T	0	0	5	42.120477	-80.081483
87	5302		Down Milepost	87.00	0	32	T	0	0	5	42.125654	-80.063469
87	2859		Class Change	4.00	0	35	C	0	0	5	42.127503	-80.053429
87	2859		Posted Speed	60.00	0	35	C	0	0	5	42.127503	-80.053429
86	5303		Down Milepost	86.00	0	39	T	0	0	5	42.131332	-80.046075
85	4721		Down Milepost	85.00	0	41	T	0	0	5	42.138332	-80.031534
85	2831	162	L Prof 62	-1.79	5	40	T	4	5	5	42.141774	-80.022223
85	2831	163	R Prof 62	-1.55	3	40	T	4	5	5	42.141774	-80.022223
84	5866		Down Milepost	84.00	0	44	T	0	0	5	42.145463	-80.012232
83	5363		Down Milepost	83.00	0	46	T	0	0	5	42.151970	-79.994581
82	5287		Down Milepost	82.00	0	41	T	0	0	5	42.158374	-79.977161
81	5219		Down Milepost	81.00	0	37	T	0	0	5	42.164460	-79.959822
80	5273		Down Milepost	80.00	0	43	T	0	0	5	42.171068	-79.942616
79	5366		Down Milepost	79.00	0	50	T	0	0	5	42.177560	-79.924936
78	5277		Down Milepost	78.00	0	51	T	0	0	5	42.183939	-79.907542

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78	1253	164	R Prof 62	-1.59	7	51	T	4	5	5	42.185453	-79.903412
77	5297		Down Milepost	77.00	0	49	T	0	0	5	42.190341	-79.890080
76	5315		Down Milepost	76.00	0	49	T	0	0	5	42.196763	-79.872553
75	5302		Down Milepost	75.00	0	55	T	0	0	5	42.203169	-79.855069
75	5488	165	Twist 31ft*	-0.86	1	53	B	4	5	5	42.209801	-79.836974
75	6353	167	R Align 62	0.77	3	53	B	4	5	5	42.210908	-79.834163
73	10591		Down Milepost	73.00	0	56	T	0	0	5	42.216068	-79.820207
72	5296		Down Milepost	72.00	0	49	T	0	0	5	42.222507	-79.802760
72	3882		Posted Speed	50.00	0	45	T	0	0	5	42.227608	-79.790247
72	5261		Posted Speed	60.00	0	40	E	0	0	5	42.228944	-79.785571
71	5308		Down Milepost	71.00	0	40	E	0	0	5	42.228953	-79.785395
71	2369		Posted Speed	50.00	0	35	T	0	0	5	42.229336	-79.776696
71	4007		Class Change	3.00	0	34	E	0	0	5	42.230440	-79.770967
71	4007		Posted Speed	40.00	0	34	E	0	0	5	42.230440	-79.770967
71	4893		Class Change	4.00	0	34	T	0	0	5	42.231939	-79.768409
71	4893		Posted Speed	60.00	0	34	T	0	0	5	42.231939	-79.768409
70	5395		Down Milepost	70.00	0	33	T	0	0	5	42.232801	-79.766966
70	2186		State Line	NY	0	34	T	0	0	5	42.236551	-79.760705
69	5326		Down Milepost	69.00	0	26	T	0	0	5	42.241936	-79.751710
68	5175		Down Milepost	68.00	0	25	T	0	0	5	42.250812	-79.736873
67	5558		Down Milepost	67.00	0	21	T	0	0	5	42.259930	-79.720539
66	5045		Down Milepost	66.00	0	32	T	0	0	5	42.267129	-79.704690
65	5293		Down Milepost	65.00	0	58	T	0	0	5	42.274670	-79.688054
65	3320	170	R Align 62	-0.78	6	59	B	4	5	5	42.279398	-79.677621
64	5267		Down Milepost	64.00	0	59	T	0	0	5	42.282357	-79.671657
63	5322		Down Milepost	63.00	0	58	T	0	0	5	42.290604	-79.655507
62	5306		Down Milepost	62.00	0	59	T	0	0	5	42.298821	-79.639390
61	5300		Down Milepost	61.00	0	56	T	0	0	5	42.307023	-79.623301
61	4292	173	L Prof 62	-1.48	4	54	T	4	5	5	42.313670	-79.610274
61	4292	172	R Prof 62	-1.41	2	54	T	4	5	5	42.313670	-79.610274
60	5299		Down Milepost	60.00	0	53	T	0	0	5	42.315230	-79.607215
59	5400		Down Milepost	59.00	0	47	T	0	0	5	42.323456	-79.590702
59	2208	174	R Align 62	-0.76	2	47	B	4	5	5	42.326130	-79.583408
59	2226	175	Twist 31ft*	-0.98	7	47	B	4	5	5	42.326153	-79.583349
58	5245		Down Milepost	58.00	0	52	T	0	0	5	42.331180	-79.574530
57	5239		Down Milepost	57.00	0	56	T	0	0	5	42.339929	-79.559251
57	35	177	L Prof 62	-1.95	13	57	T	4	5	5	42.339984	-79.559145
57	35	176	R Prof 62	-1.84	11	57	T	4	5	5	42.339984	-79.559145
56	5290		Down Milepost	56.00	0	57	T	0	0	5	42.348172	-79.543228

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55	5306		Down Milepost	55.00	0	58	T	0	0	5	42.356434	-79.527150
55	694	178	L Align 62	-0.94	5	57	T	4	5	5	42.357515	-79.525047
55	708	179	R Prof 62	-1.69	5	58	T	4	5	5	42.357537	-79.525004
54	5305		Down Milepost	54.00	0	59	T	0	0	5	42.364692	-79.511067
54	1907	180	R Align 62	-0.92	7	58	T	4	5	5	42.367660	-79.505287
54	1947	181	R Align 62	0.86	2	58	T	4	5	5	42.367722	-79.505166
53	5258		Down Milepost	53.00	0	56	T	0	0	5	42.372874	-79.495124
53	5226	183	L Prof 62	-1.42	1	57	T	4	5	5	42.380999	-79.479278
53	5255	184	R Align 62	-0.89	4	57	T	4	5	5	42.381045	-79.479190
53	5257	185	L Prof 62	1.60	9	57	T	4	5	5	42.381048	-79.479184
52	5337		Down Milepost	52.00	0	57	T	0	0	5	42.381174	-79.478939
51	5275		Down Milepost	51.00	0	58	T	0	0	5	42.389372	-79.462928
50	5291		Down Milepost	50.00	0	55	T	0	0	5	42.397587	-79.446864
49	5302		Down Milepost	49.00	0	57	T	0	0	5	42.406607	-79.431704
48	5308		Down Milepost	48.00	0	59	T	0	0	5	42.417761	-79.419178
47	5285		Down Milepost	47.00	0	58	T	0	0	5	42.428867	-79.406709
47	293	186	L Align 62	1.23	14	58	T	4	5	5	42.429482	-79.406022
46	5341		Down Milepost	46.00	0	54	T	0	0	5	42.440102	-79.394122
45	5276		Down Milepost	45.00	0	48	T	0	0	5	42.451200	-79.381687
44	5299		Down Milepost	44.00	0	48	T	0	0	5	42.462351	-79.369198
44	1082	190	Crosslevel	-1.26	28	49	T	3	5	5	42.464628	-79.366649
44	3944		Posted Speed	50.00	0	47	T	0	0	5	42.470648	-79.359905
43	5285		Down Milepost	43.00	0	46	C	0	0	5	42.473206	-79.356403
43	1321		Posted Speed	60.00	0	43	T	0	0	5	42.473871	-79.351680
43	5114		Class Change	3.00	0	40	T	0	0	5	42.473801	-79.337676
43	5114		Posted Speed	40.00	0	40	T	0	0	5	42.473801	-79.337676
42	5278		Down Milepost	42.00	0	40	T	0	0	5	42.473798	-79.337067
42	3823	192	Twist 31ft*	1.51	6	35	E	2	4	5	42.475643	-79.323762
41	5397		Down Milepost	41.00	0	38	T	0	0	5	42.479115	-79.320322
41	1750	193	Twist 31ft*	1.17	5	36	B	3	4	5	42.483371	-79.317423
41	4431		Class Change	4.00	0	38	C	0	0	5	42.488338	-79.310263
41	4431		Posted Speed	60.00	0	38	C	0	0	5	42.488338	-79.310263
40	5221		Down Milepost	40.00	0	36	T	0	0	5	42.489441	-79.307744
39	5297		Down Milepost	39.00	0	54	T	0	0	5	42.495419	-79.289932
38	5283		Down Milepost	38.00	0	59	T	0	0	5	42.501453	-79.272211
37	5293		Down Milepost	37.00	0	52	T	0	0	5	42.508433	-79.255080
36	5322		Down Milepost	36.00	0	25	T	0	0	5	42.515449	-79.237856
35	5346		Down Milepost	35.00	0	26	T	0	0	5	42.522491	-79.220552
34	5268		Down Milepost	34.00	0	25	T	0	0	5	42.529438	-79.203491

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34	1362	195	Crosslevel	-1.15	8	20	T	4	5	5	42.531237	-79.199083
34	2129	196	Twist 31ft*	-1.04	4	22	B	3	5	5	42.532250	-79.196601
33	5213		Down Milepost	33.00	0	24	T	0	0	5	42.538160	-79.188611
33	3728	197	Twist 31ft*	-0.95	3	29	B	4	5	5	42.544579	-79.178299
32	5184		Down Milepost	32.00	0	36	T	0	0	5	42.546436	-79.173538
32	2392		Posted Speed	50.00	0	33	T	0	0	5	42.549617	-79.165818
31	5283		Down Milepost	31.00	0	35	C	0	0	5	42.551372	-79.155804
31	4233		Posted Speed	60.00	0	24	T	0	0	5	42.553797	-79.141931
30	5667		Down Milepost	30.00	0	23	T	0	0	5	42.556316	-79.137868
30	2997	207	R Prof 62	-1.46	2	23	C	4	5	5	42.561527	-79.129317
30	3114	208	Twist 31ft*	-1.02	3	23	E	3	5	5	42.561708	-79.128960
30	3671	209	L Prof 62	-1.44	2	22	T	4	5	5	42.562550	-79.127245
30	3894		Class Change	2.00	0	21	T	0	0	5	42.562887	-79.126557
30	3894		Posted Speed	25.00	0	21	T	0	0	5	42.562887	-79.126557
30	4401		Class Change	4.00	0	21	T	0	0	5	42.563653	-79.124996
30	4401		Posted Speed	60.00	0	21	T	0	0	5	42.563653	-79.124996
29	4629		Down Milepost	29.00	0	21	T	0	0	5	42.563999	-79.124291
28	5733		Down Milepost	28.00	0	49	T	0	0	5	42.574123	-79.108320
27	5212		Down Milepost	27.00	0	52	T	0	0	5	42.584266	-79.094785
27	2528	210	R Prof 62	-1.61	6	55	T	4	5	5	42.589127	-79.088140
25	10741		Down Milepost	26.00	0	49	T	0	0	5	42.604771	-79.066345
24	5259		Down Milepost	24.00	0	53	T	0	0	5	42.614436	-79.051936
23	5330		Down Milepost	23.00	0	50	T	0	0	5	42.624243	-79.037343
23	2323	211	L Align 62	0.73	1	56	C	4	5	5	42.628537	-79.031011
22	5265		Down Milepost	22.00	0	56	C	0	0	5	42.634815	-79.024196
21	5301		Down Milepost	21.00	0	54	B	0	0	5	42.647688	-79.015208
20	5229		Down Milepost	20.00	0	57	T	0	0	5	42.658833	-79.003124
19	5359		Down Milepost	19.00	0	57	T	0	0	5	42.669937	-78.990177
18	5262		Down Milepost	18.00	0	59	T	0	0	5	42.680522	-78.976986
17	5343		Down Milepost	17.00	0	57	T	0	0	5	42.691287	-78.963600
16	5282		Down Milepost	16.00	0	39	T	0	0	5	42.701937	-78.950380
15	5339		Down Milepost	15.00	0	44	T	0	0	5	42.712693	-78.937005
14	4984		Down Milepost	14.00	0	46	T	0	0	5	42.722698	-78.924463
13	5701		Down Milepost	13.00	0	33	T	0	0	5	42.733560	-78.909315
12	5188		Down Milepost	12.00	0	38	T	0	0	5	42.743446	-78.895519
11	5434		Down Milepost	11.00	0	34	T	0	0	5	42.753545	-78.880742
10	5150		Down Milepost	10.00	0	30	T	0	0	5	42.763049	-78.866651
10	786	215	L Prof 62	-1.42	3	30	T	4	5	5	42.764499	-78.864501
9	5344		Down Milepost	9.00	0	24	T	0	0	5	42.772915	-78.852028

Exception Report
Class Plus 1 Exception List Section
Milepost 182 to Milepost 418
Cleveland, OH to Buffalo, NY

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Run Date: 04/09/2019
Run ID: 2019040901

MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
9	454	217	L Align 62	-1.12	13	24	T	4	5	5	42.773751	-78.850784
8	5268		Down Milepost	8.00	0	28	C	0	0	5	42.783537	-78.839049
7	5288		Down Milepost	7.00	0	28	T	0	0	5	42.797015	-78.832069
7	257		Class Change	3.00	0	28	T	0	0	5	42.797688	-78.831791
7	257		Posted Speed	35.00	0	28	T	0	0	5	42.797688	-78.831791
7	773	224	R Align 62	-1.79	2	27	C	2	4	5	42.799058	-78.831350
7	3442		Track Change	0.00	0	25	T	0	0	2	42.806330	-78.832105
6	5309		Down Milepost	6.00	0	23	T	0	0	2	42.811419	-78.832686
6	4958		Class Change	4.00	0	21	C	0	0	2	42.824906	-78.834413
6	4958		Posted Speed	60.00	0	21	C	0	0	2	42.824906	-78.834413
5	5315		Down Milepost	5.00	0	20	E	0	0	2	42.825869	-78.834645
5	5161		Class Change	3.00	0	16	T	0	0	2	42.839246	-78.840583
5	5161		Posted Speed	35.00	0	16	T	0	0	2	42.839246	-78.840583
4	5607		Down Milepost	4.00	0	15	T	0	0	2	42.840387	-78.841177
3	5286		Down Milepost	3.00	0	13	T	0	0	2	42.853940	-78.848010
3	2126		Class Change	1.00	0	13	T	0	0	2	42.859412	-78.848923
3	2126		Posted Speed	10.00	0	13	T	0	0	2	42.859412	-78.848923
3	6365		Subdivision	SOUTHE	0	12	T	0	0	2	42.869798	-78.841942
3	9021		Track Change	0.00	0	13	T	0	0	7	42.875618	-78.836573
422	9205		Down Milepost	422.00	0	10	B	0	0	7	42.875833	-78.835950
422	410		Class Change	2.00	0	8	C	0	0	7	42.876334	-78.834584
422	410		Posted Speed	15.00	0	8	C	0	0	7	42.876334	-78.834584
421	5147		Down Milepost	421.00	0	14	T	0	0	7	42.882707	-78.819596
420	5635		Down Milepost	420.00	0	12	T	0	0	7	42.885178	-78.799119
420	930		Track Change	0.00	0	12	T	0	0	5	42.886096	-78.795898
420	1083		Class Change	3.00	0	12	T	0	0	5	42.886235	-78.795361
420	1083		Posted Speed	35.00	0	12	T	0	0	5	42.886235	-78.795361
420	1405		Posted Speed	40.00	0	13	T	0	0	5	42.886527	-78.794233
419	5227		Down Milepost	419.00	0	13	T	0	0	5	42.889993	-78.780830
418	5203		Down Milepost	418.00	0	12	T	0	0	5	42.894746	-78.762601
418	1125		Class Change	1.00	0	5	B	0	0	5	42.895767	-78.758655
418	1125		Posted Speed	10.00	0	5	B	0	0	5	42.895767	-78.758655
418	1230		Track Change	0.00	0	6	B	0	0	7	42.895871	-78.758292

Notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Rail Impact Values are unitless; indicating a location with a large vertical axle acceleration

Rail Cant Exceptions values indicate degrees.

(RSA) indicates possible Rail Seat Abrasion. The following fields are irrelevant for Cant Exceptions: LC, PC

Exception Report
Class Plus 1 Exception Summary Section
Milepost 182 to Milepost 418
Cleveland, OH to Buffalo, NY

Page 1 of 2
Run Date: 04/09/2019
Run ID: 2019040901

		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot			
MP	FT	EXC	FT	Drop	EXC	FT	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	Cls	Cls	Trk
0	185	1	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	7	
180	5350	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	11	-	-	3	4	2
179	1752	-	-	-	-	-	6	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	2	
177	10675	-	-	-	-	-	-	-	-	1	53	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	5	2	
173	5786	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	4	5	2	
165	5414	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	62	1	2	24	1	-	2	5	5
161	4726	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	-	-	-	-	-	-	-	-	-	-	4	5	5	
157	5193	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
156	4965	-	-	-	-	-	2	16	-	-	-	-	-	-	-	2	6	-	-	-	-	-	-	-	-	-	-	4	5	5	
154	5301	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	32	1	-	-	-	-	-	-	-	-	-	3	5	5	
152	10795	-	-	-	-	-	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
150	5273	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	4	5	5	
144	5532	-	-	-	-	-	3	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	4	5	5	
136	5394	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
129	5270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	3	4	5	
118	4782	-	-	-	-	-	-	-	-	-	-	-	1	93	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	7	
114	10522	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	7	-	-	-	-	-	-	-	-	-	-	4	5	5	
112	4912	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	32	-	-	-	-	-	-	-	-	-	-	4	5	5	
110	5321	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	-	-	-	-	-	-	-	-	-	-	4	5	5	
108	5320	-	-	-	-	-	1	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
106	5165	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	-	-	-	-	-	-	-	-	-	-	4	5	5	
104	5125	-	-	-	-	-	3	56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
103	5394	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	-	-	-	-	-	-	-	-	-	-	4	5	5	
102	5399	-	-	-	-	-	1	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
99	5290	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	4	5	5	
98	5263	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	-	-	-	-	-	-	-	-	4	5	5	
97	5057	-	-	-	-	-	1	1	-	-	-	-	-	-	-	3	20	-	-	-	-	-	-	-	2	13	1	-	3	5	5
90	5282	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	13	-	-	-	-	-	-	-	-	-	-	4	5	5	

Exception Report
Class Plus 1 Exception Summary Section
Milepost 182 to Milepost 418
Cleveland, OH to Buffalo, NY

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Run Date: 04/09/2019
Run ID: 2019040901

		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd				
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Lim	Pst		
MP	FT	Exc	FT	Drop	Exc	FT	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	Cls	Cls	Trk	
85	4721	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
78	5277	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
75	5302	-	-	-	-	-	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	4	5	5	
65	5293	-	-	-	-	-	1	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
61	5300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	6	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
59	5400	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	-	-	-	4	5	5	
57	5239	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	24	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
55	5306	-	-	-	-	-	1	5	-	-	-	-	-	-	-	1	5	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
54	5305	-	-	-	-	-	2	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
53	5258	-	-	-	-	-	1	4	-	-	-	-	-	-	-	2	10	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
47	5285	-	-	-	-	-	1	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
44	5299	-	-	-	-	-	-	-	-	1	28	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	5	5	
42	5278	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	6	1	-	2	4	5		
41	5397	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5	-	-	3	4	5		
34	5268	-	-	-	-	-	-	-	-	1	8	-	-	-	-	-	-	-	-	-	-	-	-	1	4	1	-	3	5	5		
33	5213	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	4	5	5		
30	5667	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	-	-	-	-	-	-	1	3	1	-	3	5	5		
27	5212	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	6	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
23	5330	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
10	5150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
9	5344	-	-	-	-	-	1	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
7	257	-	-	-	-	-	1	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	5	
		1	7	-	-	-	31	310	1	3	89	2	1	93	-	37	205	1	-	-	-	1	62	1	14	80	5	-				

Total Miles: 186.50
Exceptions per 100 Miles: 47.18
CY18 National Average Exceptions per 100 miles: 5.0

Page 1 of 1

Run Date: 04/09/2019

Run ID: 2019040901

Run ID: 2019040901

Cleveland, OH to Buffalo, NY

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
There were no Alignment 62 exceptions detected during this survey.											

DOTX 219 Geometry Car

United States Department of Transportation

AUTOMATED TRACK INSPECTION PROGRAM

TRACK GEOMETRY INSPECTION REPORT

Buffalo, NY to Binghamton, NY

Railroad: NORFOLK SOUTHERN CORPORATION (NS)

Survey Number: 1924

Mile Post 418 to Mile Post 215



Prepared for:

United States Department of Transportation
Federal Railroad Administration
Office of Safety
Washington, D.C.

Prepared by:

ENSCO, Inc.
5400 Port Royal Rd
Springfield, VA 22151



Testing Cert. 2411.01

Approved By:

Survey Director:

CLAYTON SHANK

Signature

Date

Under the U.S. Department of Transportation, Federal Railroad Administration (FRA), Office of Safety Assurance and Compliance, Automated Track Inspection Program and in accordance with 49 CFR 213 Federal Track Safety Standards, this Track Geometry Inspection Report provides a list of exceptions that relate only to the time and date the track was inspected and the required remedial action taken. This compliance report is offered only to the track owner and is not to be reproduced to others in whole or part without the expressed written consent of the FRA and the track owner. FRA requests any reprinting be labeled as a copy of the original.

NOTES

An Automated Track Inspection Program (ATIP) Track Geometry Inspection Report (TGIR) is generated for each ATIP survey. The TGIR summarizes the data collected and can be used in conjunction with the strip chart. The TGIR is generated electronically onboard the car and hard copies are distributed as follows:

1. One (1) copy is provided to onboard railroad representative, as requested
2. One (1) copy is provided to onboard FRA Inspector, as requested
3. One (1) copy is archived for FRA management

Following ATIP Compliance survey operations, electronic copies of TGIRs are distributed via email, to a list of recipients designated by FRA and railroad management.

The TGIR may consist of ten (10) parts;

1. Cover,
2. Notes,
3. Exception List,
4. Curve Analysis,
5. Exception Summary,
6. Track Quality Index (TQI),
7. GRMS Exception List (if equipped),
8. Class+1 (C+1) Exception List,
9. C+1 Exception Summary,
10. Alinement MCO worksheet.

Track measurement sample frequency is once per foot.

Exceptions may not be reported for Alinement and Profile parameters when ATIP car speed is less than fifteen (15) and five (5) miles per hour, respectively.

Exception List symbols/notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49CFR 213.57(b).

Rail Impact Values are unit-less; indicating a location with a large vertical axle acceleration.

Rail Cant Exception denoted with (RSA) indicates possible Rail Seat Abrasion.

The following fields are not applicable for Limited Speed, Ride Quality [in classes 1-5], and Rail Cant:

Limited Class (LC); Posted Class (PC).

All Exception Parameter values are reported in inches, except for the following:

- Limiting Speed (Vmax) expressed in: MPH
- Ride Quality; Carbody Lateral, Carbody Vertical, Truck Lateral expressed in: g (gravitational acceleration)
- Rail Cant; Left (L) and Right (R), NEG[ative] and POS[itive] expressed in: angular degrees (°)

For Alinement exceptions: Negative (-) values indicate rail shifting to the right and Positive (+) values indicate rail shifting to the left, referencing direction of ATIP car travel during testing.

Alinement exceptions reported in turnout paths are considered Federal Track Safety Standard Advisory.

For Rail Cant exceptions: Negative (-) values indicate an outward shift in the rail angle, and Positive (+) values indicate an inward shift in the rail angle. Rail Cant exceptions have a minimum length of 15 feet.

A complete description of the information provided in the TGIR is available at

<https://www.fra.dot.gov/eLib/Details/L04545>

ATIP survey exceptions are available for review the next business day, and ATIP track measurement foot by foot data is available the following week at: https://tdms.fra.dot.gov/tdms_lite

Exception Report
Exception List Section
Milepost 418 to Milepost 215
Buffalo, NY to Binghamton, NY

Page 1 of 8
Run Date: 04/10/2019
Run ID: 2019041001

MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	142		Posted Speed	60.00	0	5	T	0	0	7	42.895756	-78.758676
0	142		State Line	NY	0	5	T	0	0	7	42.895756	-78.758676
0	143		Railroad	NS -	0	5	T	0	0	7	42.895757	-78.758673
0	144		Subdivision	SOUTHE	0	5	T	0	0	7	42.895757	-78.758673
418	176		Down Milepost	418.00	0	6	T	0	0	7	42.895786	-78.758558
418	1057		Track Change	0.00	0	6	T	0	0	5	42.895786	-78.758558
418	1057		Class Change	3.00	0	6	T	0	0	5	42.895786	-78.758558
418	1057		Posted Speed	40.00	0	6	T	0	0	5	42.895786	-78.758558
418	1275		Class Change	4.00	0	11	T	0	0	5	42.895984	-78.757791
418	1275		Posted Speed	80.00	0	11	T	0	0	5	42.895984	-78.757791
418	1309		Posted Speed	50.00	0	12	T	0	0	5	42.896015	-78.757672
418	1521		Class Change	3.00	0	15	T	0	0	5	42.896208	-78.756929
418	1521		Posted Speed	40.00	0	15	T	0	0	5	42.896208	-78.756929
417	5162		Down Milepost	417.00	0	36	T	0	0	5	42.899503	-78.744157
416	5294		Down Milepost	416.00	0	37	T	0	0	5	42.904300	-78.725579
416	2712		Class Change	4.00	0	35	B	0	0	5	42.906749	-78.716060
416	2712		Posted Speed	50.00	0	35	B	0	0	5	42.906749	-78.716060
415	5317		Down Milepost	415.00	0	28	T	0	0	5	42.906808	-78.706443
414	5329		Down Milepost	414.00	0	13	T	0	0	5	42.905719	-78.686684
414	3867		Class Change	2.00	0	23	T	0	0	5	42.904931	-78.672352
414	3867		Posted Speed	25.00	0	23	T	0	0	5	42.904931	-78.672352
414	4393		Class Change	4.00	0	24	T	0	0	5	42.904826	-78.670402
414	4393		Posted Speed	50.00	0	24	T	0	0	5	42.904826	-78.670402
413	5281		Down Milepost	413.00	0	25	T	0	0	5	42.904645	-78.667106
412	5277		Down Milepost	412.00	0	48	T	0	0	5	42.903570	-78.647545
411	5316		Down Milepost	411.00	0	49	T	0	0	5	42.902480	-78.627837
410	5295		Down Milepost	410.00	0	48	T	0	0	5	42.901391	-78.608210
409	5299		Down Milepost	409.00	0	47	T	0	0	5	42.901058	-78.588549
408	5311		Down Milepost	408.00	0	32	T	0	0	5	42.900650	-78.568884
407	5304		Down Milepost	407.00	0	25	T	0	0	5	42.898441	-78.549401
407	4189		Class Change	2.00	0	24	T	0	0	5	42.897470	-78.533916
407	4189		Posted Speed	25.00	0	24	T	0	0	5	42.897470	-78.533916
407	4339		Track Change	0.00	0	23	B	0	0	6	42.897464	-78.533359
406	5333		Down Milepost	406.00	0	24	E	0	0	6	42.897446	-78.529663
405	5268		Down Milepost	405.00	0	21	T	0	0	6	42.897141	-78.510073
404	5302		Down Milepost	404.00	0	24	T	0	0	6	42.895621	-78.490575
403	5296		Down Milepost	403.00	0	24	C	0	0	6	42.892705	-78.471401
402	5304		Down Milepost	402.00	0	16	E	0	0	6	42.895562	-78.452101
402	4628		Class Change	4.00	0	19	E	0	0	6	42.894788	-78.435036

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
402	4628		Posted Speed	50.00	0	19	E	0	0	6	42.894788	-78.435036
402	4803		Track Change	0.00	0	19	T	0	0	5	42.894700	-78.434396
401	5295		Down Milepost	401.00	0	21	T	0	0	5	42.894463	-78.432592
400	5284		Down Milepost	400.00	0	48	T	0	0	5	42.891785	-78.413295
399	5263		Down Milepost	399.00	0	47	T	0	0	5	42.892665	-78.393882
398	5331		Down Milepost	398.00	0	49	T	0	0	5	42.894457	-78.374215
397	5310		Down Milepost	397.00	0	47	C	0	0	5	42.893873	-78.354882
396	5296		Down Milepost	396.00	0	45	T	0	0	5	42.887088	-78.337600
395	5320		Down Milepost	395.00	0	41	T	0	0	5	42.881669	-78.319348
394	5302		Down Milepost	394.00	0	33	T	0	0	5	42.874749	-78.302253
393	5276		Down Milepost	393.00	0	26	T	0	0	5	42.865746	-78.286962
393	2286		Class Change	2.00	0	21	E	0	0	5	42.862709	-78.279807
393	2286		Posted Speed	25.00	0	21	E	0	0	5	42.862709	-78.279807
393	2521		Class Change	3.00	0	21	T	0	0	5	42.862681	-78.278935
393	2521		Posted Speed	40.00	0	21	T	0	0	5	42.862681	-78.278935
393	4409		Class Change	4.00	0	28	C	0	0	5	42.861359	-78.272295
393	4409		Posted Speed	50.00	0	28	C	0	0	5	42.861359	-78.272295
393	5744		Class Change	3.00	0	34	B	0	0	5	42.858919	-78.268609
393	5744		Posted Speed	40.00	0	34	B	0	0	5	42.858919	-78.268609
393	6544		Class Change	4.00	0	33	C	0	0	5	42.857766	-78.266093
393	6544		Posted Speed	50.00	0	33	C	0	0	5	42.857766	-78.266093
391	10600		Down Milepost	391.00	0	38	C	0	0	5	42.860560	-78.252790
391	547		Class Change	3.00	0	38	C	0	0	5	42.861880	-78.251842
391	547		Posted Speed	40.00	0	38	C	0	0	5	42.861880	-78.251842
391	2333		Class Change	4.00	0	36	T	0	0	5	42.866444	-78.249482
391	2333		Posted Speed	50.00	0	36	T	0	0	5	42.866444	-78.249482
390	5277		Down Milepost	390.00	0	44	C	0	0	5	42.873322	-78.244097
388	10598		Down Milepost	388.00	0	49	B	0	0	5	42.885112	-78.209132
388	4209	44	Crosslevel	-1.38	17	48	T	3	4	5	42.885482	-78.193541
387	5298		Down Milepost	387.00	0	47	T	0	0	5	42.885466	-78.189491
386	5307		Down Milepost	386.00	0	50	B	0	0	5	42.880976	-78.171128
385	5325		Down Milepost	385.00	0	47	C	0	0	5	42.868651	-78.161580
384	5301		Down Milepost	384.00	0	48	C	0	0	5	42.856035	-78.170507
383	5291		Down Milepost	383.00	0	48	T	0	0	5	42.842541	-78.177487
382	5272		Down Milepost	382.00	0	49	C	0	0	5	42.828790	-78.180794
381	5319		Down Milepost	381.00	0	49	C	0	0	5	42.815344	-78.173472
380	5207		Down Milepost	380.00	0	48	T	0	0	5	42.804450	-78.161125
379	5401		Down Milepost	379.00	0	48	T	0	0	5	42.791582	-78.152022
378	5297		Down Milepost	378.00	0	47	C	0	0	5	42.777345	-78.148482

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
377	5108		Down Milepost	377.00	0	41	T	0	0	5	42.763501	-78.150792
376	5314		Down Milepost	376.00	0	29	T	0	0	5	42.749059	-78.152792
376	3345		Class Change	2.00	0	22	T	0	0	5	42.739932	-78.153401
376	3345		Posted Speed	25.00	0	22	T	0	0	5	42.739932	-78.153401
376	3800		Class Change	4.00	0	22	T	0	0	5	42.738688	-78.153486
376	3800		Posted Speed	50.00	0	22	T	0	0	5	42.738688	-78.153486
375	5311		Down Milepost	375.00	0	24	E	0	0	5	42.734569	-78.153430
374	5435		Down Milepost	374.00	0	48	T	0	0	5	42.720534	-78.147784
373	5133		Down Milepost	373.00	0	49	T	0	0	5	42.707275	-78.142752
372	5296		Down Milepost	372.00	0	49	T	0	0	5	42.695394	-78.131542
372	2873	58	Gage Wide	57.68	5	45	C	3	4	5	42.689442	-78.124658
371	5305		Down Milepost	371.00	0	46	T	0	0	5	42.683329	-78.121432
370	5308		Down Milepost	370.00	0	47	E	0	0	5	42.673090	-78.112165
369	5069		Down Milepost	369.00	0	48	C	0	0	5	42.672889	-78.094261
368	5347		Down Milepost	368.00	0	47	T	0	0	5	42.660874	-78.083236
367	5459		Down Milepost	367.00	0	33	T	0	0	5	42.647550	-78.074120
366	5403		Down Milepost	366.00	0	26	T	0	0	5	42.634367	-78.065141
366	3333		Class Change	2.00	0	22	C	0	0	5	42.626171	-78.059770
366	3333		Posted Speed	25.00	0	22	C	0	0	5	42.626171	-78.059770
366	3836		Class Change	4.00	0	22	C	0	0	5	42.624837	-78.059330
366	3836		Posted Speed	50.00	0	22	C	0	0	5	42.624837	-78.059330
365	5214		Down Milepost	365.00	0	25	T	0	0	5	42.621076	-78.059050
364	5396		Down Milepost	364.00	0	37	C	0	0	5	42.606334	-78.058968
363	5247		Down Milepost	363.00	0	30	C	0	0	5	42.592541	-78.058564
363	1749		Class Change	3.00	0	29	T	0	0	5	42.589138	-78.054060
363	1749		Posted Speed	30.00	0	29	T	0	0	5	42.589138	-78.054060
362	5292		Down Milepost	362.00	0	29	C	0	0	5	42.580860	-78.053456
361	5107		Down Milepost	361.00	0	28	B	0	0	5	42.577575	-78.037767
361	2293		Posted Speed	40.00	0	28	B	0	0	5	42.577752	-78.029720
360	5429		Down Milepost	360.00	0	37	T	0	0	5	42.570580	-78.024051
360	4403		Class Change	4.00	0	38	C	0	0	5	42.558796	-78.021048
360	4403		Posted Speed	50.00	0	38	C	0	0	5	42.558796	-78.021048
358	10605		Down Milepost	358.00	0	48	E	0	0	5	42.550025	-78.002466
357	5304		Down Milepost	357.00	0	49	T	0	0	5	42.545980	-77.983635
356	5307		Down Milepost	356.00	0	49	C	0	0	5	42.540467	-77.965582
355	5258		Down Milepost	355.00	0	50	T	0	0	5	42.542070	-77.946395
354	5377		Down Milepost	354.00	0	49	T	0	0	5	42.540148	-77.927212
353	5227		Down Milepost	353.00	0	44	C	0	0	5	42.533318	-77.910402
352	5354		Down Milepost	352.00	0	49	T	0	0	5	42.522891	-77.896522

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351	5357		Down Milepost	351.00	0	31	T	0	0	5	42.510816	-77.885499
350	5214		Down Milepost	350.00	0	20	T	0	0	5	42.497736	-77.877853
349	5351		Down Milepost	349.00	0	26	T	0	0	5	42.486172	-77.866521
349	4396		Class Change	3.00	0	34	T	0	0	5	42.478735	-77.853772
349	4396		Posted Speed	35.00	0	34	T	0	0	5	42.478735	-77.853772
349	4948		Class Change	4.00	0	35	B	0	0	5	42.477799	-77.852171
349	4948		Posted Speed	50.00	0	35	B	0	0	5	42.477799	-77.852171
347	10450		Down Milepost	347.00	0	34	T	0	0	5	42.467984	-77.836780
346	5298		Down Milepost	346.00	0	46	C	0	0	5	42.458751	-77.821742
345	5293		Down Milepost	345.00	0	50	T	0	0	5	42.456138	-77.802822
344	5307		Down Milepost	344.00	0	49	T	0	0	5	42.458977	-77.783713
343	5321		Down Milepost	343.00	0	49	T	0	0	5	42.462713	-77.764732
342	5310		Down Milepost	342.00	0	49	C	0	0	5	42.459937	-77.745976
341	5294		Down Milepost	341.00	0	49	T	0	0	5	42.448787	-77.734360
340	5293		Down Milepost	340.00	0	49	T	0	0	5	42.435334	-77.727194
339	5268		Down Milepost	339.00	0	49	T	0	0	5	42.421901	-77.720206
338	5295		Down Milepost	338.00	0	49	C	0	0	5	42.408450	-77.712995
337	5345		Down Milepost	337.00	0	50	T	0	0	5	42.395693	-77.703410
336	5305		Down Milepost	336.00	0	49	C	0	0	5	42.383211	-77.693457
335	5325		Down Milepost	335.00	0	43	T	0	0	5	42.370191	-77.684691
334	5327		Down Milepost	334.00	0	37	C	0	0	5	42.357008	-77.676417
333	5302		Down Milepost	333.00	0	29	T	0	0	5	42.342989	-77.671462
333	4389		Class Change	3.00	0	27	T	0	0	5	42.331384	-77.667367
333	4389		Posted Speed	30.00	0	27	T	0	0	5	42.331384	-77.667367
332	5325		Down Milepost	332.00	0	27	B	0	0	5	42.328939	-77.666359
332	1752		Posted Speed	35.00	0	29	T	0	0	5	42.324924	-77.662860
331	5287		Down Milepost	331.00	0	31	T	0	0	5	42.317041	-77.655347
331	3874		Class Change	4.00	0	34	C	0	0	5	42.308324	-77.647257
331	3874		Posted Speed	50.00	0	34	C	0	0	5	42.308324	-77.647257
330	5099		Down Milepost	330.00	0	35	C	0	0	5	42.305585	-77.644657
329	5294		Down Milepost	329.00	0	45	T	0	0	5	42.295394	-77.630973
328	5281		Down Milepost	328.00	0	44	T	0	0	5	42.286840	-77.615311
327	5349		Down Milepost	327.00	0	42	T	0	0	5	42.277198	-77.600652
327	4401		Class Change	3.00	0	36	C	0	0	5	42.269039	-77.588934
327	4401		Posted Speed	40.00	0	36	C	0	0	5	42.269039	-77.588934
326	5286		Down Milepost	326.00	0	37	B	0	0	5	42.267167	-77.586873
326	727		Class Change	4.00	0	37	E	0	0	5	42.266125	-77.584641
326	727		Posted Speed	50.00	0	37	E	0	0	5	42.266125	-77.584641
325	5305		Down Milepost	325.00	0	35	T	0	0	5	42.264197	-77.568013

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325	4390		Class Change	2.00	0	24	B	0	0	5	42.262751	-77.551982
325	4390		Posted Speed	25.00	0	24	B	0	0	5	42.262751	-77.551982
325	4829	97	Gage Wide	57.87	2	25	C	1	2	5	42.262452	-77.550420
325	5023		Class Change	4.00	0	25	E	0	0	5	42.262260	-77.549754
325	5023		Posted Speed	50.00	0	25	E	0	0	5	42.262260	-77.549754
324	5312		Down Milepost	324.00	0	25	E	0	0	5	42.261923	-77.548788
323	5339		Down Milepost	323.00	0	24	T	0	0	5	42.255108	-77.531416
323	1214		Class Change	2.00	0	24	B	0	0	5	42.253582	-77.527456
323	1214		Posted Speed	25.00	0	24	B	0	0	5	42.253582	-77.527456
323	1766		Class Change	4.00	0	25	C	0	0	5	42.253098	-77.525532
323	1766		Posted Speed	50.00	0	25	C	0	0	5	42.253098	-77.525532
322	5279		Down Milepost	322.00	0	24	T	0	0	5	42.253168	-77.512636
321	5256		Down Milepost	321.00	0	49	B	0	0	5	42.256140	-77.494082
320	5304		Down Milepost	320.00	0	48	C	0	0	5	42.254252	-77.474748
319	5346		Down Milepost	319.00	0	42	C	0	0	5	42.252311	-77.455464
319	3882		Class Change	3.00	0	38	T	0	0	5	42.244167	-77.446446
319	3882		Posted Speed	40.00	0	38	T	0	0	5	42.244167	-77.446446
318	5160		Down Milepost	318.00	0	37	E	0	0	5	42.241089	-77.444365
317	5388		Down Milepost	317.00	0	39	T	0	0	5	42.229363	-77.433796
316	5319		Down Milepost	316.00	0	38	C	0	0	5	42.222589	-77.416515
316	2819		Class Change	4.00	0	38	C	0	0	5	42.215315	-77.413834
316	2819		Posted Speed	50.00	0	38	C	0	0	5	42.215315	-77.413834
315	5284		Down Milepost	315.00	0	40	T	0	0	5	42.208583	-77.414231
314	5294		Down Milepost	314.00	0	46	E	0	0	5	42.197117	-77.405122
313	5315		Down Milepost	313.00	0	29	C	0	0	5	42.191684	-77.387752
313	3329		Class Change	2.00	0	24	B	0	0	5	42.184158	-77.380874
313	3329		Posted Speed	25.00	0	24	B	0	0	5	42.184158	-77.380874
313	3860		Class Change	4.00	0	24	C	0	0	5	42.183017	-77.379672
313	3860		Posted Speed	50.00	0	24	C	0	0	5	42.183017	-77.379672
312	5258		Down Milepost	312.00	0	25	E	0	0	5	42.181423	-77.375113
311	5323		Down Milepost	311.00	0	41	T	0	0	5	42.177602	-77.356626
310	5298		Down Milepost	310.00	0	39	T	0	0	5	42.174493	-77.338308
310	1258		Class Change	3.00	0	40	T	0	0	5	42.174546	-77.333686
310	1258		Posted Speed	40.00	0	40	T	0	0	5	42.174546	-77.333686
309	5491		Down Milepost	309.00	0	39	T	0	0	5	42.166662	-77.325629
308	5126		Down Milepost	308.00	0	39	T	0	0	5	42.155105	-77.315338
308	1233		Class Change	4.00	0	40	C	0	0	5	42.152136	-77.313391
308	1233		Posted Speed	50.00	0	40	C	0	0	5	42.152136	-77.313391
307	5254		Down Milepost	307.00	0	45	T	0	0	5	42.141414	-77.316478

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306	5308		Down Milepost	306.00	0	50	C	0	0	5	42.127434	-77.320203
305	5589		Down Milepost	305.00	0	49	T	0	0	5	42.118328	-77.304072
304	5004		Down Milepost	304.00	0	49	B	0	0	5	42.112133	-77.287711
303	5301		Down Milepost	303.00	0	46	C	0	0	5	42.109450	-77.268635
302	5331		Down Milepost	302.00	0	29	C	0	0	5	42.109961	-77.249194
301	5347		Down Milepost	301.00	0	24	E	0	0	5	42.107483	-77.230185
300	5215		Down Milepost	300.00	0	33	B	0	0	5	42.114886	-77.214721
299	5338		Down Milepost	299.00	0	47	C	0	0	5	42.119851	-77.196792
298	5254		Down Milepost	298.00	0	49	T	0	0	5	42.114575	-77.179400
297	5360		Down Milepost	297.00	0	41	T	0	0	5	42.113449	-77.160047
296	5271		Down Milepost	296.00	0	28	E	0	0	5	42.118745	-77.142361
295	5328		Down Milepost	295.00	0	25	T	0	0	5	42.129516	-77.129192
295	1009		Class Change	3.00	0	25	T	0	0	5	42.131558	-77.126701
295	1009		Posted Speed	40.00	0	25	T	0	0	5	42.131558	-77.126701
295	1223		Track Change	0.00	0	25	E	0	0	6	42.131986	-77.126166
295	2021	136	R Runoff*	2.97	31	26	T	2	3	6	42.133579	-77.124165
293	10415		Down Milepost	293.00	0	37	T	0	0	6	42.149381	-77.102184
292	5400		Down Milepost	292.00	0	20	T	0	0	6	42.155452	-77.084124
291	5181		Down Milepost	291.00	0	20	T	0	0	6	42.158245	-77.065702
291	4334		Class Change	4.00	0	40	C	0	0	6	42.155183	-77.050455
291	4334		Posted Speed	50.00	0	40	C	0	0	6	42.155183	-77.050455
291	4528		Track Change	0.00	0	40	T	0	0	5	42.154974	-77.049800
290	5323		Down Milepost	290.00	0	40	C	0	0	5	42.154040	-77.047161
289	5545		Down Milepost	289.00	0	49	T	0	0	5	42.142904	-77.034004
288	4887		Down Milepost	288.00	0	48	T	0	0	5	42.130864	-77.026221
287	5503		Down Milepost	287.00	0	48	C	0	0	5	42.119643	-77.013144
286	5197		Down Milepost	286.00	0	49	T	0	0	5	42.122043	-76.994988
285	5325		Down Milepost	285.00	0	50	T	0	0	5	42.127146	-76.976670
284	5291		Down Milepost	284.00	0	48	T	0	0	5	42.132217	-76.958473
283	10606		Down Milepost	282.00	0	49	T	0	0	5	42.139663	-76.920965
281	5272		Down Milepost	281.00	0	46	T	0	0	5	42.144134	-76.902760
280	5355		Down Milepost	280.00	0	33	T	0	0	5	42.150503	-76.885266
279	5276		Down Milepost	279.00	0	24	C	0	0	5	42.153212	-76.866422
279	1220		Class Change	2.00	0	23	T	0	0	5	42.154078	-76.862095
279	1220		Posted Speed	25.00	0	23	T	0	0	5	42.154078	-76.862095
279	2135		Class Change	4.00	0	23	T	0	0	5	42.154682	-76.858834
279	2135		Posted Speed	50.00	0	23	T	0	0	5	42.154682	-76.858834
278	5427		Down Milepost	278.00	0	35	T	0	0	5	42.156839	-76.847090
277	5151		Down Milepost	277.00	0	49	C	0	0	5	42.151960	-76.831676

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
276	5287		Down Milepost	276.00	0	50	T	0	0	5	42.137832	-76.827586
275	5314		Down Milepost	275.00	0	49	T	0	0	5	42.123623	-76.823510
273	10566		Down Milepost	273.00	0	48	C	0	0	5	42.096671	-76.809883
272	5316		Down Milepost	272.00	0	50	T	0	0	5	42.083224	-76.802475
271	5319		Down Milepost	271.00	0	48	T	0	0	5	42.069789	-76.795018
270	5347		Down Milepost	270.00	0	48	B	0	0	5	42.056880	-76.785839
269	5249		Down Milepost	269.00	0	49	T	0	0	5	42.046635	-76.772524
268	5309		Down Milepost	268.00	0	49	T	0	0	5	42.036777	-76.758229
267	5297		Down Milepost	267.00	0	49	T	0	0	5	42.026653	-76.744342
266	5332		Down Milepost	266.00	0	50	C	0	0	5	42.017370	-76.729486
265	5250		Down Milepost	265.00	0	49	C	0	0	5	42.016597	-76.710330
264	5309		Down Milepost	264.00	0	49	T	0	0	5	42.019903	-76.691385
263	5298		Down Milepost	263.00	0	49	C	0	0	5	42.023132	-76.672463
262	5298		Down Milepost	262.00	0	49	C	0	0	5	42.022747	-76.653202
261	5287		Down Milepost	261.00	0	49	T	0	0	5	42.015296	-76.636638
259	10607		Down Milepost	259.00	0	50	T	0	0	5	42.003955	-76.606146
258	5377		Down Milepost	258.00	0	48	T	0	0	5	42.009910	-76.587690
257	5213		Down Milepost	257.00	0	49	C	0	0	5	42.012879	-76.569035
256	5366		Down Milepost	256.00	0	49	B	0	0	5	42.003182	-76.555614
255	5246		Down Milepost	255.00	0	49	T	0	0	5	42.000735	-76.537968
254	5238		Down Milepost	254.00	0	48	C	0	0	5	42.003307	-76.519108
253	5440		Down Milepost	253.00	0	49	E	0	0	5	42.006472	-76.499628
252	5228		Down Milepost	252.00	0	49	T	0	0	5	42.007742	-76.480580
251	5335		Down Milepost	251.00	0	49	C	0	0	5	42.014196	-76.465172
250	5241		Down Milepost	250.00	0	48	C	0	0	5	42.027795	-76.470899
249	5301		Down Milepost	249.00	0	49	T	0	0	5	42.039517	-76.460303
248	5302		Down Milepost	248.00	0	48	B	0	0	5	42.042811	-76.442069
247	5313		Down Milepost	247.00	0	49	C	0	0	5	42.035043	-76.425806
246	5102		Down Milepost	246.00	0	49	T	0	0	5	42.033167	-76.407815
245	5572		Down Milepost	245.00	0	35	T	0	0	5	42.030099	-76.387833
244	5226		Down Milepost	244.00	0	24	T	0	0	5	42.031509	-76.369330
244	69		Class Change	2.00	0	24	T	0	0	5	42.031559	-76.369086
244	69		Posted Speed	25.00	0	24	T	0	0	5	42.031559	-76.369086
244	1759		Class Change	4.00	0	24	C	0	0	5	42.033513	-76.363564
244	1759		Posted Speed	50.00	0	24	C	0	0	5	42.033513	-76.363564
243	5265		Down Milepost	243.00	0	38	T	0	0	5	42.041861	-76.357343
242	5304		Down Milepost	242.00	0	49	T	0	0	5	42.054185	-76.347169
241	5222		Down Milepost	241.00	0	49	C	0	0	5	42.066237	-76.336993
240	5334		Down Milepost	240.00	0	49	T	0	0	5	42.079812	-76.330140

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
239	5347		Down Milepost	239.00	0	49	T	0	0	5	42.087759	-76.314179
238	5290		Down Milepost	238.00	0	49	B	0	0	5	42.095602	-76.298330
237	5302		Down Milepost	237.00	0	49	C	0	0	5	42.103917	-76.282448
236	5276		Down Milepost	236.00	0	43	T	0	0	5	42.107826	-76.263818
235	5234		Down Milepost	235.00	0	33	T	0	0	5	42.105073	-76.246027
234	5405		Down Milepost	234.00	0	27	T	0	0	5	42.097319	-76.229136
234	3417		Class Change	2.00	0	25	T	0	0	5	42.092429	-76.218447
234	3417		Posted Speed	25.00	0	25	T	0	0	5	42.092429	-76.218447
234	5289		Class Change	4.00	0	24	C	0	0	5	42.090086	-76.212365
234	5289		Posted Speed	50.00	0	24	C	0	0	5	42.090086	-76.212365
233	5295		Down Milepost	233.00	0	23	C	0	0	5	42.090081	-76.212341
232	5290		Down Milepost	232.00	0	47	T	0	0	5	42.093182	-76.194174
231	5303		Down Milepost	231.00	0	49	C	0	0	5	42.100678	-76.177610
229	10611		Down Milepost	229.00	0	48	T	0	0	5	42.084909	-76.150128
228	5288		Down Milepost	228.00	0	49	C	0	0	5	42.071026	-76.144802
227	5293		Down Milepost	227.00	0	49	T	0	0	5	42.064412	-76.130690
226	5308		Down Milepost	226.00	0	49	C	0	0	5	42.071176	-76.113507
225	5233		Down Milepost	225.00	0	49	C	0	0	5	42.081028	-76.099674
224	5119		Down Milepost	224.00	0	50	T	0	0	5	42.091150	-76.087301
223	5246		Down Milepost	223.00	0	49	T	0	0	5	42.097599	-76.070434
222	5387		Down Milepost	222.00	0	49	B	0	0	5	42.104757	-76.053392
221	5268		Down Milepost	221.00	0	49	C	0	0	5	42.108203	-76.034783
220	5108		Down Milepost	220.00	0	48	B	0	0	5	42.108000	-76.016036
219	5489		Down Milepost	219.00	0	47	T	0	0	5	42.115819	-75.999160
218	5251		Down Milepost	218.00	0	46	T	0	0	5	42.118409	-75.980821
218	2522		Track Change	0.00	0	45	T	0	0	2	42.117744	-75.971608
216	10628		Down Milepost	216.00	0	37	T	0	0	2	42.112469	-75.943335
216	3399		Class Change	3.00	0	26	T	0	0	2	42.107216	-75.933045
216	3399		Posted Speed	30.00	0	26	T	0	0	2	42.107216	-75.933045
215	5329		Down Milepost	215.00	0	22	C	0	0	2	42.104440	-75.927038
215	4512		Class Change	1.00	0	6	B	0	0	2	42.104057	-75.910518
215	4512		Posted Speed	10.00	0	6	B	0	0	2	42.104057	-75.910518
215	4523		Track Change	0.00	0	6	B	0	0	7	42.104058	-75.910478

Notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Rail Impact Values are unitless; indicating a location with a large vertical axle acceleration

Rail Cant Exceptions values indicate degrees.

(RSA) indicates possible Rail Seat Abrasion. The following fields are irrelevant for Cant Exceptions: LC, PC

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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	416	2563	416	3957	1395	34	1/59	2.11	50	58	416	3288	2/07	2.08	0	0	58	64	69	73	78	82	86	
5	410	2474	410	3259	786	50	-1/19	-0.53	50	61	410	2854	-1/19	-0.41	0	0	61	69	76	83	89	95	101	
5	409	2911	409	3977	1067	38	1/32	0.91	50	58	409	3466	1/40	0.88	0	0	58	64	71	76	82	87	92	
5	407	1566	407	2575	1010	25	-0/50	-0.94	50	74	407	2002	-1/03	-1.03	0	0	74	82	90	97	104	110	116	
6	407	4239	407	4384	146	23	-1/43	-0.16	25	51	407	4383	-1/43	-0.16	0	0	51	58	65	71	77	82	87	
6	407	4384	407	4570	187	23	-1/44	-0.03	25	50	407	4390	-1/44	-0.03	0	0	50	57	64	70	75	81	86	
6	407	4570	407	4871	302	23	0/43	0.64	25	80	407	4643	0/50	0.72	0	0	80	89	98	106	114	121	128	
6	407	4871	407	5163	293	23	1/21	0.49	25	60	407	4955	1/23	0.47	0	0	60	67	74	81	87	93	98	
6	407	5163	406	95	267	24	-0/47	-0.4	25	78	407	5294	-0/47	-0.42	0	0	78	89	98	107	115	123	130	
6	405	2711	405	3034	324	23	0/36	0.52	25	91	405	3033	0/36	0.52	0	0	91	103	114	124	133	142	150	
6	405	3034	405	4261	1228	24	1/08	0.94	25	66	405	3307	1/16	0.83	0	0	66	73	80	87	93	99	105	
6	404	3163	403	148	2283	24	-0/58	-0.99	25	71	403	39	-1/02	-0.76	0	0	71	80	88	96	103	109	115	
6	403	148	403	1092	945	24	-0/49	-0.88	25	74	403	255	-1/05	-1.17	0	0	74	82	90	97	103	110	115	
6	403	3896	402	35	1445	16	0/43	0.93	25	78	403	4478	0/55	0.93	0	0	78	87	96	104	111	118	124	
6	402	1674	402	3231	1440	11	0/52	0.91	25	74	402	1941	1/02	1.01	0	0	74	83	91	98	105	111	117	
6	402	4083	402	4411	329	19	1/08	0.37	25	61	402	4221	1/14	0.25	0	0	61	70	78	85	91	97	103	
6	402	4411	402	4697	287	19	-1/44	0.26	50	47	402	4532	-1/44	0.29	0	0	47	55	62	68	74	79	84	
5	401	499	401	712	214	27	0/16	0.88	50	137	401	617	0/17	0.78	0	0	137	153	168	182	195	208	219	
5	400	390	400	1636	1247	49	-1/47	-0.91	50	55	400	805	-1/50	-0.92	0	0	55	61	67	73	78	83	87	
5	398	2312	397	285	3285	48	1/10	0.79	50	64	398	3495	1/19	0.71	0	0	64	71	78	85	91	97	102	
5	397	878	397	2287	1410	49	-1/09	-1.15	50	69	397	1896	-1/13	-1.11	0	0	69	77	84	91	97	103	108	
5	397	2402	397	2822	421	49	1/15	0.88	50	65	397	2692	1/17	0.78	0	0	65	72	79	86	92	98	104	
5	397	2822	397	3926	1105	49	1/20	0.75	50	54	397	2941	1/40	0.35	0	0	54	61	67	73	79	84	89	
5	396	233	396	2152	1920	44	-0/55	-1.12	50	65	396	571	-1/15	-0.76	0	0	65	73	81	87	94	100	105	
5	395	1489	395	3323	1835	38	0/49	1.74	50	52	395	1824	2/17	1.33	0	0	52	57	62	67	72	76	80	
5	394	2416	394	3463	1048	30	0/26	1.03	50	102	394	2714	0/32	0.95	0	0	102	114	125	135	145	153	162	
5	393	841	393	2333	1493	24	-3/11	-2.75	25	42	393	1244	-4/11	-2.3	176	0	42	46	49	53	56	59	62	
5	393	2888	393	4255	1368	27	2/16	2.25	40	46	393	3251	3/31	2.29	0	0	46	50	54	58	61	64	67	
5	393	4255	393	4805	551	28	2/53	1.76	40	48	393	4452	2/56	1.78	89	-1	48	53	57	61	65	69	72	
5	393	5353	391	844	6093	39	-1/55	-1.94	40	58	391	123	-2/00	-1.66	0	0	58	63	68	73	78	83	87	
5	391	3205	390	230	2304	44	1/27	1.75	50	66	391	5035	1/32	1.7	0	0	66	72	79	84	90	95	99	
5	390	973	390	3182	2210	47	1/26	0.87	50	59	390	1353	1/34	0.81	0	0	59	66	72	78	84	89	94	
5	390	4093	390	6255	2163	49	-2/13	-2.43	50	57	390	4489	-2/19	-2.22	0	0	57	61	66	71	75	79	83	
5	390	6255	390	6375	121	49	0/26	0.51	50	108	390	6374	0/26	0.51	0	0	108	122	135	147	157	168	177	
5	390	6375	390	7296	922	49	2/16	3.7	50	61	390	6708	2/38	3.84	0	0	61	65	69	73	76	80	83	
5	390	7296	390	8059	764	48	2/29	3.73	50	61	390	7474	2/31	3.53	0	0	61	65	69	73	77	80	84	
5	390	10566	388	1281	1315	49	1/19	0.7	50	62	388	269	1/20	0.62	0	0	62	70	77	84	90	96	101	
5	387	443	387	3703	3261	50	0/56	0.54	50	72	387	2082	0/58	0.47	0	0	72	81	89	97	104	111	118	
5	387	5089	386	1355	1575	50	1/53	1.87	50	60	386	395	1/53	1.72	0	0	60	65	71	76	81	85	90	
5	386	2734	386	3923	1190	48	1/59	1.19	50	54	386	3442	2/02	1.17	0	0	54	60	65	71	75	80	84	
5	386	4227	386	4782	556	47	1/14	2.39	50	78	386	4764	1/14	2.28	0	0	78	85	91	97	103	108	113	
5	386	4782	385	2044	2589	47	2/07	2.78	50	56	385	1610	2/20	2.18	0	0	56	61	66	70	74	78	82	
5	385	2929	385	4231	1303	48	-0/33	-1.06	50	95	385	3981	-0/37	-0.98	0	0	95	107	117	126	135	143	151	
5	385	4628	384	718	1393	49	-0/22	-0.81	50	111	384	299	-0/25	-0.64	0	0	111	127	140	152	163	173	183	
5	384	1908	384	2903	996	49	-0/58	-0.71	50	70	384	2219	-1/01	-0.49	0	0	70	79	88	95	102	109	115	
5	383	227	383	1255	1029	49	1/41	1.26	50	55	383	703	1/55	1.13	0	0	55	61	67	72	77	82	86	

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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	383	1714	383	3395	1682	48	-2/56	-3.91	50	57	383	2342	-3/02	-3.85	0	0	57	60	64	68	71	74	77	
5	383	3635	383	4729	1095	47	2/26	2.26	50	54	383	4011	2/35	2.2	0	0	54	58	63	67	71	74	78	
5	383	4729	382	929	1474	49	-3/10	-3.8	50	55	382	393	-3/12	-3.71	0	0	55	58	62	65	69	72	75	
5	382	1227	382	1984	758	48	1/43	1.58	50	56	382	1570	2/07	1.64	0	0	56	61	66	71	76	80	84	
5	382	3328	382	3854	527	48	0/52	0.88	50	77	382	3514	0/54	0.76	0	0	77	86	95	103	110	117	124	
5	382	4900	381	1114	1535	49	-1/55	-1.06	50	53	382	5250	-2/01	-1.01	0	0	53	59	65	70	75	79	84	
5	381	3755	381	4607	853	49	0/59	0.78	50	71	381	4031	1/04	0.75	0	0	71	79	87	94	101	108	114	
5	380	2811	380	4464	1654	49	1/43	1.31	50	55	380	3231	2/01	1.31	0	0	55	61	66	71	76	81	85	
5	379	4767	378	813	1345	47	2/00	1.3	50	52	379	5263	2/09	1.14	0	0	52	58	63	68	73	77	82	
5	378	2100	378	2676	577	47	-0/26	-1.14	50	90	378	2350	-0/43	-1.1	0	0	90	100	110	118	126	134	141	
5	377	3906	377	4471	566	34	-0/59	-0.98	50	71	377	4085	-1/08	-1.05	0	0	71	79	87	94	100	106	112	
5	376	4257	375	22	1078	23	-1/26	-1.37	50	64	376	4606	-1/26	-1.16	0	0	64	71	78	84	89	95	100	
5	375	737	375	2097	1361	38	-2/18	-2.33	50	53	375	1100	-2/35	-2.05	0	0	53	57	62	66	70	74	78	
5	375	2708	375	4131	1424	46	2/17	2.34	50	54	375	3131	2/30	2.1	0	0	54	59	63	68	72	75	79	
5	374	2761	374	3661	901	48	-2/00	-1.96	50	56	374	3428	-2/11	-1.82	0	0	56	61	66	71	76	80	84	
5	374	3661	374	4438	778	49	-2/06	-1.73	50	54	374	3850	-2/16	-1.56	0	0	54	59	64	69	73	77	81	
5	372	777	372	2038	1262	49	-1/14	-0.77	50	60	372	1269	-1/25	-0.66	0	0	60	68	75	81	87	93	98	
5	372	2256	372	3255	1000	46	3/16	3.73	50	54	372	2883	3/18	3.7	0	0	54	57	61	64	68	71	74	
5	372	3780	371	0	1527	45	2/01	1.19	50	53	372	4184	2/07	1.13	0	0	53	58	64	69	74	78	82	
5	371	1842	370	210	3678	49	-2/56	-3.37	50	54	371	4803	-3/03	-3.33	0	0	54	58	62	66	69	72	75	
5	370	2397	370	2940	544	49	2/13	2.69	50	61	370	2939	2/13	2.69	0	0	61	65	70	74	78	82	86	
5	370	2940	370	4503	1564	48	2/25	2.15	50	52	370	3600	2/41	2.16	0	0	52	57	61	65	69	73	77	
5	370	4621	369	630	1080	49	2/24	2.78	50	55	370	4993	2/40	2.69	0	0	55	59	64	68	72	75	79	
5	369	2002	369	2220	219	49	0/27	0.59	50	107	369	2219	0/27	0.59	0	0	107	120	133	144	155	165	174	
5	369	2220	369	2635	416	49	1/26	0.7	50	56	369	2323	1/40	0.63	0	0	56	63	69	75	81	86	91	
5	369	2635	369	3346	712	49	1/14	0.61	50	57	369	2762	1/33	0.53	0	0	57	64	71	77	83	88	93	
5	368	3878	368	4336	459	36	-0/52	-1.08	50	80	368	4159	-0/55	-1.1	0	0	80	89	97	105	112	119	125	
5	368	4336	368	4683	348	35	0/52	0.94	50	77	368	4452	0/56	0.95	0	0	77	86	95	102	109	116	122	
5	366	2522	366	4677	2156	23	1/20	0.86	50	61	366	3610	1/26	0.72	0	0	61	68	75	81	87	93	98	
5	365	4570	364	888	1716	38	1/03	0.97	50	69	364	679	1/11	0.96	0	0	69	77	84	91	98	104	109	
5	364	1582	363	1355	5022	35	-1/20	-1	50	61	364	4464	-1/30	-0.94	0	0	61	68	75	81	86	92	97	
5	363	2056	363	4557	2502	29	3/56	1.35	30	39	363	2469	3/56	1.19	0	0	39	43	47	51	54	57	60	
5	363	4641	362	1337	1990	30	-6/08	-2.38	30	32	362	60	-7/05	-2.18	0	0	32	35	38	40	43	45	47	
5	362	2198	362	3565	1368	29	-1/44	-0.91	30	52	362	3280	-1/58	-0.7	0	0	52	58	64	69	74	79	83	
5	362	3565	362	4163	599	29	-2/21	-0.68	30	46	362	4162	-2/28	-0.67	0	0	46	52	57	62	66	70	74	
5	362	4163	362	4986	824	28	-3/15	-0.34	30	38	362	4580	-3/17	-0.26	0	0	38	43	47	52	56	59	63	
5	362	4986	361	2261	2384	29	2/44	0.95	30	41	361	157	3/23	0.92	0	0	41	45	49	53	57	61	64	
5	361	2261	361	2428	168	28	3/13	0.98	40	42	361	2385	3/11	0.88	0	0	42	46	51	55	59	63	66	
5	361	2428	361	3004	577	28	3/23	0.92	40	40	361	2536	3/25	0.85	0	0	40	45	49	53	57	60	64	
5	361	3342	361	5212	1871	36	1/51	0.99	40	53	361	3634	2/05	1.04	0	0	53	58	64	69	74	78	83	
5	360	3251	360	4411	1161	38	-1/50	-0.74	50	52	360	4118	-1/58	-0.68	0	0	52	58	64	69	74	79	84	
5	360	4411	360	5033	623	38	-1/57	-0.72	50	51	360	4559	-2/01	-0.71	0	0	51	57	63	69	74	78	83	
5	360	5802	360	7678	1877	43	-2/17	-2.43	50	57	360	7281	-2/20	-2.33	0	0	57	62	67	71	75	79	83	
5	360	10101	358	92	598	48	-0/59	-0.73	50	67	360	10367	-1/08	-0.64	0	0	67	76	84	91	98	104	110	
5	358	173	358	427	255	49	0/16	1.1	50	147	358	356	0/16	1.09	0	0	147	164	179	193	206	219	231	
5	358	434	358	522	89	49	0/16	0.97	50	147	358	459	0/16	0.99	0	0	147	162	178	192	205	218	229	

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							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	357	1353	357	2414	1062	50	1/29	1.42	50	63	357	1764	1/34	1.38	0	0	63	70	76	82	87	92	97	
5	357	4160	356	1750	2899	49	-1/26	-1.31	50	62	356	708	-1/30	-1.1	0	0	62	69	76	82	87	93	98	
5	355	1231	355	3138	1908	49	1/55	1.65	50	57	355	1921	2/02	1.61	0	0	57	62	68	73	77	82	86	
5	354	826	353	924	5327	47	0/27	1.05	50	103	354	1909	0/31	0.92	0	0	103	116	127	137	147	156	165	
5	352	559	352	1988	1430	50	0/53	0.93	50	76	352	1313	0/59	0.94	0	0	76	84	93	100	107	114	120	
5	352	4050	352	5185	1136	35	1/04	0.93	50	69	352	4732	1/10	0.91	0	0	69	77	85	92	98	104	110	
5	351	1880	351	2447	568	28	0/20	0.8	50	110	351	1978	0/25	0.54	0	0	110	124	137	149	160	170	180	
5	351	2447	351	2791	345	27	-0/25	-0.8	50	100	351	2564	-0/33	-0.88	0	0	100	112	123	133	143	151	160	
5	350	1961	350	3980	2020	9	-1/50	-1.32	50	55	350	2548	-1/53	-1.05	0	0	55	61	67	72	78	82	87	
5	349	4913	349	5612	700	35	0/23	0.99	50	115	349	5395	0/26	1.04	0	0	115	127	140	151	161	171	180	
5	347	4001	346	3169	4468	49	-0/52	-0.99	50	63	347	4353	-1/19	-0.73	0	0	63	71	78	85	91	97	102	
5	345	295	345	2033	1739	50	-1/05	-1.48	50	72	345	613	-1/11	-1.32	0	0	72	80	87	94	100	106	111	
5	344	518	344	864	347	50	0/29	0.63	50	92	344	686	0/40	0.85	0	0	92	102	112	121	130	138	146	
5	344	938	344	1408	471	50	-0/22	-0.94	50	119	344	1187	-0/23	-0.98	0	0	119	135	147	159	170	181	191	
5	343	223	343	3427	3205	49	1/05	1.13	50	54	343	1178	1/58	0.99	0	0	54	60	66	71	76	80	85	
5	343	4447	342	4253	5118	49	0/55	0.82	50	72	342	3359	1/01	0.72	0	0	72	81	89	97	104	111	117	
5	340	189	340	732	544	49	0/25	0.76	50	104	340	592	0/31	0.87	0	0	104	116	128	138	148	157	166	
5	340	1280	340	1818	539	49	-0/29	-0.74	50	94	340	1515	-0/38	-0.91	0	0	94	105	115	125	133	142	149	
5	339	4583	339	4861	279	49	-0/15	-1.15	50	149	339	4809	-0/16	-1.15	0	0	149	168	183	198	211	224	236	
5	339	4899	339	5118	220	49	-0/18	-1.13	50	136	339	5077	-0/19	-1.12	0	0	136	153	167	181	193	204	215	
5	339	5118	338	720	899	49	-0/19	-1.09	50	123	339	5239	-0/23	-1.15	0	0	123	139	152	163	175	185	195	
5	338	779	338	1181	403	49	-0/20	-1.04	50	126	338	983	-0/21	-0.97	0	0	126	142	156	168	180	191	201	
5	338	1195	338	1671	477	49	-0/21	-1.02	50	126	338	1581	-0/21	-1.03	0	0	126	143	156	169	181	192	202	
5	338	1671	338	2320	650	50	-0/19	-1	50	124	338	2118	-0/22	-1.04	0	0	124	139	152	164	176	186	196	
5	337	5086	336	798	1019	49	0/25	0.81	50	105	336	460	0/30	0.87	0	0	105	118	129	140	149	159	167	
5	335	4027	334	107	1409	39	0/51	0.83	50	72	335	4805	1/03	0.84	0	0	72	81	89	96	103	109	115	
5	333	4825	333	5245	421	27	-3/50	-0.86	30	36	333	5050	-3/53	-0.61	0	0	36	41	45	49	52	56	59	
5	333	5304	332	509	532	28	-4/15	-1.29	30	38	332	254	-4/14	-1.29	0	0	38	42	46	49	52	55	58	
5	332	2004	332	2590	587	29	-1/53	-1.41	35	57	332	2391	-1/54	-1.41	0	0	57	63	69	74	79	84	88	
5	332	2590	332	3039	450	29	2/33	0.02	35	40	332	2844	2/39	0.04	0	0	40	46	52	57	61	65	69	
5	332	3962	332	4393	432	28	0/18	1.08	35	129	332	4175	0/20	0.95	0	0	129	144	158	170	182	193	204	
5	331	850	331	1382	533	34	-0/16	-0.92	35	142	331	1065	-0/16	-0.8	0	0	142	162	178	193	207	219	232	
5	331	3280	331	3646	367	33	-1/59	-0.53	35	49	331	3494	-2/05	-0.53	0	0	49	55	61	66	71	76	80	
5	331	3646	331	4017	372	34	1/32	0.97	50	58	331	3784	1/42	1.01	0	0	58	64	71	76	82	87	91	
5	331	4794	330	193	500	35	-1/29	-1.39	50	63	331	5055	-1/35	-1.45	0	0	63	69	76	81	87	92	96	
5	330	2565	330	3474	910	42	-1/58	-1.25	50	55	330	2975	-2/01	-1.23	0	0	55	60	66	71	76	80	85	
5	330	4326	330	4830	505	44	-0/22	-0.66	50	111	330	4681	-0/26	-0.78	0	0	111	125	138	150	160	170	180	
5	328	2631	328	3905	1275	44	1/23	0.97	50	62	328	3454	1/26	0.91	0	0	62	70	76	83	88	94	99	
5	327	2052	327	3074	1023	37	-2/57	-4.46	50	59	327	2554	-3/05	-4.41	0	0	59	62	66	69	72	75	78	
5	327	3762	327	4985	1224	37	2/28	2.42	40	54	327	4232	2/36	2.4	0	0	54	59	63	67	71	75	79	
5	327	4985	326	1006	1309	37	-4/25	-3.6	50	44	326	131	-4/39	-3.24	0	0	44	47	50	53	56	58	61	
5	326	1760	326	2678	919	37	-0/43	-1.08	50	84	326	2056	-0/51	-1.24	0	0	84	93	102	110	117	124	131	
5	325	3968	324	211	1557	25	2/04	1.86	50	56	325	4503	2/09	1.67	0	0	56	61	66	71	75	80	84	
5	323	778	323	2700	1923	25	-1/56	-1.36	50	55	323	1615	-2/01	-1.31	0	0	55	61	66	72	76	81	85	
5	322	1054	322	2926	1873	39	-1/58	-2.21	50	56	322	2513	-2/25	-2.31	0	0	56	61	65	70	74	78	81	
5	322	3058	322	4603	1546	47	2/54	3.32	50	55	322	3515	2/54	3.18	0	0	55	59	63	67	70	74	77	

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							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	322	5207	321	987	1038	49	1/58	1.87	50	58	321	524	2/05	1.94	0	0	58	63	68	73	78	82	86	
5	321	5016	320	643	933	48	-0/35	-0.98	50	88	320	168	-0/43	-0.94	0	0	88	99	109	118	126	134	141	
5	320	3830	319	1750	3268	45	1/34	1.37	50	56	320	4376	2/36	2.72	0	0	56	60	65	69	73	76	80	
5	319	4207	318	146	1101	37	4/23	4.11	40	47	319	4710	4/36	3.99	0	0	47	49	52	55	58	61	63	
5	318	146	318	1138	993	37	-3/25	-1.73	40	44	318	617	-3/30	-1.76	0	0	44	48	52	56	59	63	66	
5	318	3143	318	4753	1611	39	-3/00	-1.87	40	47	318	4284	-3/04	-1.8	0	0	47	52	56	60	64	67	71	
5	317	4704	316	3102	3719	39	1/40	1.25	50	45	316	121	4/07	2.76	0	0	45	48	51	55	58	61	63	
5	316	4936	316	5239	304	40	-0/16	-1.11	50	146	316	5154	-0/16	-1.1	0	0	146	167	183	197	211	223	235	
5	315	738	315	2210	1473	46	-1/52	-2.63	50	56	315	1587	-2/44	-2.98	0	0	56	60	64	68	72	75	79	
5	315	2210	315	3764	1555	47	-2/27	-3.16	50	58	315	2576	-2/32	-2.99	0	0	58	62	67	71	75	78	82	
5	315	4486	314	498	1308	47	-3/14	-3.95	50	55	315	5062	-3/17	-3.87	0	0	55	58	62	65	68	71	74	
5	314	1902	313	286	3701	41	1/20	1.33	50	63	314	4166	1/31	1.17	0	0	63	69	76	82	87	92	97	
5	313	3249	312	27	2038	25	-2/58	-3.63	50	55	313	4305	-3/01	-3.46	0	0	55	59	63	66	70	73	76	
5	312	3235	312	4948	1714	42	2/33	2.86	50	56	312	4464	2/32	2.62	0	0	56	61	65	69	73	77	81	
5	311	376	311	3245	2870	40	-1/33	-1.62	50	61	311	959	-1/40	-1.4	0	0	61	67	73	79	84	89	94	
5	310	1612	310	3582	1971	39	4/12	3.27	40	43	310	2173	5/07	3.59	0	0	43	46	48	51	54	56	59	
5	310	3582	310	4382	801	39	2/58	1.46	40	45	310	3876	3/02	1.27	0	0	45	49	54	58	62	66	69	
5	310	4382	310	5113	732	38	-2/29	-1.43	40	48	310	4686	-2/40	-1.3	0	0	48	53	58	62	66	70	74	
5	309	139	309	2218	2080	38	-1/25	-1.2	40	62	309	633	-1/32	-1.12	0	0	62	68	75	81	86	91	96	
5	308	155	308	1832	1678	40	3/52	2.73	40	45	308	1316	3/52	2.58	174	-1	45	49	52	56	59	62	65	
5	308	3617	308	4427	811	43	1/00	0.91	50	70	308	4022	1/10	0.95	0	0	70	78	85	92	98	104	110	
5	307	3599	306	1121	2832	50	-2/53	-3.74	50	56	307	5040	-2/58	-3.63	0	0	56	60	64	68	71	74	78	
5	306	3374	306	4641	1268	49	-2/16	-1.87	50	55	306	3995	-2/16	-1.84	0	0	55	60	65	70	74	78	82	
5	305	1367	305	2586	1220	49	0/23	0.68	50	105	305	1817	0/29	0.69	0	0	105	118	130	141	151	160	169	
5	305	4497	304	1007	1516	50	-1/42	-1.81	50	58	304	404	-1/55	-1.59	0	0	58	64	70	75	80	84	89	
5	304	4287	303	407	1423	47	-1/19	-1.52	50	67	304	4853	-1/29	-1.68	0	0	67	73	80	85	91	96	101	
5	303	3639	302	330	2024	34	1/28	1.49	50	65	302	9	1/29	1.38	0	0	65	72	78	84	89	95	100	
5	302	1674	302	1893	220	12	-0/27	-0.65	50	107	302	1892	-0/26	-0.65	0	0	107	122	135	146	157	167	176	
5	302	1893	302	2952	899	9	-2/10	-2.92	50	62	302	2324	-2/13	-2.99	0	0	62	67	71	76	80	84	87	
5	302	4507	301	416	1258	24	-2/20	-2.31	50	56	302	5178	-2/21	-2.25	0	0	56	61	66	70	75	78	82	
5	301	1812	301	3910	2099	28	-2/06	-2.47	50	60	301	2796	-2/09	-2.44	0	0	60	65	70	74	79	83	87	
5	301	5157	300	2149	2209	45	2/06	1.63	50	52	300	1077	2/13	1.19	0	0	52	57	63	68	72	76	80	
5	300	5101	299	2385	2624	50	2/02	2.03	50	55	299	1288	2/20	1.94	0	0	55	60	65	69	73	77	81	
5	299	3247	299	4895	1649	50	-1/38	-0.76	50	53	299	3788	-1/53	-0.69	0	0	53	59	65	71	76	81	85	
5	298	1859	298	2582	724	47	-1/02	-2.53	50	87	298	2364	-1/01	-2.42	0	0	87	94	101	108	114	120	126	
5	298	2582	298	3554	973	46	-2/07	-2.37	50	59	298	3024	-2/11	-2.38	0	0	59	64	69	74	78	82	86	
5	297	530	297	2991	2462	37	-0/57	-1.21	50	74	297	915	-1/02	-1.04	0	0	74	83	91	98	105	111	117	
5	297	4324	296	285	1234	29	-2/32	-2.54	50	55	297	4802	-2/35	-2.39	0	0	55	59	63	68	72	75	79	
6	295	1053	295	1348	296	25	1/46	-0.41	40	45	295	1198	1/47	-0.42	0	0	45	53	60	66	72	77	82	
6	295	1348	295	1614	267	25	-1/49	0.17	40	46	295	1473	-1/50	0.24	0	0	46	54	60	66	72	77	82	
6	295	8183	295	9676	1494	40	1/56	1.14	40	54	295	8865	1/58	1.06	0	0	54	60	66	71	76	81	85	
6	293	3737	293	4699	963	25	1/00	0.92	40	72	293	4309	1/04	0.9	0	0	72	80	88	95	102	109	114	
6	292	2346	292	4836	2491	13	1/00	0.78	40	60	292	4418	1/28	0.75	0	0	60	68	74	81	87	92	97	
6	291	1211	291	2917	1707	39	1/04	0.79	40	62	291	1593	1/17	0.48	0	0	62	70	77	84	91	96	102	
6	291	3877	291	4166	290	40	-1/47	-0.52	40	53	291	4004	-1/48	-0.5	0	0	53	59	66	71	77	82	86	
6	291	4166	291	4426	261	40	1/32	0.14	50	49	291	4278	1/41	-0.19	0	0	49	56	63	70	75	81	86	

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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	291	4765	290	712	1272	41	1/26	1.88	50	67	290	60	1/27	1.61	0	0	67	74	80	86	92	97	102	
5	290	2258	290	4199	1942	49	1/35	0.77	50	53	290	2749	1/42	0.31	0	0	53	60	66	72	78	83	88	
5	288	504	288	2384	1881	50	-1/08	-0.78	50	67	288	1891	-1/08	-0.64	0	0	67	76	84	91	97	104	109	
5	288	4453	287	2487	3539	49	-2/02	-2.37	50	61	287	1950	-2/03	-2.29	0	0	61	66	71	76	80	84	88	
5	284	4011	284	5202	1192	49	0/55	0.63	50	70	284	4220	0/59	0.4	0	0	70	79	88	96	103	110	116	
5	283	1973	283	4328	2356	49	-0/53	-0.95	50	77	283	3898	-0/56	-0.89	0	0	77	86	95	102	110	116	123	
5	281	3876	281	5130	1255	35	2/59	3.3	50	54	281	4598	3/02	3.23	0	0	54	58	62	65	69	72	75	
5	280	2558	280	4624	2067	28	-1/12	-0.82	50	61	280	4176	-1/24	-0.66	0	0	61	68	76	82	88	94	99	
5	280	4868	279	520	930	24	2/02	1.88	50	57	280	5267	2/08	1.88	0	0	57	62	67	72	77	81	85	
5	278	567	277	387	4973	49	1/56	1.13	50	53	278	3972	1/59	0.93	0	0	53	59	65	70	75	80	84	
5	275	1292	275	1694	403	49	-0/31	-0.42	50	92	275	1693	-0/37	-0.65	0	0	92	104	114	124	133	142	150	
5	275	1694	275	3058	1365	50	-0/52	-0.84	50	75	275	2527	-0/58	-0.86	0	0	75	84	92	100	107	114	120	
5	275	5659	275	6074	416	48	0/30	0.75	50	94	275	6073	0/37	0.86	0	0	94	105	116	125	134	142	150	
5	275	6074	275	6592	519	48	0/39	0.5	50	74	275	6197	0/56	0.56	0	0	74	83	92	100	107	114	121	
5	275	10339	273	186	415	48	-0/29	-0.92	50	104	273	131	-0/30	-0.92	0	0	104	118	130	140	150	159	168	
5	271	124	271	1571	1448	49	-0/26	-1.08	50	106	271	1301	-0/31	-1.11	0	0	106	119	130	141	150	159	168	
5	271	5235	270	2084	2198	50	-1/01	-0.98	50	71	270	1688	-1/05	-0.86	0	0	71	80	88	95	101	108	114	
5	269	3760	269	4186	427	49	0/22	0.95	50	118	269	4020	0/25	1.02	0	0	118	132	144	156	167	177	186	
5	267	3341	266	1152	3145	50	-1/23	-2.11	50	66	267	4857	-1/36	-1.89	0	0	66	72	78	83	89	93	98	
5	266	1208	266	1411	204	50	-0/29	-0.51	50	93	266	1303	-0/29	0.03	0	0	93	108	121	133	144	154	163	
5	266	1411	266	1725	315	50	-1/55	-1.26	50	55	266	1525	-2/00	-1.3	0	0	55	61	67	72	77	81	85	
5	266	1725	266	2040	316	50	0/31	0.9	50	88	266	1797	0/43	0.91	0	0	88	98	108	117	125	132	140	
5	266	2040	266	2541	502	50	0/26	0.91	50	104	266	2413	0/32	0.99	0	0	104	115	127	137	146	155	164	
5	266	4071	265	813	1994	49	-0/55	-0.98	50	76	265	217	-0/58	-0.9	0	0	76	84	93	100	107	114	120	
5	264	4568	263	761	1493	49	2/00	1.3	50	54	263	353	2/04	1.15	0	0	54	59	65	70	75	79	83	
5	263	1010	263	2620	1611	49	-1/34	-1.49	50	63	263	2215	-1/37	-1.44	0	0	63	69	75	81	86	91	96	
5	263	2988	263	4010	1023	49	2/08	2.65	50	60	263	3494	2/15	2.63	0	0	60	64	69	74	78	82	85	
5	263	4505	262	1522	2317	50	1/22	1.04	50	54	263	4905	2/04	1.19	0	0	54	60	65	70	75	79	84	
5	261	1110	261	2213	1104	48	2/02	1.26	50	54	261	1832	2/04	1.25	0	0	54	60	65	70	75	79	84	
5	261	3181	261	4257	1077	49	1/59	1.2	50	53	261	3528	2/06	1.15	0	0	53	59	64	69	74	78	83	
5	261	4402	261	4530	129	49	-0/26	-0.53	50	107	261	4529	-0/26	-0.53	0	0	107	122	135	147	158	168	177	
5	261	4530	261	5474	945	49	-1/27	-1.04	50	60	261	4663	-1/32	-0.93	0	0	60	67	74	80	85	91	95	
5	261	5474	261	5658	185	49	-2/10	-1.9	50	56	261	5597	-2/08	-1.71	0	0	56	61	67	71	76	80	84	
5	261	5658	261	8824	3167	50	-2/01	-1.98	50	53	261	5944	-2/34	-2.15	0	0	53	58	63	67	71	75	78	
5	261	9352	261	10533	1182	50	-2/02	-1.23	50	54	261	10070	-2/04	-1.2	0	0	54	60	65	70	75	79	84	
5	259	2995	259	4074	1080	48	1/09	1.31	50	70	259	3651	1/16	1.26	0	0	70	77	84	90	96	102	107	
5	258	433	258	1087	655	49	0/50	0.79	50	80	258	857	0/51	0.8	0	0	80	89	98	106	114	121	128	
5	258	4400	257	1359	2174	50	2/02	1.96	50	55	257	19	2/47	2.93	0	0	55	59	63	67	71	74	78	
5	257	1359	257	2945	1587	50	1/46	0.78	50	52	257	1581	1/59	0.75	0	0	52	58	64	69	74	79	83	
5	257	3826	257	4961	1136	49	2/57	3.41	50	55	257	4506	3/01	3.37	0	0	55	59	62	66	70	73	76	
5	257	4961	256	2802	3209	49	-2/53	-4.16	50	56	256	92	-3/16	-4.17	0	0	56	59	63	66	69	73	75	
5	255	869	255	1938	1070	50	-0/52	-0.93	50	75	255	1422	-1/02	-1.11	0	0	75	84	92	99	106	112	118	
5	255	4510	255	5015	506	49	-0/24	-0.75	50	107	255	4869	-0/27	-0.73	0	0	107	122	134	146	156	166	175	
5	255	5015	254	146	371	48	0/21	0.62	50	104	255	5088	0/29	0.7	0	0	104	117	128	139	149	159	168	
5	254	4977	253	145	610	49	0/47	0.9	50	82	254	5239	0/49	0.83	0	0	82	92	101	109	117	124	131	
5	253	1920	253	2934	1015	49	1/13	-0.03	50	59	253	2584	1/13	-0.03	0	0	59	68	76	83	90	96	102	

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							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	252	899	252	2124	1226	49	-2/05	-1.11	50	52	252	1685	-2/08	-1.02	0	0	52	58	63	68	73	77	81	
5	252	2641	252	4288	1648	49	-3/29	-3.89	50	51	252	3192	-3/39	-3.77	0	0	51	55	58	61	64	67	70	
5	252	4393	251	830	1774	49	-3/34	-4.02	50	52	251	302	-3/38	-3.99	0	0	52	55	59	62	65	68	71	
5	251	1844	251	2335	492	49	-0/48	-1.07	50	83	251	2060	-0/50	-1.06	0	0	83	93	102	110	117	124	131	
5	251	4302	250	941	1882	48	2/55	3.32	50	55	250	578	2/56	3.2	0	0	55	59	63	66	70	73	77	
5	250	1293	250	4174	2882	49	0/35	0.91	50	53	250	1569	2/59	2.8	0	0	53	56	61	64	68	71	75	
5	249	458	249	2181	1724	49	2/57	3.31	50	55	249	1771	2/58	3.2	0	0	55	58	62	66	70	73	76	
5	249	4835	248	1272	1741	48	3/04	3.26	50	52	248	40	3/10	3	0	0	52	56	60	63	67	70	73	
5	248	4744	247	404	975	49	-1/57	-1.72	50	57	248	5250	-2/03	-1.65	0	0	57	62	68	73	77	82	86	
5	247	1240	247	3271	2032	50	-2/37	-3.27	50	56	247	1839	-2/41	-2.86	0	0	56	60	64	68	72	75	79	
5	247	3693	247	4922	1230	49	2/37	1.96	50	51	247	4525	2/38	1.9	0	0	51	56	61	65	69	73	76	
5	246	4135	246	5426	1292	39	0/55	0.9	50	75	246	4496	0/59	0.83	0	0	75	83	92	99	106	113	119	
5	245	568	245	2301	1734	30	-2/41	-3.37	50	57	245	1503	-2/43	-3.25	0	0	57	61	65	69	73	77	80	
5	244	230	244	2744	2515	24	-2/26	-2.99	50	57	244	955	-2/28	-2.71	0	0	57	62	66	70	74	78	82	
5	244	3963	244	4493	531	31	-0/23	-1.02	50	114	244	4337	-0/26	-1.07	0	0	114	128	140	151	161	171	180	
5	243	1170	243	2063	894	47	1/32	1.01	50	58	243	1593	1/40	0.86	0	0	58	64	71	76	82	87	92	
5	242	3643	241	481	2062	50	-1/00	-0.91	50	67	242	3918	-1/10	-0.7	0	0	67	75	83	90	96	103	108	
5	241	2345	241	2763	419	48	0/36	1.03	50	97	241	2762	0/37	1.08	0	0	97	108	118	127	136	144	152	
5	241	2763	241	3310	548	48	0/43	0.58	50	67	241	2880	1/08	0.61	0	0	67	76	83	91	97	103	109	
5	241	3946	241	5164	1219	50	1/12	0.76	50	65	241	4872	1/16	0.67	0	0	65	72	80	86	93	99	104	
5	240	626	240	2513	1888	49	1/58	1.55	50	56	240	2068	2/05	1.56	0	0	56	61	66	71	76	80	84	
5	239	2729	239	3261	533	48	-1/40	-1.8	50	64	239	3260	-1/39	-1.8	0	0	64	70	76	82	87	92	96	
5	239	3261	239	4572	1312	48	-2/10	-1.95	50	54	239	3761	-2/25	-1.95	0	0	54	59	64	68	72	76	80	
5	239	4968	238	969	1293	49	2/01	0.95	50	51	238	475	2/05	0.81	0	0	51	57	63	68	73	77	81	
5	238	4500	237	878	1682	49	1/16	0.72	50	62	237	311	1/20	0.61	0	0	62	70	77	83	90	95	101	
5	236	743	236	1097	355	42	1/01	1.33	50	78	236	1096	1/01	1.33	0	0	78	86	94	101	108	114	120	
5	236	1097	236	3601	2505	42	1/50	1.13	50	51	236	2732	2/02	0.67	0	0	51	57	63	68	73	77	82	
5	234	4011	234	4295	285	23	-0/33	-0.34	25	93	234	4294	-0/33	-0.36	0	0	93	106	118	128	138	147	155	
5	234	4295	233	1359	2361	26	-1/25	-0.57	50	57	234	5021	-1/31	-0.45	0	0	57	64	71	78	83	89	94	
5	233	1730	233	4482	2753	48	-1/24	-0.78	50	59	233	2142	-1/28	-0.56	0	0	59	66	73	80	85	91	96	
5	232	3098	232	3694	597	50	0/45	0.86	50	80	232	3612	0/52	0.86	0	0	80	89	98	106	114	121	127	
5	232	3694	232	4780	1087	50	0/44	1.23	50	78	232	3837	0/56	0.96	0	0	78	86	95	102	109	116	123	
5	232	4780	231	2529	3054	49	1/21	0.93	50	56	231	214	1/44	0.79	0	0	56	62	68	74	79	84	89	
5	231	4569	231	6103	1535	50	2/56	3.31	50	54	231	5487	3/01	3.17	0	0	54	58	62	65	69	72	75	
5	231	7094	231	9553	2460	50	0/52	0.89	50	72	231	8589	1/01	0.62	0	0	72	80	89	96	103	110	116	
5	229	3729	229	4194	466	49	-0/37	-0.73	50	90	229	4193	-0/40	-0.81	0	0	90	102	112	121	130	138	145	
5	229	4194	228	383	1479	49	-0/54	-0.96	50	76	229	4645	-0/57	-0.89	0	0	76	85	94	101	108	115	121	
5	228	1549	228	2167	619	49	-1/32	-1.68	50	66	228	2079	-1/28	-1.43	0	0	66	72	79	85	90	96	101	
5	228	2167	228	3429	1263	50	-2/52	-3.24	50	52	228	2453	-2/58	-2.71	0	0	52	56	61	64	68	71	75	
5	228	3429	227	0	1866	50	-2/52	-3.19	50	54	228	3905	-3/02	-3.09	0	0	54	57	61	65	68	72	75	
5	227	3965	226	718	2063	49	-1/11	-0.85	50	64	226	60	-1/19	-0.75	0	0	64	71	79	85	91	97	103	
5	226	825	226	1438	614	49	-1/02	-1	50	70	226	1065	-1/11	-1.09	0	0	70	78	85	92	98	104	110	
5	226	1438	226	2467	1030	49	2/19	2.1	50	55	226	1735	2/23	1.99	0	0	55	59	64	69	73	77	81	
5	226	2519	226	3187	669	50	-1/32	-0.62	50	55	226	2824	-1/42	-0.56	0	0	55	61	68	74	79	84	89	
5	226	4475	225	472	1232	49	1/53	1.32	50	56	225	40	1/56	1.23	0	0	56	62	67	72	77	82	86	
5	225	472	225	2312	1841	49	-2/51	-3.16	50	55	225	1846	-2/53	-3.1	0	0	55	59	63	67	70	74	77	

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							Average				Limiting Point														
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at								
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0		
+	5	225	2312	225	3378	1067	50	2/53	2.68	50	52	225	2670	2/58	2.5	0	0	52	56	60	64	67	71	74	
	5	224	382	224	708	327	50	0/32	0.54	50	91	224	502	0/29	-0.22	0	0	91	106	119	131	142	152	161	
	5	224	708	224	2597	1890	49	1/26	1.5	50	65	224	1839	1/29	1.48	0	0	65	72	78	84	90	95	100	
	5	223	1473	223	1790	318	49	-0/35	-0.38	50	90	223	1789	-0/35	-0.38	0	0	90	103	114	124	133	142	150	
	5	223	1790	223	3806	2017	49	-0/56	-0.9	50	73	223	2557	-1/01	-0.79	0	0	73	82	90	97	104	111	117	
	5	223	4956	222	2006	2439	49	1/26	1.38	50	64	222	1017	1/34	1.44	0	0	64	70	76	82	87	92	97	
	5	222	4811	221	1006	1465	49	0/52	0.93	50	75	221	106	0/59	0.84	0	0	75	84	92	99	106	113	119	
	5	221	4790	220	1294	1614	48	-3/48	-3.72	50	50	220	753	-3/53	-3.75	186	-2	50	53	56	59	62	65	68	
	5	220	2541	220	3711	1171	49	1/50	1.65	50	57	220	3104	1/58	1.44	0	0	57	62	68	73	78	82	86	
	5	219	1615	219	3604	1990	46	1/58	1.25	50	54	219	3116	2/04	1.25	0	0	54	60	65	70	75	79	84	
	2	218	6959	218	8552	1594	42	1/14	1.64	50	65	218	8551	1/34	1.63	0	0	65	71	77	83	88	93	98	
	2	218	8552	218	9329	778	41	1/54	1.6	50	58	218	8784	1/56	1.63	0	0	58	64	69	74	79	84	88	
	2	216	4535	215	1005	1801	23	-2/34	-1.07	30	47	215	164	-2/37	-1.05	0	0	47	52	57	62	66	70	74	
	2	215	2025	215	2500	476	21	-0/23	-1.11	30	119	215	2379	-0/25	-1.12	0	0	119	133	145	157	168	178	187	
	2	215	2687	215	3076	390	16	0/25	0.41	30	104	215	2821	0/29	0.63	0	0	104	117	129	140	150	160	169	
	7	215	4444	215	4634	191	7	-4/31	-0.42	10	31	215	4561	-4/38	-0.21	0	0	31	36	40	43	47	50	53	
	7	215	4634	215	4909	170	5	4/24	0.02	10	31	215	4711	4/26	-0	0	0	31	35	40	43	47	50	53	
	7	215	4909	215	5093	164	4	-4/28	-0.42	10	32	215	5015	-4/34	-0.22	0	0	32	36	40	44	47	50	53	
	7	215	5093	215	5223	85	3	3/37	0.17	10	34	215	5157	3/41	-0.01	0	0	34	39	44	48	52	55	59	
	7	215	5223	215	5458	207	7	-5/04	0.31	10	28	215	5325	-5/04	0.31	0	0	28	32	36	40	43	46	49	
7	215	5458	215	5736	279	9	4/59	0.04	10	28	215	5612	5/05	-0.23	0	0	28	32	36	40	43	46	49		

Notes:

+ Maximum curve speed is limited at qualified cant deficiency.
However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Exception Report
Exception Summary Section
Milepost 418 to Milepost 215
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		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Lim	Pst	
MP	FT	EXC	FT	Drop	EXC	FT	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	Cls	Cls	Trk
388	10598	-	-	-	-	-	-	-	-	1	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5	
372	5296	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5	
325	4390	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	5	
295	1223	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	31	-	-	-	-	-	-	-	2	3	6	
		2	7	-	-	-	-	-	-	1	17	-	-	-	-	-	-	-	1	31	-	-	-	-	-	-	-				

Total Miles: 204.50
Exceptions per 100 Miles: 1.96
CY18 National Average Exceptions per 100 miles: 5.0

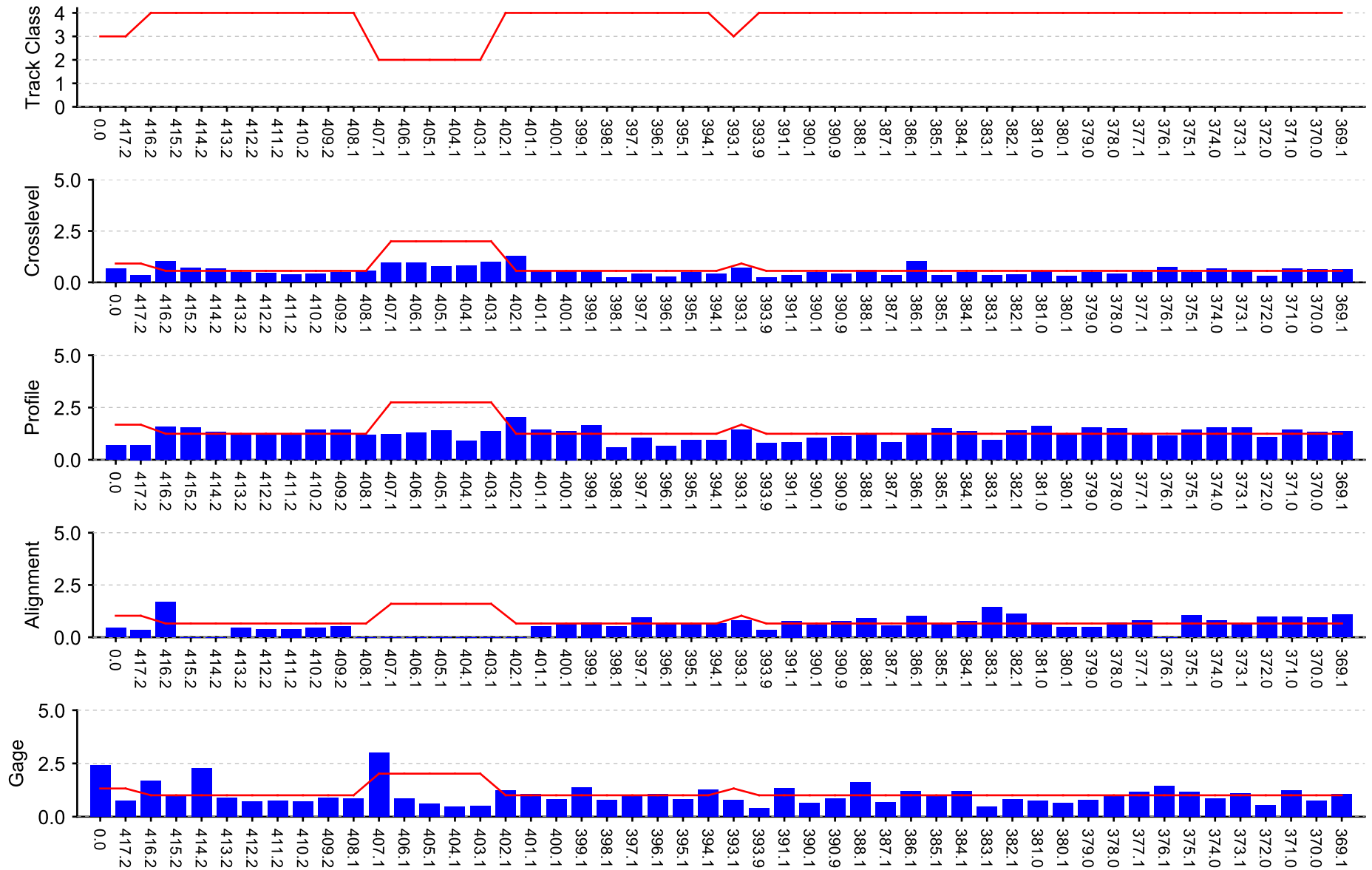
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Milepost 418 to Milepost 215

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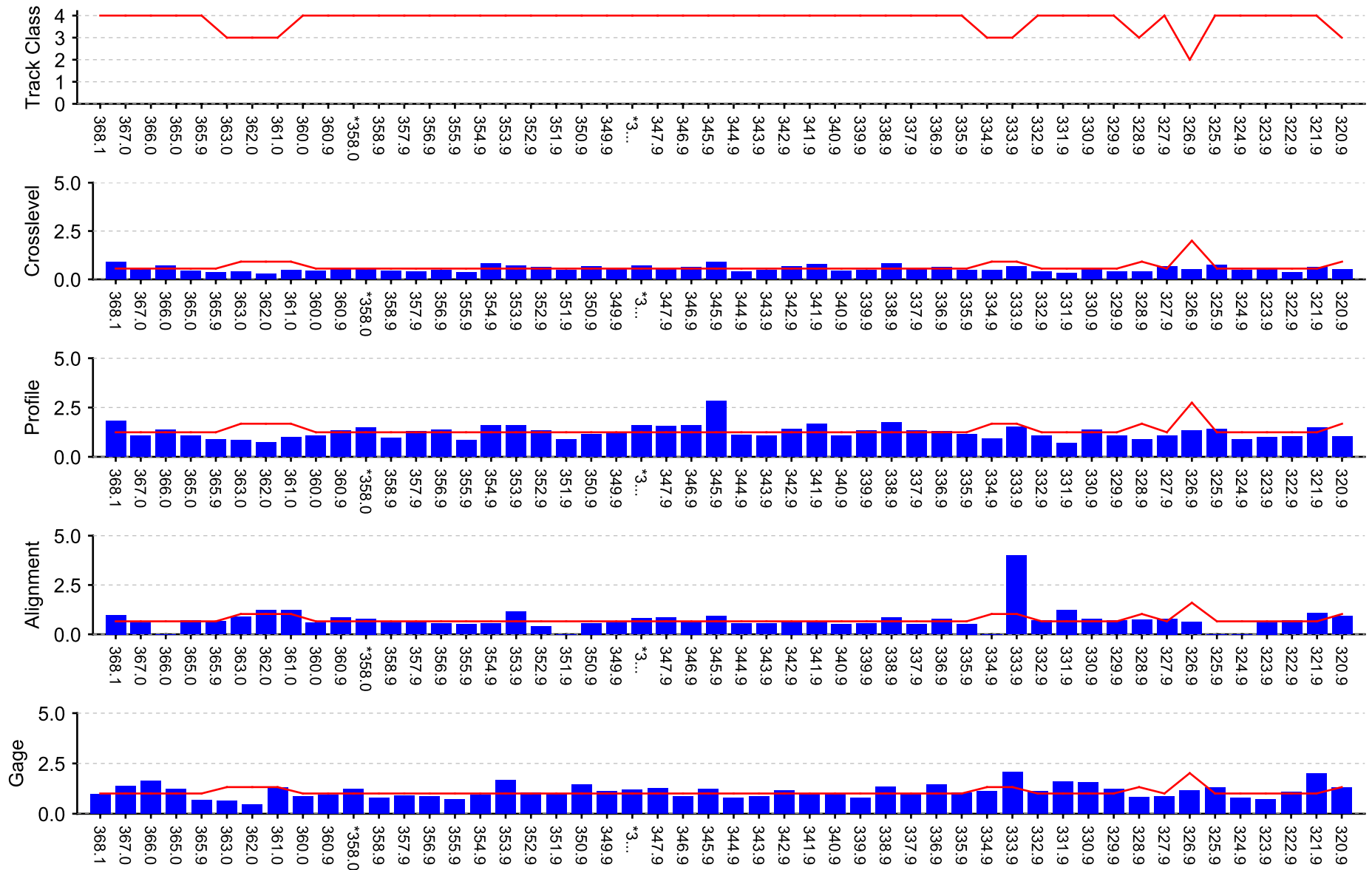
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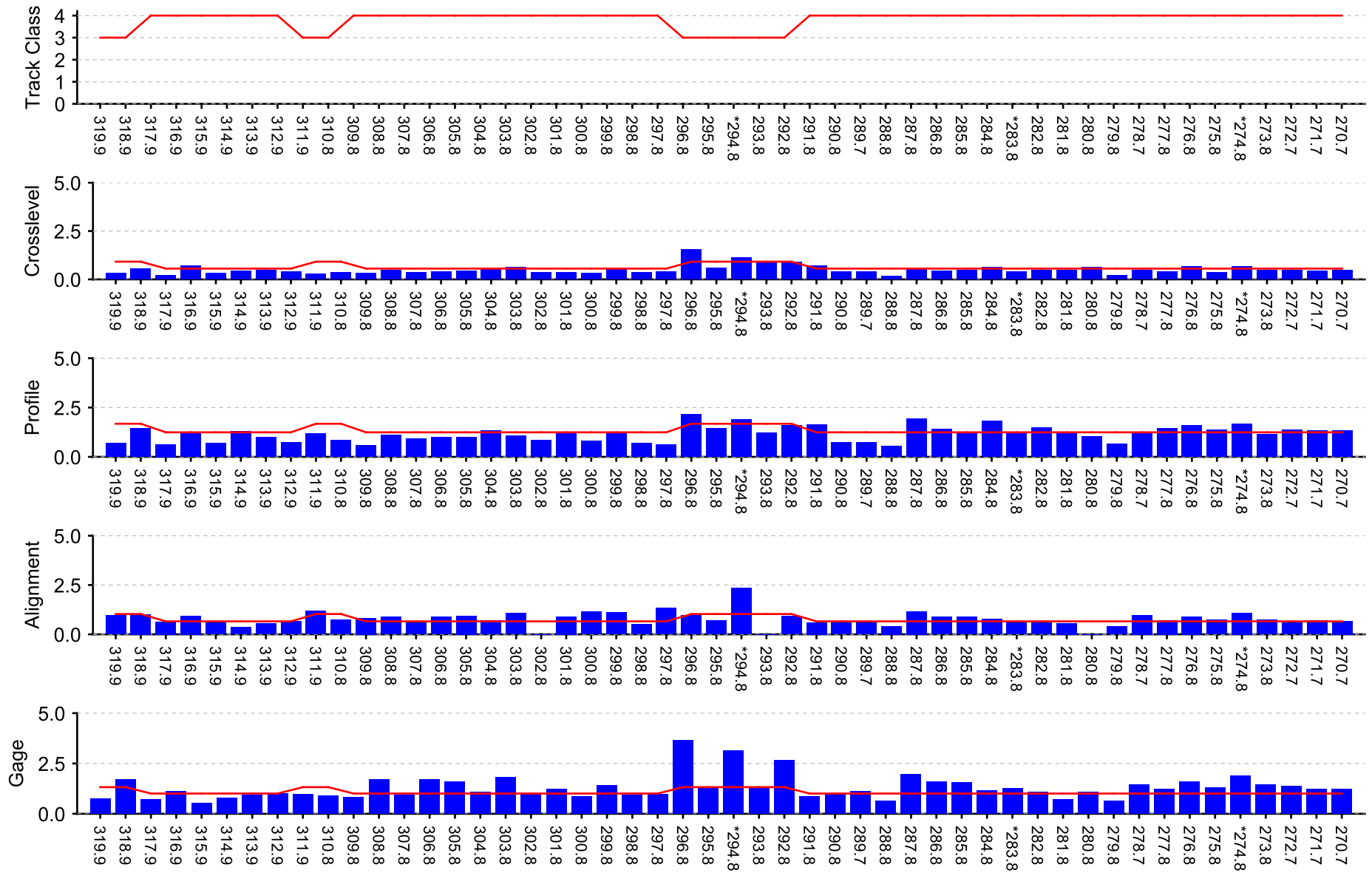
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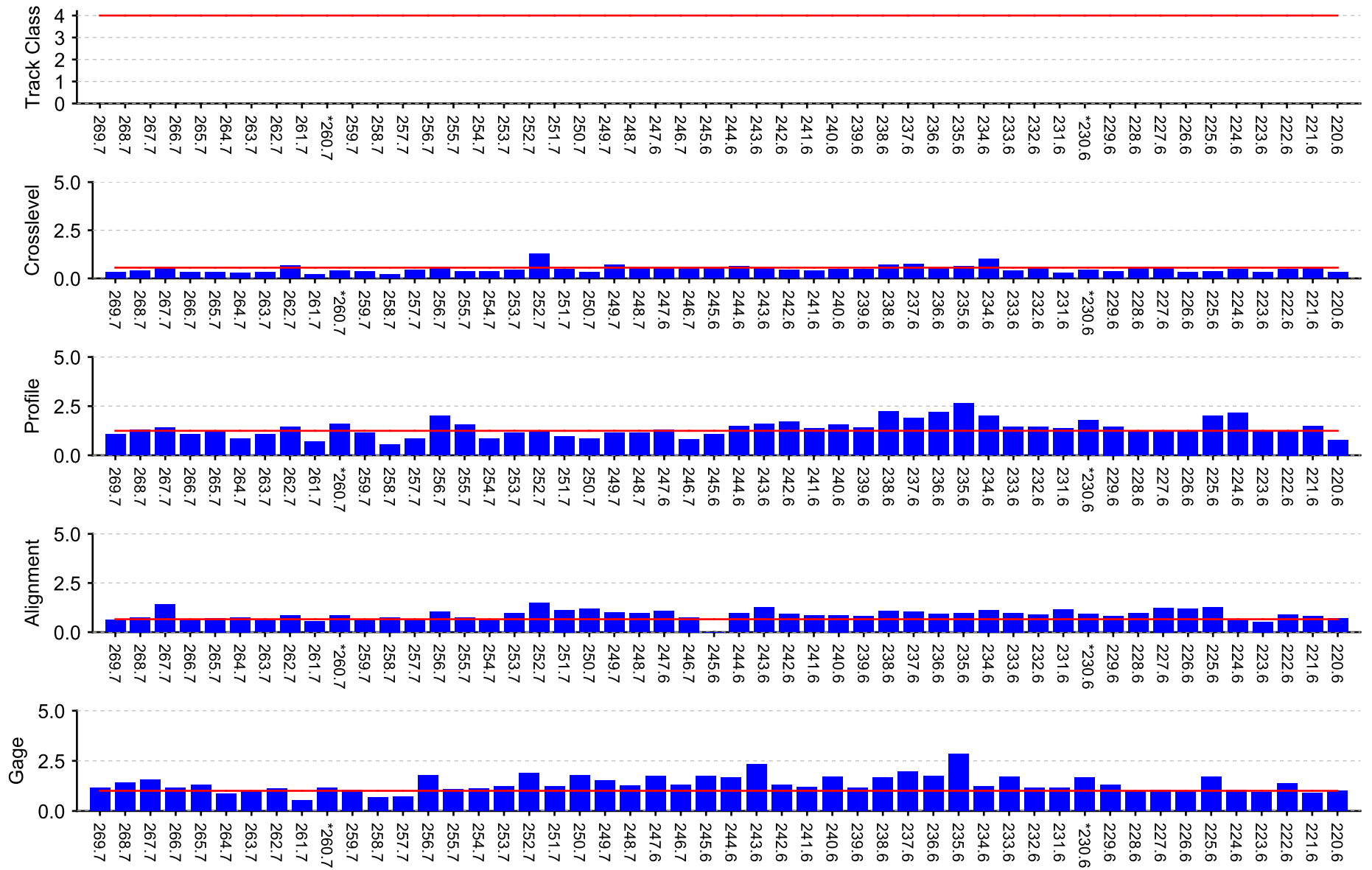
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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	142		Posted Speed	60.00	0	5	T	0	0	7	42.895756	-78.758676
0	142		State Line	NY	0	5	T	0	0	7	42.895756	-78.758676
0	143		Railroad	NS -	0	5	T	0	0	7	42.895757	-78.758673
0	144		Subdivision	SOUTHE	0	5	T	0	0	7	42.895757	-78.758673
418	176		Down Milepost	418.00	0	6	T	0	0	7	42.895786	-78.758558
418	1057		Track Change	0.00	0	6	T	0	0	5	42.895786	-78.758558
418	1057		Class Change	3.00	0	6	T	0	0	5	42.895786	-78.758558
418	1057		Posted Speed	40.00	0	6	T	0	0	5	42.895786	-78.758558
418	1275		Class Change	4.00	0	11	T	0	0	5	42.895984	-78.757791
418	1275		Posted Speed	80.00	0	11	T	0	0	5	42.895984	-78.757791
418	1309		Posted Speed	50.00	0	12	T	0	0	5	42.896015	-78.757672
418	1521		Class Change	3.00	0	15	T	0	0	5	42.896208	-78.756929
418	1521		Posted Speed	40.00	0	15	T	0	0	5	42.896208	-78.756929
417	5162		Down Milepost	417.00	0	36	T	0	0	5	42.899503	-78.744157
416	5294		Down Milepost	416.00	0	37	T	0	0	5	42.904300	-78.725579
416	2712		Class Change	4.00	0	35	B	0	0	5	42.906749	-78.716060
416	2712		Posted Speed	50.00	0	35	B	0	0	5	42.906749	-78.716060
415	5317		Down Milepost	415.00	0	28	T	0	0	5	42.906808	-78.706443
414	5329		Down Milepost	414.00	0	13	T	0	0	5	42.905719	-78.686684
414	3867		Class Change	2.00	0	23	T	0	0	5	42.904931	-78.672352
414	3867		Posted Speed	25.00	0	23	T	0	0	5	42.904931	-78.672352
414	4393		Class Change	4.00	0	24	T	0	0	5	42.904826	-78.670402
414	4393		Posted Speed	50.00	0	24	T	0	0	5	42.904826	-78.670402
413	5281		Down Milepost	413.00	0	25	T	0	0	5	42.904645	-78.667106
412	5277		Down Milepost	412.00	0	48	T	0	0	5	42.903570	-78.647545
411	5316		Down Milepost	411.00	0	49	T	0	0	5	42.902480	-78.627837
410	5295		Down Milepost	410.00	0	48	T	0	0	5	42.901391	-78.608210
409	5299		Down Milepost	409.00	0	47	T	0	0	5	42.901058	-78.588549
408	5311		Down Milepost	408.00	0	32	T	0	0	5	42.900650	-78.568884
407	5304		Down Milepost	407.00	0	25	T	0	0	5	42.898441	-78.549401
407	4189		Class Change	2.00	0	24	T	0	0	5	42.897470	-78.533916
407	4189		Posted Speed	25.00	0	24	T	0	0	5	42.897470	-78.533916
407	4339		Track Change	0.00	0	23	B	0	0	6	42.897464	-78.533359
406	5333		Down Milepost	406.00	0	24	E	0	0	6	42.897446	-78.529663
405	5268		Down Milepost	405.00	0	21	T	0	0	6	42.897141	-78.510073
404	5302		Down Milepost	404.00	0	24	T	0	0	6	42.895621	-78.490575
403	5296		Down Milepost	403.00	0	24	C	0	0	6	42.892705	-78.471401
403	104	9	Warp 62	2.14	44	24	C	2	3	6	42.892731	-78.471016
402	5304		Down Milepost	402.00	0	16	E	0	0	6	42.895562	-78.452101

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402	4628		Class Change	4.00	0	19	E	0	0	6	42.894788	-78.435036
402	4628		Posted Speed	50.00	0	19	E	0	0	6	42.894788	-78.435036
402	4629	13	R Align 62	0.92	14	19	E	4	5	6	42.894787	-78.435032
402	4633	12	L Align 62	0.76	2	19	E	4	5	6	42.894785	-78.435017
402	4803		Track Change	0.00	0	19	T	0	0	5	42.894700	-78.434396
401	5295		Down Milepost	401.00	0	21	T	0	0	5	42.894463	-78.432592
400	5284		Down Milepost	400.00	0	48	T	0	0	5	42.891785	-78.413295
400	1692	14	Crosslevel	-1.17	21	48	T	4	5	5	42.891471	-78.407061
400	1929	15	Crosslevel	-1.35	81	48	T	3	5	5	42.891550	-78.406186
400	2264	16	Crosslevel	-1.16	2	47	T	4	5	5	42.891660	-78.404949
400	2282	17	Crosslevel	-1.17	5	47	T	4	5	5	42.891666	-78.404883
400	2630	18	Crosslevel	-1.12	4	47	T	4	5	5	42.891782	-78.403599
400	2719	19	Crosslevel	-1.22	16	47	T	4	5	5	42.891812	-78.403270
400	2762	20	Crosslevel	-1.16	13	47	T	4	5	5	42.891826	-78.403112
400	2789	21	Crosslevel	-1.10	1	46	T	4	5	5	42.891836	-78.403012
400	2965	22	Crosslevel	-1.11	2	46	T	4	5	5	42.891894	-78.402362
400	3000	23	Crosslevel	-1.11	1	46	T	4	5	5	42.891906	-78.402233
400	3010	24	Crosslevel	-1.14	6	46	T	4	5	5	42.891909	-78.402196
399	5263		Down Milepost	399.00	0	47	T	0	0	5	42.892665	-78.393882
399	4103	25	R Prof 62	1.41	4	48	T	4	5	5	42.894041	-78.378748
398	5331		Down Milepost	398.00	0	49	T	0	0	5	42.894457	-78.374215
397	5310		Down Milepost	397.00	0	47	C	0	0	5	42.893873	-78.354882
397	2952	26	L Align 62	0.82	10	49	C	4	5	5	42.890511	-78.344949
396	5296		Down Milepost	396.00	0	45	T	0	0	5	42.887088	-78.337600
396	485	27	L Align 62	0.77	7	44	B	4	5	5	42.886346	-78.336109
396	487	28	R Align 62	0.80	11	44	B	4	5	5	42.886342	-78.336103
396	522	29	L Align 62	-1.02	16	44	B	4	5	5	42.886290	-78.335994
396	533	30	R Align 62	-1.05	23	44	B	4	5	5	42.886273	-78.335960
395	5320		Down Milepost	395.00	0	41	T	0	0	5	42.881669	-78.319348
395	1813	31	R Align 62	1.08	25	37	B	4	5	5	42.880092	-78.312962
395	1819	32	L Align 62	1.07	26	37	C	4	5	5	42.880086	-78.312941
394	5302		Down Milepost	394.00	0	33	T	0	0	5	42.874749	-78.302253
393	5276		Down Milepost	393.00	0	26	T	0	0	5	42.865746	-78.286962
393	1116	33	L Align 62	0.96	17	24	B	4	5	5	42.863736	-78.283845
393	1116	34	R Align 62	1.03	21	24	B	4	5	5	42.863736	-78.283845
393	1228	36	L Align 62	-0.99	34	24	B	4	5	5	42.863553	-78.283511
393	1235	35	R Align 62	-0.79	9	24	B	4	5	5	42.863543	-78.283489
393	1273	37	L Align 62	0.75	2	24	C	4	5	5	42.863485	-78.283372
393	2286		Class Change	2.00	0	21	E	0	0	5	42.862709	-78.279807

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
393	2286		Posted Speed	25.00	0	21	E	0	0	5	42.862709	-78.279807
393	2521		Class Change	3.00	0	21	T	0	0	5	42.862681	-78.278935
393	2521		Posted Speed	40.00	0	21	T	0	0	5	42.862681	-78.278935
393	4409		Class Change	4.00	0	28	C	0	0	5	42.861359	-78.272295
393	4409		Posted Speed	50.00	0	28	C	0	0	5	42.861359	-78.272295
393	5744		Class Change	3.00	0	34	B	0	0	5	42.858919	-78.268609
393	5744		Posted Speed	40.00	0	34	B	0	0	5	42.858919	-78.268609
393	6544		Class Change	4.00	0	33	C	0	0	5	42.857766	-78.266093
393	6544		Posted Speed	50.00	0	33	C	0	0	5	42.857766	-78.266093
391	10600		Down Milepost	391.00	0	38	C	0	0	5	42.860560	-78.252790
391	11	43	R Align 62	-1.12	22	38	C	4	5	5	42.860585	-78.252767
391	547		Class Change	3.00	0	38	C	0	0	5	42.861880	-78.251842
391	547		Posted Speed	40.00	0	38	C	0	0	5	42.861880	-78.251842
391	2333		Class Change	4.00	0	36	T	0	0	5	42.866444	-78.249482
391	2333		Posted Speed	50.00	0	36	T	0	0	5	42.866444	-78.249482
390	5277		Down Milepost	390.00	0	44	C	0	0	5	42.873322	-78.244097
388	10598		Down Milepost	388.00	0	49	B	0	0	5	42.885112	-78.209132
388	4209	45	Crosslevel	-1.38	52	48	T	3	5	5	42.885482	-78.193541
387	5298		Down Milepost	387.00	0	47	T	0	0	5	42.885466	-78.189491
386	5307		Down Milepost	386.00	0	50	B	0	0	5	42.880976	-78.171128
386	2696	46	R Prof 62	-1.62	2	48	T	4	5	5	42.875376	-78.164761
386	2703	47	R Prof 62	-1.72	3	48	T	4	5	5	42.875360	-78.164747
385	5325		Down Milepost	385.00	0	47	C	0	0	5	42.868651	-78.161580
385	4068	49	L Prof 62	-1.78	7	48	C	4	5	5	42.858976	-78.168258
384	5301		Down Milepost	384.00	0	48	C	0	0	5	42.856035	-78.170507
383	5291		Down Milepost	383.00	0	48	T	0	0	5	42.842541	-78.177487
383	4105	50	L Align 62	-0.74	2	47	C	4	5	5	42.831978	-78.180669
383	4156	51	L Align 62	0.75	3	47	C	4	5	5	42.831839	-78.180658
383	5117	52	R Align 62	0.96	18	49	C	4	5	5	42.829215	-78.180844
383	5176	54	R Align 62	-0.84	18	49	C	4	5	5	42.829054	-78.180832
383	5180	53	L Align 62	-0.80	7	49	C	4	5	5	42.829043	-78.180831
382	5272		Down Milepost	382.00	0	49	C	0	0	5	42.828790	-78.180794
382	522	56	R Align 62	-0.92	17	49	C	4	5	5	42.827422	-78.180270
382	523	55	L Align 62	-0.73	1	49	C	4	5	5	42.827419	-78.180268
381	5319		Down Milepost	381.00	0	49	C	0	0	5	42.815344	-78.173472
380	5207		Down Milepost	380.00	0	48	T	0	0	5	42.804450	-78.161125
379	5401		Down Milepost	379.00	0	48	T	0	0	5	42.791582	-78.152022
378	5297		Down Milepost	378.00	0	47	C	0	0	5	42.777345	-78.148482
377	5108		Down Milepost	377.00	0	41	T	0	0	5	42.763501	-78.150792

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
376	5314		Down Milepost	376.00	0	29	T	0	0	5	42.749059	-78.152792
376	3345		Class Change	2.00	0	22	T	0	0	5	42.739932	-78.153401
376	3345		Posted Speed	25.00	0	22	T	0	0	5	42.739932	-78.153401
376	3800		Class Change	4.00	0	22	T	0	0	5	42.738688	-78.153486
376	3800		Posted Speed	50.00	0	22	T	0	0	5	42.738688	-78.153486
375	5311		Down Milepost	375.00	0	24	E	0	0	5	42.734569	-78.153430
374	5435		Down Milepost	374.00	0	48	T	0	0	5	42.720534	-78.147784
373	5133		Down Milepost	373.00	0	49	T	0	0	5	42.707275	-78.142752
372	5296		Down Milepost	372.00	0	49	T	0	0	5	42.695394	-78.131542
372	2867	57	R Align 62	0.83	16	45	C	4	5	5	42.689456	-78.124670
372	2871	61	L Align 62	1.15	30	45	C	4	5	5	42.689447	-78.124662
372	2873	59	Gage Wide	57.68	5	45	C	3	5	5	42.689442	-78.124658
372	2876	60	R Align 62	0.77	3	45	C	4	5	5	42.689436	-78.124651
372	2924	62	L Align 62	-0.87	21	45	E	4	5	5	42.689327	-78.124553
371	5305		Down Milepost	371.00	0	46	T	0	0	5	42.683329	-78.121432
370	5308		Down Milepost	370.00	0	47	E	0	0	5	42.673090	-78.112165
369	5069		Down Milepost	369.00	0	48	C	0	0	5	42.672889	-78.094261
369	2293	66	L Align 62	0.98	23	49	B	4	5	5	42.668216	-78.088593
368	5347		Down Milepost	368.00	0	47	T	0	0	5	42.660874	-78.083236
368	2196	67	L Prof 62	-1.42	4	43	T	4	5	5	42.655507	-78.079587
368	2197	68	R Prof 62	-1.56	7	43	T	4	5	5	42.655505	-78.079585
367	5459		Down Milepost	367.00	0	33	T	0	0	5	42.647550	-78.074120
366	5403		Down Milepost	366.00	0	26	T	0	0	5	42.634367	-78.065141
366	3333		Class Change	2.00	0	22	C	0	0	5	42.626171	-78.059770
366	3333		Posted Speed	25.00	0	22	C	0	0	5	42.626171	-78.059770
366	3836		Class Change	4.00	0	22	C	0	0	5	42.624837	-78.059330
366	3836		Posted Speed	50.00	0	22	C	0	0	5	42.624837	-78.059330
365	5214		Down Milepost	365.00	0	25	T	0	0	5	42.621076	-78.059050
364	5396		Down Milepost	364.00	0	37	C	0	0	5	42.606334	-78.058968
363	5247		Down Milepost	363.00	0	30	C	0	0	5	42.592541	-78.058564
363	1749		Class Change	3.00	0	29	T	0	0	5	42.589138	-78.054060
363	1749		Posted Speed	30.00	0	29	T	0	0	5	42.589138	-78.054060
362	5292		Down Milepost	362.00	0	29	C	0	0	5	42.580860	-78.053456
362	280	69	Twist 31ft*	-1.30	14	30	E	2	4	5	42.580106	-78.053403
361	5107		Down Milepost	361.00	0	28	B	0	0	5	42.577575	-78.037767
361	2293		Posted Speed	40.00	0	28	B	0	0	5	42.577752	-78.029720
360	5429		Down Milepost	360.00	0	37	T	0	0	5	42.570580	-78.024051
360	4403		Class Change	4.00	0	38	C	0	0	5	42.558796	-78.021048
360	4403		Posted Speed	50.00	0	38	C	0	0	5	42.558796	-78.021048

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
358	10605		Down Milepost	358.00	0	48	E	0	0	5	42.550025	-78.002466
358	244	70	R Align 62	-0.87	5	49	B	4	5	5	42.549848	-78.001597
357	5304		Down Milepost	357.00	0	49	T	0	0	5	42.545980	-77.983635
356	5307		Down Milepost	356.00	0	49	C	0	0	5	42.540467	-77.965582
355	5258		Down Milepost	355.00	0	50	T	0	0	5	42.542070	-77.946395
354	5377		Down Milepost	354.00	0	49	T	0	0	5	42.540148	-77.927212
353	5227		Down Milepost	353.00	0	44	C	0	0	5	42.533318	-77.910402
352	5354		Down Milepost	352.00	0	49	T	0	0	5	42.522891	-77.896522
352	1889	72	L Align 62	0.91	11	49	C	4	5	5	42.518976	-77.891996
352	1890	73	R Align 62	0.85	14	49	C	4	5	5	42.518974	-77.891994
352	2123	74	R Prof 62	-1.89	7	50	T	4	5	5	42.518437	-77.891530
352	2125	76	L Prof 62	-1.94	9	50	T	4	5	5	42.518433	-77.891526
352	2126	75	R Align 62	0.98	3	50	T	4	5	5	42.518430	-77.891524
351	5357		Down Milepost	351.00	0	31	T	0	0	5	42.510816	-77.885499
350	5214		Down Milepost	350.00	0	20	T	0	0	5	42.497736	-77.877853
349	5351		Down Milepost	349.00	0	26	T	0	0	5	42.486172	-77.866521
349	4396		Class Change	3.00	0	34	T	0	0	5	42.478735	-77.853772
349	4396		Posted Speed	35.00	0	34	T	0	0	5	42.478735	-77.853772
349	4948		Class Change	4.00	0	35	B	0	0	5	42.477799	-77.852171
349	4948		Posted Speed	50.00	0	35	B	0	0	5	42.477799	-77.852171
347	10450		Down Milepost	347.00	0	34	T	0	0	5	42.467984	-77.836780
347	4444	80	R Align 62	0.77	5	45	E	4	5	5	42.460050	-77.824366
346	5298		Down Milepost	346.00	0	46	C	0	0	5	42.458751	-77.821742
346	3806	81	R Prof 62	-1.40	3	49	T	4	5	5	42.456264	-77.808311
345	5293		Down Milepost	345.00	0	50	T	0	0	5	42.456138	-77.802822
345	4062	82	R Prof 62	-1.55	10	49	T	4	5	5	42.458096	-77.788155
345	4063	83	L Prof 62	-1.67	11	49	T	4	5	5	42.458096	-77.788151
344	5307		Down Milepost	344.00	0	49	T	0	0	5	42.458977	-77.783713
344	569	84	L Align 62	-0.80	13	49	B	4	5	5	42.459380	-77.781685
344	603	85	R Align 31	0.70	3	49	B	4	5	5	42.459403	-77.781564
344	604	86	R Align 62	1.11	14	49	B	4	5	5	42.459404	-77.781560
344	609	87	L Align 62	0.87	10	49	B	4	5	5	42.459408	-77.781542
344	2819	88	L Prof 62	-1.38	2	50	T	4	5	5	42.460939	-77.773654
343	5321		Down Milepost	343.00	0	49	T	0	0	5	42.462713	-77.764732
342	5310		Down Milepost	342.00	0	49	C	0	0	5	42.459937	-77.745976
341	5294		Down Milepost	341.00	0	49	T	0	0	5	42.448787	-77.734360
340	5293		Down Milepost	340.00	0	49	T	0	0	5	42.435334	-77.727194
339	5268		Down Milepost	339.00	0	49	T	0	0	5	42.421901	-77.720206
339	4881	89	Crosslevel	-1.26	38	49	T	3	5	5	42.409492	-77.713589

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
338	5295		Down Milepost	338.00	0	49	C	0	0	5	42.408450	-77.712995
337	5345		Down Milepost	337.00	0	50	T	0	0	5	42.395693	-77.703410
336	5305		Down Milepost	336.00	0	49	C	0	0	5	42.383211	-77.693457
335	5325		Down Milepost	335.00	0	43	T	0	0	5	42.370191	-77.684691
335	1628	94	R Align 62	-0.93	8	41	T	4	5	5	42.366207	-77.682032
334	5327		Down Milepost	334.00	0	37	C	0	0	5	42.357008	-77.676417
334	2427	95	R Prof 62	1.40	3	33	T	4	5	5	42.350592	-77.674147
333	5302		Down Milepost	333.00	0	29	T	0	0	5	42.342989	-77.671462
333	4389		Class Change	3.00	0	27	T	0	0	5	42.331384	-77.667367
333	4389		Posted Speed	30.00	0	27	T	0	0	5	42.331384	-77.667367
332	5325		Down Milepost	332.00	0	27	B	0	0	5	42.328939	-77.666359
332	1752		Posted Speed	35.00	0	29	T	0	0	5	42.324924	-77.662860
331	5287		Down Milepost	331.00	0	31	T	0	0	5	42.317041	-77.655347
331	3874		Class Change	4.00	0	34	C	0	0	5	42.308324	-77.647257
331	3874		Posted Speed	50.00	0	34	C	0	0	5	42.308324	-77.647257
330	5099		Down Milepost	330.00	0	35	C	0	0	5	42.305585	-77.644657
329	5294		Down Milepost	329.00	0	45	T	0	0	5	42.295394	-77.630973
328	5281		Down Milepost	328.00	0	44	T	0	0	5	42.286840	-77.615311
327	5349		Down Milepost	327.00	0	42	T	0	0	5	42.277198	-77.600652
327	4401		Class Change	3.00	0	36	C	0	0	5	42.269039	-77.588934
327	4401		Posted Speed	40.00	0	36	C	0	0	5	42.269039	-77.588934
326	5286		Down Milepost	326.00	0	37	B	0	0	5	42.267167	-77.586873
326	727		Class Change	4.00	0	37	E	0	0	5	42.266125	-77.584641
326	727		Posted Speed	50.00	0	37	E	0	0	5	42.266125	-77.584641
325	5305		Down Milepost	325.00	0	35	T	0	0	5	42.264197	-77.568013
325	4390		Class Change	2.00	0	24	B	0	0	5	42.262751	-77.551982
325	4390		Posted Speed	25.00	0	24	B	0	0	5	42.262751	-77.551982
325	4829	98	Gage Wide	57.87	2	25	C	1	3	5	42.262452	-77.550420
325	5023		Class Change	4.00	0	25	E	0	0	5	42.262260	-77.549754
325	5023		Posted Speed	50.00	0	25	E	0	0	5	42.262260	-77.549754
324	5312		Down Milepost	324.00	0	25	E	0	0	5	42.261923	-77.548788
323	5339		Down Milepost	323.00	0	24	T	0	0	5	42.255108	-77.531416
323	1214		Class Change	2.00	0	24	B	0	0	5	42.253582	-77.527456
323	1214		Posted Speed	25.00	0	24	B	0	0	5	42.253582	-77.527456
323	1766		Class Change	4.00	0	25	C	0	0	5	42.253098	-77.525532
323	1766		Posted Speed	50.00	0	25	C	0	0	5	42.253098	-77.525532
322	5279		Down Milepost	322.00	0	24	T	0	0	5	42.253168	-77.512636
321	5256		Down Milepost	321.00	0	49	B	0	0	5	42.256140	-77.494082
320	5304		Down Milepost	320.00	0	48	C	0	0	5	42.254252	-77.474748

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319	5346		Down Milepost	319.00	0	42	C	0	0	5	42.252311	-77.455464
319	2087	102	L Align 62	1.59	2	39	T	3	5	5	42.248170	-77.450261
319	3882		Class Change	3.00	0	38	T	0	0	5	42.244167	-77.446446
319	3882		Posted Speed	40.00	0	38	T	0	0	5	42.244167	-77.446446
318	5160		Down Milepost	318.00	0	37	E	0	0	5	42.241089	-77.444365
317	5388		Down Milepost	317.00	0	39	T	0	0	5	42.229363	-77.433796
317	5178	103	Gage Wide	57.61	3	39	B	3	4	5	42.222841	-77.416910
317	5316	104	Gage Wide	57.61	2	38	C	3	4	5	42.222596	-77.416526
316	5319		Down Milepost	316.00	0	38	C	0	0	5	42.222589	-77.416515
316	6	105	Gage Wide	57.72	10	38	C	3	4	5	42.222577	-77.416499
316	24	106	Gage Wide	57.61	2	38	C	3	4	5	42.222543	-77.416451
316	102	107	Gage Wide	57.63	7	38	C	3	4	5	42.222391	-77.416255
316	156	108	Gage Wide	57.62	6	38	C	3	4	5	42.222280	-77.416125
316	447	109	Gage Wide	57.60	1	38	C	3	4	5	42.221623	-77.415526
316	2819		Class Change	4.00	0	38	C	0	0	5	42.215315	-77.413834
316	2819		Posted Speed	50.00	0	38	C	0	0	5	42.215315	-77.413834
315	5284		Down Milepost	315.00	0	40	T	0	0	5	42.208583	-77.414231
315	1344	110	L Prof 62	-1.39	2	43	C	4	5	5	42.204916	-77.414261
315	4952	111	R Align 62	-0.76	3	46	C	4	5	5	42.197476	-77.406285
314	5294		Down Milepost	314.00	0	46	E	0	0	5	42.197117	-77.405122
313	5315		Down Milepost	313.00	0	29	C	0	0	5	42.191684	-77.387752
313	3329		Class Change	2.00	0	24	B	0	0	5	42.184158	-77.380874
313	3329		Posted Speed	25.00	0	24	B	0	0	5	42.184158	-77.380874
313	3860		Class Change	4.00	0	24	C	0	0	5	42.183017	-77.379672
313	3860		Posted Speed	50.00	0	24	C	0	0	5	42.183017	-77.379672
312	5258		Down Milepost	312.00	0	25	E	0	0	5	42.181423	-77.375113
311	5323		Down Milepost	311.00	0	41	T	0	0	5	42.177602	-77.356626
310	5298		Down Milepost	310.00	0	39	T	0	0	5	42.174493	-77.338308
310	1258		Class Change	3.00	0	40	T	0	0	5	42.174546	-77.333686
310	1258		Posted Speed	40.00	0	40	T	0	0	5	42.174546	-77.333686
310	2156	112	Gage Wide	57.69	9	39	B	3	4	5	42.174461	-77.330397
310	2572	113	Gage Wide	57.62	4	39	C	3	4	5	42.174007	-77.329008
310	2710	114	Gage Wide	57.61	1	39	C	3	4	5	42.173778	-77.328606
310	2755	115	Gage Wide	57.72	46	39	C	3	4	5	42.173696	-77.328483
310	2809	116	Gage Wide	57.81	30	39	C	1	4	5	42.173593	-77.328341
310	2947	117	Gage Wide	57.61	1	38	C	3	4	5	42.173310	-77.328007
310	2960	118	Gage Wide	57.68	10	38	C	3	4	5	42.173282	-77.327978
310	3058	119	Gage Wide	57.66	11	38	E	3	4	5	42.173062	-77.327773
309	5491		Down Milepost	309.00	0	39	T	0	0	5	42.166662	-77.325629

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308	5126		Down Milepost	308.00	0	39	T	0	0	5	42.155105	-77.315338
308	766	120	Gage Wide	57.61	1	39	C	3	4	5	42.153373	-77.313774
308	772	121	Gage Wide	57.61	3	39	C	3	4	5	42.153358	-77.313766
308	1091	122	Gage Wide	57.67	19	40	C	3	4	5	42.152521	-77.313451
308	1233		Class Change	4.00	0	40	C	0	0	5	42.152136	-77.313391
308	1233		Posted Speed	50.00	0	40	C	0	0	5	42.152136	-77.313391
307	5254		Down Milepost	307.00	0	45	T	0	0	5	42.141414	-77.316478
306	5308		Down Milepost	306.00	0	50	C	0	0	5	42.127434	-77.320203
305	5589		Down Milepost	305.00	0	49	T	0	0	5	42.118328	-77.304072
304	5004		Down Milepost	304.00	0	49	B	0	0	5	42.112133	-77.287711
304	332	126	L Align 62	-0.99	17	50	C	4	5	5	42.111792	-77.286578
303	5301		Down Milepost	303.00	0	46	C	0	0	5	42.109450	-77.268635
302	5331		Down Milepost	302.00	0	29	C	0	0	5	42.109961	-77.249194
301	5347		Down Milepost	301.00	0	24	E	0	0	5	42.107483	-77.230185
301	3389	127	L Align 62	-0.74	1	27	C	4	5	5	42.110929	-77.218804
300	5215		Down Milepost	300.00	0	33	B	0	0	5	42.114886	-77.214721
300	986	129	L Align 62	0.84	9	39	C	4	5	5	42.116767	-77.212154
300	990	128	L Prof 62	-1.36	1	39	C	4	5	5	42.116773	-77.212142
299	5338		Down Milepost	299.00	0	47	C	0	0	5	42.119851	-77.196792
298	5254		Down Milepost	298.00	0	49	T	0	0	5	42.114575	-77.179400
298	3532	130	Twist 31ft*	0.93	3	46	E	4	5	5	42.112892	-77.166722
297	5360		Down Milepost	297.00	0	41	T	0	0	5	42.113449	-77.160047
296	5271		Down Milepost	296.00	0	28	E	0	0	5	42.118745	-77.142361
295	5328		Down Milepost	295.00	0	25	T	0	0	5	42.129516	-77.129192
295	1009		Class Change	3.00	0	25	T	0	0	5	42.131558	-77.126701
295	1009		Posted Speed	40.00	0	25	T	0	0	5	42.131558	-77.126701
295	1223		Track Change	0.00	0	25	E	0	0	6	42.131986	-77.126166
295	2021	137	R Runoff*	2.97	31	26	T	2	4	6	42.133579	-77.124165
293	10415		Down Milepost	293.00	0	37	T	0	0	6	42.149381	-77.102184
292	5400		Down Milepost	292.00	0	20	T	0	0	6	42.155452	-77.084124
291	5181		Down Milepost	291.00	0	20	T	0	0	6	42.158245	-77.065702
291	4334		Class Change	4.00	0	40	C	0	0	6	42.155183	-77.050455
291	4334		Posted Speed	50.00	0	40	C	0	0	6	42.155183	-77.050455
291	4528		Track Change	0.00	0	40	T	0	0	5	42.154974	-77.049800
290	5323		Down Milepost	290.00	0	40	C	0	0	5	42.154040	-77.047161
289	5545		Down Milepost	289.00	0	49	T	0	0	5	42.142904	-77.034004
288	4887		Down Milepost	288.00	0	48	T	0	0	5	42.130864	-77.026221
287	5503		Down Milepost	287.00	0	48	C	0	0	5	42.119643	-77.013144
286	5197		Down Milepost	286.00	0	49	T	0	0	5	42.122043	-76.994988

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285	5325		Down Milepost	285.00	0	50	T	0	0	5	42.127146	-76.976670
284	5291		Down Milepost	284.00	0	48	T	0	0	5	42.132217	-76.958473
283	10606		Down Milepost	282.00	0	49	T	0	0	5	42.139663	-76.920965
281	5272		Down Milepost	281.00	0	46	T	0	0	5	42.144134	-76.902760
280	5355		Down Milepost	280.00	0	33	T	0	0	5	42.150503	-76.885266
279	5276		Down Milepost	279.00	0	24	C	0	0	5	42.153212	-76.866422
279	1220		Class Change	2.00	0	23	T	0	0	5	42.154078	-76.862095
279	1220		Posted Speed	25.00	0	23	T	0	0	5	42.154078	-76.862095
279	2135		Class Change	4.00	0	23	T	0	0	5	42.154682	-76.858834
279	2135		Posted Speed	50.00	0	23	T	0	0	5	42.154682	-76.858834
278	5427		Down Milepost	278.00	0	35	T	0	0	5	42.156839	-76.847090
277	5151		Down Milepost	277.00	0	49	C	0	0	5	42.151960	-76.831676
276	5287		Down Milepost	276.00	0	50	T	0	0	5	42.137832	-76.827586
275	5314		Down Milepost	275.00	0	49	T	0	0	5	42.123623	-76.823510
275	10422	147	L Align 31	-0.64	2	48	B	4	5	5	42.097041	-76.810075
273	10566		Down Milepost	273.00	0	48	C	0	0	5	42.096671	-76.809883
273	102	148	R Align 62	-0.74	1	48	C	4	5	5	42.096411	-76.809744
273	106	149	L Align 62	-0.87	9	48	C	4	5	5	42.096401	-76.809739
272	5316		Down Milepost	272.00	0	50	T	0	0	5	42.083224	-76.802475
272	441	150	Crosslevel	-1.18	10	50	T	4	5	5	42.082112	-76.801859
271	5319		Down Milepost	271.00	0	48	T	0	0	5	42.069789	-76.795018
270	5347		Down Milepost	270.00	0	48	B	0	0	5	42.056880	-76.785839
269	5249		Down Milepost	269.00	0	49	T	0	0	5	42.046635	-76.772524
268	5309		Down Milepost	268.00	0	49	T	0	0	5	42.036777	-76.758229
267	5297		Down Milepost	267.00	0	49	T	0	0	5	42.026653	-76.744342
267	4845	152	R Prof 62	-1.45	5	49	C	4	5	5	42.017856	-76.731153
267	4846	151	L Prof 62	-1.38	2	49	C	4	5	5	42.017855	-76.731149
266	5332		Down Milepost	266.00	0	50	C	0	0	5	42.017370	-76.729486
265	5250		Down Milepost	265.00	0	49	C	0	0	5	42.016597	-76.710330
264	5309		Down Milepost	264.00	0	49	T	0	0	5	42.019903	-76.691385
263	5298		Down Milepost	263.00	0	49	C	0	0	5	42.023132	-76.672463
262	5298		Down Milepost	262.00	0	49	C	0	0	5	42.022747	-76.653202
261	5287		Down Milepost	261.00	0	49	T	0	0	5	42.015296	-76.636638
261	3055	153	L Align 62	-1.05	2	49	T	4	5	5	42.009986	-76.628102
261	3062	154	R Align 62	-1.02	7	49	T	4	5	5	42.009972	-76.628085
261	3063	155	L Align 62	-0.96	5	49	T	4	5	5	42.009970	-76.628083
259	10607		Down Milepost	259.00	0	50	T	0	0	5	42.003955	-76.606146
258	5377		Down Milepost	258.00	0	48	T	0	0	5	42.009910	-76.587690
257	5213		Down Milepost	257.00	0	49	C	0	0	5	42.012879	-76.569035

Exception Report
Class Plus 1 Exception List Section
Milepost 418 to Milepost 215
Buffalo, NY to Binghamton, NY

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
256	5366		Down Milepost	256.00	0	49	B	0	0	5	42.003182	-76.555614
255	5246		Down Milepost	255.00	0	49	T	0	0	5	42.000735	-76.537968
254	5238		Down Milepost	254.00	0	48	C	0	0	5	42.003307	-76.519108
253	5440		Down Milepost	253.00	0	49	E	0	0	5	42.006472	-76.499628
253	5177	156	R Align 62	0.89	5	49	T	4	5	5	42.007738	-76.480771
253	5181	157	L Align 62	0.99	11	49	T	4	5	5	42.007739	-76.480756
253	5226	158	L Align 62	-1.21	23	49	T	4	5	5	42.007742	-76.480591
253	5226	159	R Align 62	-1.16	22	49	T	4	5	5	42.007742	-76.480591
252	5228		Down Milepost	252.00	0	49	T	0	0	5	42.007742	-76.480580
251	5335		Down Milepost	251.00	0	49	C	0	0	5	42.014196	-76.465172
251	1308	160	R Prof 62	-2.05	6	49	T	3	5	5	42.017653	-76.466240
251	4788	161	Twist 31ft*	1.05	14	48	B	3	5	5	42.026571	-76.470675
250	5241		Down Milepost	250.00	0	48	C	0	0	5	42.027795	-76.470899
250	439	162	R Align 62	-0.84	11	47	C	4	5	5	42.028988	-76.470747
250	444	163	L Align 62	-0.93	16	47	C	4	5	5	42.029001	-76.470743
250	477	164	L Align 62	0.89	12	47	C	4	5	5	42.029089	-76.470717
249	5301		Down Milepost	249.00	0	49	T	0	0	5	42.039517	-76.460303
248	5302		Down Milepost	248.00	0	48	B	0	0	5	42.042811	-76.442069
248	33	167	R Align 62	0.83	7	48	C	4	5	5	42.042805	-76.441949
247	5313		Down Milepost	247.00	0	49	C	0	0	5	42.035043	-76.425806
247	4256	168	R Align 62	0.78	11	49	C	4	5	5	42.033439	-76.410892
247	4260	169	L Align 62	0.77	7	49	C	4	5	5	42.033440	-76.410878
246	5102		Down Milepost	246.00	0	49	T	0	0	5	42.033167	-76.407815
245	5572		Down Milepost	245.00	0	35	T	0	0	5	42.030099	-76.387833
244	5226		Down Milepost	244.00	0	24	T	0	0	5	42.031509	-76.369330
244	69		Class Change	2.00	0	24	T	0	0	5	42.031559	-76.369086
244	69		Posted Speed	25.00	0	24	T	0	0	5	42.031559	-76.369086
244	1759		Class Change	4.00	0	24	C	0	0	5	42.033513	-76.363564
244	1759		Posted Speed	50.00	0	24	C	0	0	5	42.033513	-76.363564
244	1976	170	L Align 62	1.00	17	24	C	4	5	5	42.033944	-76.363019
244	2036	171	R Align 62	-0.82	10	24	C	4	5	5	42.034070	-76.362878
244	2082	172	R Align 62	0.95	20	24	C	4	5	5	42.034168	-76.362772
243	5265		Down Milepost	243.00	0	38	T	0	0	5	42.041861	-76.357343
242	5304		Down Milepost	242.00	0	49	T	0	0	5	42.054185	-76.347169
241	5222		Down Milepost	241.00	0	49	C	0	0	5	42.066237	-76.336993
240	5334		Down Milepost	240.00	0	49	T	0	0	5	42.079812	-76.330140
239	5347		Down Milepost	239.00	0	49	T	0	0	5	42.087759	-76.314179
239	3653	173	R Align 62	-0.74	1	48	C	4	5	5	42.092172	-76.302175
239	3658	174	R Align 62	-0.76	5	48	C	4	5	5	42.092180	-76.302161

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Milepost 418 to Milepost 215
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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
238	5290		Down Milepost	238.00	0	49	B	0	0	5	42.095602	-76.298330
237	5302		Down Milepost	237.00	0	49	C	0	0	5	42.103917	-76.282448
237	788	175	L Prof 62	1.37	2	48	E	4	5	5	42.104641	-76.279728
237	848	176	L Align 62	-0.79	8	48	E	4	5	5	42.104591	-76.279968
237	854	178	R Align 62	-0.88	13	48	E	4	5	5	42.104688	-76.279494
237	862	179	L Prof 62	1.75	8	48	E	4	5	5	42.104694	-76.279466
237	862	177	R Prof 62	1.38	1	48	E	4	5	5	42.104694	-76.279466
236	5276		Down Milepost	236.00	0	43	T	0	0	5	42.107826	-76.263818
236	2921	182	L Align 31	0.69	2	38	C	4	5	5	42.108280	-76.253343
236	2921	181	L Align 62	0.87	3	38	C	4	5	5	42.108280	-76.253343
236	3052	183	L Align 62	0.75	1	37	C	4	5	5	42.108139	-76.252899
236	3260	184	L Align 62	0.74	8	36	C	4	5	5	42.107887	-76.252213
235	5234		Down Milepost	235.00	0	33	T	0	0	5	42.105073	-76.246027
234	5405		Down Milepost	234.00	0	27	T	0	0	5	42.097319	-76.229136
234	3417		Class Change	2.00	0	25	T	0	0	5	42.092429	-76.218447
234	3417		Posted Speed	25.00	0	25	T	0	0	5	42.092429	-76.218447
234	5289		Class Change	4.00	0	24	C	0	0	5	42.090086	-76.212365
234	5289		Posted Speed	50.00	0	24	C	0	0	5	42.090086	-76.212365
233	5295		Down Milepost	233.00	0	23	C	0	0	5	42.090081	-76.212341
233	3034	188	L Align 62	-1.15	21	41	C	4	5	5	42.090125	-76.201320
233	3043	189	R Align 62	-1.02	24	41	C	4	5	5	42.090132	-76.201288
232	5290		Down Milepost	232.00	0	47	T	0	0	5	42.093182	-76.194174
231	5303		Down Milepost	231.00	0	49	C	0	0	5	42.100678	-76.177610
231	2011	190	L Prof 62	-1.65	4	49	E	4	5	5	42.100622	-76.170304
231	5413	191	L Align 62	0.74	2	49	C	4	5	5	42.097380	-76.158652
231	10410	192	L Align 62	-0.87	2	48	T	4	5	5	42.085444	-76.150312
229	10611		Down Milepost	229.00	0	48	T	0	0	5	42.084909	-76.150128
228	5288		Down Milepost	228.00	0	49	C	0	0	5	42.071026	-76.144802
228	4809	193	L Align 62	-0.73	1	49	E	4	5	5	42.063869	-76.132312
228	4809	194	R Align 62	-0.79	10	49	E	4	5	5	42.063869	-76.132312
228	4868	195	R Align 62	0.76	8	49	E	4	5	5	42.063928	-76.132111
228	4869	196	L Align 62	0.80	11	49	E	4	5	5	42.063929	-76.132108
227	5293		Down Milepost	227.00	0	49	T	0	0	5	42.064412	-76.130690
226	5308		Down Milepost	226.00	0	49	C	0	0	5	42.071176	-76.113507
225	5233		Down Milepost	225.00	0	49	C	0	0	5	42.081028	-76.099674
224	5119		Down Milepost	224.00	0	50	T	0	0	5	42.091150	-76.087301
223	5246		Down Milepost	223.00	0	49	T	0	0	5	42.097599	-76.070434
222	5387		Down Milepost	222.00	0	49	B	0	0	5	42.104757	-76.053392
222	4863	197	L Align 31	-0.64	2	49	B	4	5	5	42.108041	-76.036258

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Class Plus 1 Exception List Section
Milepost 418 to Milepost 215
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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
221	5268		Down Milepost	221.00	0	49	C	0	0	5	42.108203	-76.034783
220	5108		Down Milepost	220.00	0	48	B	0	0	5	42.108000	-76.016036
219	5489		Down Milepost	219.00	0	47	T	0	0	5	42.115819	-75.999160
218	5251		Down Milepost	218.00	0	46	T	0	0	5	42.118409	-75.980821
218	95	199	L Prof 62	-1.43	4	46	T	4	5	5	42.118384	-75.980473
218	135	200	L Prof 62	1.53	8	45	T	4	5	5	42.118373	-75.980327
218	136	201	R Prof 62	1.66	8	45	T	4	5	5	42.118373	-75.980324
218	2522		Track Change	0.00	0	45	T	0	0	2	42.117744	-75.971608
218	3382	208	L Prof 62	-1.43	6	45	T	4	5	2	42.117516	-75.968468
218	3382	207	R Prof 62	-1.39	3	45	T	4	5	2	42.117516	-75.968468
216	10628		Down Milepost	216.00	0	37	T	0	0	2	42.112469	-75.943335
216	3399		Class Change	3.00	0	26	T	0	0	2	42.107216	-75.933045
216	3399		Posted Speed	30.00	0	26	T	0	0	2	42.107216	-75.933045
215	5329		Down Milepost	215.00	0	22	C	0	0	2	42.104440	-75.927038
215	4512		Class Change	1.00	0	6	B	0	0	2	42.104057	-75.910518
215	4512		Posted Speed	10.00	0	6	B	0	0	2	42.104057	-75.910518
215	4523		Track Change	0.00	0	6	B	0	0	7	42.104058	-75.910478

Notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Rail Impact Values are unitless; indicating a location with a large vertical axle acceleration

Rail Cant Exceptions values indicate degrees.

(RSA) indicates possible Rail Seat Abrasion. The following fields are irrelevant for Cant Exceptions: LC, PC

Exception Report
Class Plus 1 Exception Summary Section
Milepost 418 to Milepost 215
Buffalo, NY to Binghamton, NY

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[illegible]

Exception Report
Class Plus 1 Exception Summary Section
Milepost 418 to Milepost 215
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		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot			
MP	FT	Exc	FT	Drop	Exc	FT	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	Cls	Cls	Trk
319	5346	-	-	-	-	-	1	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	5	5	
317	5388	2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5	
316	5319	5	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5	
315	5284	-	-	-	-	-	1	3	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	4	5	5	
310	1258	8	112	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	5	
308	5126	3	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5	
304	5004	-	-	-	-	-	1	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
301	5347	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
300	5215	-	-	-	-	-	1	9	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	4	5	5	
298	5254	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	4	5	5	
295	1223	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31	1	1	-	-	-	-	-	-	-	-	2	4	6	
275	5314	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
273	10566	-	-	-	-	-	2	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
272	5316	-	-	-	-	-	-	-	-	1	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
267	5297	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	7	-	-	-	-	-	-	-	-	-	-	4	5	5	
261	5287	-	-	-	-	-	3	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
253	5440	-	-	-	-	-	2	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
252	5228	-	-	-	-	-	2	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
251	5335	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	6	1	-	-	-	-	-	-	1	14	1	-	3	5	5
250	5241	-	-	-	-	-	3	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
248	5302	-	-	-	-	-	1	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
247	5313	-	-	-	-	-	2	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
244	1759	-	-	-	-	-	3	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
239	5347	-	-	-	-	-	2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
237	5302	-	-	-	-	-	2	21	-	-	-	-	-	-	-	3	11	-	-	-	-	-	-	-	-	-	-	4	5	5	
236	5276	-	-	-	-	-	4	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
233	5295	-	-	-	-	-	2	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
231	5303	-	-	-	-	-	2	4	-	-	-	-	-	-	-	1	4	-	-	-	-	-	-	-	-	-	-	4	5	5	

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		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Lim	Pst	
MP	FT	EXC	FT	Drop	EXC	FT	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	Cls	Cls	Trk
228	5288	-	-	-	-	-	4	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
222	5387	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
218	5251	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	20	-	-	-	-	-	-	-	-	-	-	4	5	5	
218	2522	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	9	-	-	-	-	-	-	-	-	-	-	4	5	2	
		20	173	3	-	-	78	836	1	14	252	3	-	-	-	27	132	1	1	31	1	1	44	-	3	31	2	-			

Total Miles: 204.50
Exceptions per 100 Miles: 70.42
CY18 National Average Exceptions per 100 miles: 5.0

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Buffalo, NY to Binghamton, NY

Buffalo, NY to Binghamton, NY

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
There were no Alignment 62 exceptions detected during this survey.											

There were no Alignment 62 exceptions detected during this survey.

DOTX 219 Geometry Car

United States Department of Transportation

AUTOMATED TRACK INSPECTION PROGRAM

TRACK GEOMETRY INSPECTION REPORT

Binghamton, NY to Harrisburg, PA

Railroad: NORFOLK SOUTHERN CORPORATION (NS)

Survey Number: 1924

Mile Post 215 to Mile Post 305



Prepared for:

United States Department of Transportation
Federal Railroad Administration
Office of Safety
Washington, D.C.

Prepared by:

ENSCO, Inc.
5400 Port Royal Rd
Springfield, VA 22151



Testing Cert. 2411.01

Approved By:

Survey Director:

CLAYTON SHANK

Signature

Date

Under the U.S. Department of Transportation, Federal Railroad Administration (FRA), Office of Safety Assurance and Compliance, Automated Track Inspection Program and in accordance with 49 CFR 213 Federal Track Safety Standards, this Track Geometry Inspection Report provides a list of exceptions that relate only to the time and date the track was inspected and the required remedial action taken. This compliance report is offered only to the track owner and is not to be reproduced to others in whole or part without the expressed written consent of the FRA and the track owner. FRA requests any reprinting be labeled as a copy of the original.

NOTES

An Automated Track Inspection Program (ATIP) Track Geometry Inspection Report (TGIR) is generated for each ATIP survey. The TGIR summarizes the data collected and can be used in conjunction with the strip chart. The TGIR is generated electronically onboard the car and hard copies are distributed as follows:

1. One (1) copy is provided to onboard railroad representative, as requested
2. One (1) copy is provided to onboard FRA Inspector, as requested
3. One (1) copy is archived for FRA management

Following ATIP Compliance survey operations, electronic copies of TGIRs are distributed via email, to a list of recipients designated by FRA and railroad management.

The TGIR may consist of ten (10) parts;

1. Cover,
2. Notes,
3. Exception List,
4. Curve Analysis,
5. Exception Summary,
6. Track Quality Index (TQI),
7. GRMS Exception List (if equipped),
8. Class+1 (C+1) Exception List,
9. C+1 Exception Summary,
10. Alinement MCO worksheet.

Track measurement sample frequency is once per foot.

Exceptions may not be reported for Alinement and Profile parameters when ATIP car speed is less than fifteen (15) and five (5) miles per hour, respectively.

Exception List symbols/notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49CFR 213.57(b).

Rail Impact Values are unit-less; indicating a location with a large vertical axle acceleration.

Rail Cant Exception denoted with (RSA) indicates possible Rail Seat Abrasion.

The following fields are not applicable for Limited Speed, Ride Quality [in classes 1-5], and Rail Cant:

Limited Class (LC); Posted Class (PC).

All Exception Parameter values are reported in inches, except for the following:

- Limiting Speed (Vmax) expressed in: MPH
- Ride Quality; Carbody Lateral, Carbody Vertical, Truck Lateral expressed in: g (gravitational acceleration)
- Rail Cant; Left (L) and Right (R), NEG[ative] and POS[itive] expressed in: angular degrees (°)

For Alinement exceptions: Negative (-) values indicate rail shifting to the right and Positive (+) values indicate rail shifting to the left, referencing direction of ATIP car travel during testing.

Alinement exceptions reported in turnout paths are considered Federal Track Safety Standard Advisory.

For Rail Cant exceptions: Negative (-) values indicate an outward shift in the rail angle, and Positive (+) values indicate an inward shift in the rail angle. Rail Cant exceptions have a minimum length of 15 feet.

A complete description of the information provided in the TGIR is available at

<https://www.fra.dot.gov/eLib/Details/L04545>

ATIP survey exceptions are available for review the next business day, and ATIP track measurement foot by foot data is available the following week at: https://tdms.fra.dot.gov/tdms_lite

Exception Report
Exception List Section
Milepost 215 to Milepost 305
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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	144		Railroad	NS -	0	3	T	0	0	7		
0	188		Track Change	0.00	0	4	B	0	0	7		
0	188		Class Change	1.00	0	4	B	0	0	7		
0	188		Posted Speed	10.00	0	4	B	0	0	7		
0	188		State Line	NY	0	4	B	0	0	7		
0	189		Subdivision	SOUTHE	0	4	B	0	0	7		
215	189		Down Milepost	215.00	0	4	B	0	0	7		
215	4753		Track Change	0.00	0	4	B	0	0	1		
215	4753		Class Change	4.00	0	4	B	0	0	1		
215	4753		Posted Speed	50.00	0	4	B	0	0	1		
215	5063		Class Change	3.00	0	5	T	0	0	1	42.104071	-75.907777
215	5063		Posted Speed	30.00	0	5	T	0	0	1	42.104071	-75.907777
214	5118		Down Milepost	214.00	0	6	T	0	0	1	42.104071	-75.907572
214	3949		Class Change	1.00	0	9	B	0	0	1	42.103985	-75.893073
214	3949		Posted Speed	10.00	0	9	B	0	0	1	42.103985	-75.893073
214	5518		Track Change	0.00	0	11	T	0	0	2	42.103765	-75.887322
214	6058		Subdivision	SUNBUR	0	9	T	0	0	2	42.103755	-75.885339
615	8709		Up Milepost	615.00	0	10	E	0	0	2	42.101566	-75.876257
616	5363		Up Milepost	616.00	0	8	B	0	0	2	42.098712	-75.856977
617	5465		Up Milepost	617.00	0	8	T	0	0	2	42.091034	-75.840495
617	1930	21	R Cant POS*(132RE)	6.70	19	9	T		1	2	42.086737	-75.836389
617	3931	22	R Cant POS*(132RE)	6.00	19	8	T		1	2	42.082280	-75.832130
617	5294		Class Change	2.00	0	9	T	0	0	2	42.079246	-75.829232
617	5294		Posted Speed	20.00	0	9	T	0	0	2	42.079246	-75.829232
618	5305		Up Milepost	618.00	0	9	T	0	0	2	42.079220	-75.829206
619	5125		Up Milepost	619.00	0	16	T	0	0	2	42.067805	-75.818312
619	4699	23	R Cant POS*(132RE)	6.00	15	17	T		2	2	42.056273	-75.811426
620	5298		Up Milepost	620.00	0	16	T	0	0	2	42.054676	-75.810943
620	1300		Class Change	3.00	0	18	T	0	0	2	42.051206	-75.809894
620	1300		Posted Speed	40.00	0	18	T	0	0	2	42.051206	-75.809894
620	1526		Track Change	0.00	0	19	T	0	0	5	42.050603	-75.809713
621	5293		Up Milepost	621.00	0	23	C	0	0	5	42.040605	-75.806417
621	4236		Class Change	1.00	0	9	T	0	0	5	42.029892	-75.800554
621	4236		Posted Speed	10.00	0	9	T	0	0	5	42.029892	-75.800554
621	5294		Class Change	3.00	0	13	T	0	0	5	42.027194	-75.799162
621	5294		Posted Speed	40.00	0	13	T	0	0	5	42.027194	-75.799162
622	5310		Up Milepost	622.00	0	13	T	0	0	5	42.027150	-75.799139
623	5296		Up Milepost	623.00	0	25	T	0	0	5	42.015336	-75.788423
624	5278		Up Milepost	624.00	0	29	T	0	0	5	42.006885	-75.772770

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
624	4194		State Line	PA	0	38	T	0	0	5	41.997915	-75.763766
625	5302		Up Milepost	625.00	0	38	C	0	0	5	41.995109	-75.762242
626	5308		Up Milepost	626.00	0	38	T	0	0	5	41.981470	-75.756546
627	5282		Up Milepost	627.00	0	38	C	0	0	5	41.968823	-75.748604
628	5321		Up Milepost	628.00	0	37	T	0	0	5	41.954570	-75.745199
629	5289		Up Milepost	629.00	0	36	C	0	0	5	41.941632	-75.737171
630	5332		Up Milepost	630.00	0	30	C	0	0	5	41.927431	-75.733472
631	5314		Up Milepost	631.00	0	12	E	0	0	5	41.912928	-75.734437
632	5262		Up Milepost	632.00	0	36	C	0	0	5	41.898656	-75.732017
633	5304		Up Milepost	633.00	0	35	B	0	0	5	41.884342	-75.729019
634	5285		Up Milepost	634.00	0	36	C	0	0	5	41.870456	-75.731924
635	5306		Up Milepost	635.00	0	37	C	0	0	5	41.867469	-75.750556
636	5293		Up Milepost	636.00	0	37	C	0	0	5	41.857533	-75.763663
637	5300		Up Milepost	637.00	0	37	C	0	0	5	41.843985	-75.770392
638	5304		Up Milepost	638.00	0	38	C	0	0	5	41.830758	-75.776501
639	5303		Up Milepost	639.00	0	38	B	0	0	5	41.816542	-75.775727
640	5294		Up Milepost	640.00	0	39	T	0	0	5	41.802232	-75.774434
641	5300		Up Milepost	641.00	0	37	T	0	0	5	41.788204	-75.774180
642	5295		Up Milepost	642.00	0	34	E	0	0	5	41.774618	-75.767955
643	5422		Up Milepost	643.00	0	23	C	0	0	5	41.762289	-75.758669
643	506		Class Change	2.00	0	24	E	0	0	5	41.761067	-75.757804
643	506		Posted Speed	25.00	0	24	E	0	0	5	41.761067	-75.757804
643	978		Class Change	3.00	0	25	T	0	0	5	41.759888	-75.757104
643	978		Posted Speed	40.00	0	25	T	0	0	5	41.759888	-75.757104
644	5155		Up Milepost	644.00	0	38	T	0	0	5	41.748996	-75.753133
644	1458	25	R Cant POS*(131RE)	5.50	22	38	T		3	5	41.745017	-75.752749
644	1579	26	Gage Narrow	55.87	3	38	T	0	3	5	41.744688	-75.752717
645	5312		Up Milepost	645.00	0	38	C	0	0	5	41.734507	-75.751981
646	5302		Up Milepost	646.00	0	38	T	0	0	5	41.722147	-75.761724
647	5282		Up Milepost	647.00	0	38	T	0	0	5	41.709502	-75.765339
648	5321		Up Milepost	648.00	0	39	T	0	0	5	41.696625	-75.767185
649	5289		Up Milepost	649.00	0	39	C	0	0	5	41.683221	-75.772060
650	5314		Up Milepost	650.00	0	38	E	0	0	5	41.669582	-75.778098
651	5297		Up Milepost	651.00	0	39	C	0	0	5	41.655255	-75.780395
652	5278		Up Milepost	652.00	0	38	C	0	0	5	41.641986	-75.779118
653	5316		Up Milepost	653.00	0	39	E	0	0	5	41.627749	-75.776091
654	5285		Up Milepost	654.00	0	34	T	0	0	5	41.615277	-75.783279
655	5268		Up Milepost	655.00	0	25	C	0	0	5	41.604536	-75.794834
655	1692		Class Change	2.00	0	25	C	0	0	5	41.600163	-75.793082

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
655	1692		Posted Speed	25.00	0	25	C	0	0	5	41.600163	-75.793082
656	5396		Up Milepost	656.00	0	25	T	0	0	5	41.591783	-75.785416
656	139		Class Change	3.00	0	25	T	0	0	5	41.591567	-75.784975
656	139		Posted Speed	40.00	0	25	T	0	0	5	41.591567	-75.784975
657	5234		Up Milepost	657.00	0	37	T	0	0	5	41.581779	-75.772206
658	5312		Up Milepost	658.00	0	34	T	0	0	5	41.574203	-75.755707
659	5268		Up Milepost	659.00	0	39	T	0	0	5	41.563110	-75.743931
660	5309		Up Milepost	660.00	0	39	C	0	0	5	41.550781	-75.733698
661	5285		Up Milepost	661.00	0	37	T	0	0	5	41.536703	-75.729851
662	5218		Up Milepost	662.00	0	37	T	0	0	5	41.523635	-75.723721
663	5408		Up Milepost	663.00	0	37	T	0	0	5	41.511105	-75.714215
664	5289		Up Milepost	664.00	0	31	T	0	0	5	41.497554	-75.708538
664	2371		Posted Speed	35.00	0	30	T	0	0	5	41.492241	-75.703605
665	5290		Up Milepost	665.00	0	32	T	0	0	5	41.486095	-75.696855
666	5340		Up Milepost	666.00	0	33	B	0	0	5	41.474700	-75.685282
667	5256		Up Milepost	667.00	0	34	B	0	0	5	41.466646	-75.670226
668	5383		Up Milepost	668.00	0	34	E	0	0	5	41.453244	-75.666180
669	5305		Up Milepost	669.00	0	31	B	0	0	5	41.440690	-75.669953
670	4882		Up Milepost	670.00	0	28	B	0	0	5	41.428234	-75.671427
670	4836		Class Change	2.00	0	19	C	0	0	5	41.415217	-75.673406
670	4836		Posted Speed	20.00	0	19	C	0	0	5	41.415217	-75.673406
671	5545		Up Milepost	671.00	0	19	B	0	0	5	41.413279	-75.673614
672	5945		Up Milepost	672.00	0	17	T	0	0	5	41.398988	-75.679739
673	5351		Up Milepost	673.00	0	18	T	0	0	5	41.389845	-75.693506
674	5100		Up Milepost	674.00	0	20	B	0	0	5	41.382717	-75.708386
674	3104		Class Change	3.00	0	17	E	0	0	5	41.376641	-75.712728
674	3104		Posted Speed	30.00	0	17	E	0	0	5	41.376641	-75.712728
675	3173		Up Milepost	675.00	0	17	T	0	0	5	41.376625	-75.712981
676	5418		Up Milepost	676.00	0	28	B	0	0	5	41.366322	-75.722546
677	5342		Up Milepost	677.00	0	29	T	0	0	5	41.354363	-75.729629
677	2324	45	Twist 31ft*	-1.56	19	30	B	2	3	5	41.352792	-75.737772
677	4513	48	Twist 31ft*	1.45	5	30	B	2	3	5	41.347960	-75.740101
678	5260		Up Milepost	678.00	0	28	E	0	0	5	41.345972	-75.740429
679	5228		Up Milepost	679.00	0	27	B	0	0	5	41.332511	-75.745685
679	1099	52	L Cant NEG*(115RE)	-2.80	32	28	B		3	5	41.329639	-75.746054
679	1158	53	L Cant NEG*(115RE)	-3.00	32	28	B		3	5	41.329477	-75.746040
679	1216	54	L Cant NEG*(115RE)	-2.80	14	28	B		3	5	41.329318	-75.746040
680	5356		Up Milepost	680.00	0	28	T	0	0	5	41.322465	-75.756932
680	2772	56	L Align 62	1.86	1	26	B	2	3	5	41.318826	-75.765751

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
681	5390		Up Milepost	681.00	0	25	C	0	0	5	41.317685	-75.775052
681	1592		Class Change	2.00	0	19	T	0	0	5	41.314525	-75.778981
681	1592		Posted Speed	25.00	0	19	T	0	0	5	41.314525	-75.778981
682	5207		Up Milepost	682.00	0	24	T	0	0	5	41.305614	-75.777765
683	5286		Up Milepost	683.00	0	27	T	0	0	5	41.296196	-75.790843
684	5215		Up Milepost	684.00	0	24	E	0	0	5	41.291353	-75.807843
685	5428		Up Milepost	685.00	0	24	B	0	0	5	41.277873	-75.813814
686	5603		Up Milepost	686.00	0	25	B	0	0	5	41.273392	-75.832367
687	6635		Up Milepost	687.00	0	11	C	0	0	5	41.265876	-75.852991
687	3730	60	R Runoff*	3.28	31	27	T	1	2	5	41.261153	-75.863843
687	4769	64	Twist 31ft*	1.93	3	21	B	1	2	5	41.260730	-75.867492
688	5465		Up Milepost	688.00	0	20	T	0	0	5	41.261346	-75.869851
689	6158		Up Milepost	689.00	0	21	T	0	0	5	41.256468	-75.889103
690	4278		Up Milepost	690.00	0	24	C	0	0	5	41.249875	-75.901945
691	5511		Up Milepost	691.00	0	25	T	0	0	5	41.239011	-75.915500
692	5213		Up Milepost	692.00	0	24	T	0	0	5	41.231145	-75.930668
693	5177		Up Milepost	693.00	0	23	C	0	0	5	41.224674	-75.947247
693	1788	73	Lmt Speed 3+	38.00	767	24	C		3	5	41.223229	-75.953402
693	1988		Class Change	3.00	0	23	C	0	0	5	41.222884	-75.953960
693	1988		Posted Speed	40.00	0	23	C	0	0	5	41.222884	-75.953960
693	2136	69	Twist 31ft*	1.79	18	23	E	1	3	5	41.222590	-75.954317
693	2174	71	Warp 62	2.17	56	23	E	2	3	5	41.222512	-75.954403
695	10622		Up Milepost	695.00	0	37	E	0	0	5	41.210529	-75.980122
696	5421		Up Milepost	696.00	0	37	C	0	0	5	41.206940	-75.998853
696	3907	75	Lmt Speed 3+	39.00	646	37	C		3	5	41.213483	-76.009521
697	5417		Up Milepost	697.00	0	37	E	0	0	5	41.215910	-76.013932
697	287	76	Twist 31ft*	-1.65	4	37	B	2	3	5	41.216462	-76.014671
697	302	78	Warp 62	2.11	61	38	B	2	3	5	41.216490	-76.014711
698	5204		Up Milepost	698.00	0	39	T	0	0	5	41.215612	-76.030226
699	5297		Up Milepost	699.00	0	38	C	0	0	5	41.207597	-76.046144
700	5216		Up Milepost	700.00	0	38	C	0	0	5	41.201899	-76.063357
701	5347		Up Milepost	701.00	0	38	T	0	0	5	41.192280	-76.077820
702	5184		Up Milepost	702.00	0	38	E	0	0	5	41.182050	-76.090736
703	5432		Up Milepost	703.00	0	38	T	0	0	5	41.175459	-76.108208
704	5228		Up Milepost	704.00	0	34	T	0	0	5	41.168002	-76.124314
704	5317		Posted Speed	35.00	0	33	E	0	0	5	41.158075	-76.138085
705	5351		Up Milepost	705.00	0	33	E	0	0	5	41.157989	-76.138139
706	5141		Up Milepost	706.00	0	33	B	0	0	5	41.145498	-76.144166
706	548		Posted Speed	40.00	0	34	T	0	0	5	41.144167	-76.143277

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
707	5399		Up Milepost	707.00	0	39	C	0	0	5	41.131982	-76.136647
708	5342		Up Milepost	708.00	0	38	C	0	0	5	41.118162	-76.130769
709	5284		Up Milepost	709.00	0	36	C	0	0	5	41.103981	-76.127594
710	5356		Up Milepost	710.00	0	39	T	0	0	5	41.089849	-76.124484
711	5340		Up Milepost	711.00	0	38	C	0	0	5	41.076074	-76.129494
712	5308		Up Milepost	712.00	0	37	C	0	0	5	41.065702	-76.142700
713	5311		Up Milepost	713.00	0	39	E	0	0	5	41.061258	-76.160801
714	5313		Up Milepost	714.00	0	30	C	0	0	5	41.061856	-76.179955
714	5744	89	Crosslevel	1.91	4	13	T	2	3	5	41.059193	-76.200397
716	10551		Up Milepost	716.00	0	24	T	0	0	5	41.051171	-76.213114
716	3342		Posted Speed	35.00	0	22	T	0	0	5	41.045913	-76.222990
716	4432		Posted Speed	40.00	0	22	E	0	0	5	41.044780	-76.226533
717	5315		Up Milepost	717.00	0	24	T	0	0	5	41.044568	-76.229714
718	5325		Up Milepost	718.00	0	23	C	0	0	5	41.040274	-76.247946
719	5331		Up Milepost	719.00	0	24	T	0	0	5	41.036785	-76.266276
720	5314		Up Milepost	720.00	0	38	C	0	0	5	41.037394	-76.285451
721	5260		Up Milepost	721.00	0	36	T	0	0	5	41.035863	-76.304162
722	5381		Up Milepost	722.00	0	37	T	0	0	5	41.027604	-76.320115
723	5309		Up Milepost	723.00	0	38	T	0	0	5	41.020261	-76.336378
724	5330		Up Milepost	724.00	0	37	C	0	0	5	41.016384	-76.354918
725	5340		Up Milepost	725.00	0	38	B	0	0	5	41.010948	-76.372812
726	5532		Up Milepost	726.00	0	38	C	0	0	5	41.006288	-76.391795
727	5055		Up Milepost	727.00	0	32	E	0	0	5	41.000954	-76.408603
728	5389		Up Milepost	728.00	0	25	T	0	0	5	40.994998	-76.426387
728	1783		Class Change	2.00	0	23	C	0	0	5	40.993068	-76.432297
728	1783		Posted Speed	25.00	0	23	C	0	0	5	40.993068	-76.432297
728	3408		Class Change	3.00	0	25	T	0	0	5	40.991087	-76.437554
728	3408		Posted Speed	40.00	0	25	T	0	0	5	40.991087	-76.437554
729	5251		Up Milepost	729.00	0	28	E	0	0	5	40.988622	-76.443347
730	5315		Up Milepost	730.00	0	38	E	0	0	5	40.980172	-76.458755
731	5312		Up Milepost	731.00	0	39	E	0	0	5	40.967598	-76.464786
732	5280		Up Milepost	732.00	0	38	C	0	0	5	40.953346	-76.465431
733	5158		Up Milepost	733.00	0	39	C	0	0	5	40.948792	-76.481759
734	5480		Up Milepost	734.00	0	39	C	0	0	5	40.948204	-76.501355
735	5320		Up Milepost	735.00	0	38	T	0	0	5	40.941477	-76.518291
736	5285		Up Milepost	736.00	0	39	C	0	0	5	40.935936	-76.535864
737	5320		Up Milepost	737.00	0	40	T	0	0	5	40.936518	-76.554844
738	5291		Up Milepost	738.00	0	40	E	0	0	5	40.938061	-76.573721
739	5238		Up Milepost	739.00	0	39	C	0	0	5	40.938096	-76.592598

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
740	5408		Up Milepost	740.00	0	38	B	0	0	5	40.945167	-76.608873
741	5298		Up Milepost	741.00	0	38	T	0	0	5	40.955182	-76.622591
742	5276		Up Milepost	742.00	0	38	T	0	0	5	40.960110	-76.639181
743	5318		Up Milepost	743.00	0	39	E	0	0	5	40.954281	-76.656279
744	5312		Up Milepost	744.00	0	38	C	0	0	5	40.942374	-76.667100
745	5309		Up Milepost	745.00	0	37	T	0	0	5	40.933109	-76.681656
746	5310		Up Milepost	746.00	0	39	E	0	0	5	40.928154	-76.699605
747	5345		Up Milepost	747.00	0	37	E	0	0	5	40.920350	-76.715057
748	5244		Up Milepost	748.00	0	35	T	0	0	5	40.911470	-76.729805
748	5315		Posted Speed	35.00	0	32	C	0	0	5	40.906783	-76.747845
749	5330		Up Milepost	749.00	0	32	C	0	0	5	40.906768	-76.747898
750	5316		Up Milepost	750.00	0	19	T	0	0	5	40.899482	-76.764144
750	224		Class Change	2.00	0	18	B	0	0	5	40.899027	-76.764690
750	224		Posted Speed	20.00	0	18	B	0	0	5	40.899027	-76.764690
750	5316		Class Change	1.00	0	10	C	0	0	5	40.887276	-76.774487
750	5316		Posted Speed	10.00	0	10	C	0	0	5	40.887276	-76.774487
751	5329		Up Milepost	751.00	0	10	C	0	0	5	40.887246	-76.774518
752	4976		Up Milepost	752.00	0	1	E	0	0	5	40.877308	-76.786330
752	132		Subdivision	BUFFAL	0	6	E	0	0	5	40.876951	-76.786389
752	308		Class Change	3.00	0	10	E	0	0	5	40.876471	-76.786381
752	308		Posted Speed	30.00	0	10	E	0	0	5	40.876471	-76.786381
258	2901		Up Milepost	258.00	0	18	T	0	0	5	40.869679	-76.788622
258	696		Class Change	2.00	0	17	T	0	0	5	40.867918	-76.789569
258	696		Posted Speed	20.00	0	17	T	0	0	5	40.867918	-76.789569
258	4788		Class Change	4.00	0	18	T	0	0	5	40.857557	-76.795133
258	4788		Posted Speed	50.00	0	18	T	0	0	5	40.857557	-76.795133
259	6429		Up Milepost	259.00	0	21	T	0	0	5	40.853396	-76.797359
260	5297		Up Milepost	260.00	0	39	B	0	0	5	40.840613	-76.805977
261	5290		Up Milepost	261.00	0	36	B	0	0	5	40.828963	-76.816966
262	5332		Up Milepost	262.00	0	38	T	0	0	5	40.818216	-76.829922
262	509		Class Change	3.00	0	38	T	0	0	5	40.817296	-76.831296
262	509		Posted Speed	40.00	0	38	T	0	0	5	40.817296	-76.831296
262	2033		Class Change	4.00	0	38	T	0	0	5	40.813923	-76.834457
262	2033		Posted Speed	50.00	0	38	T	0	0	5	40.813923	-76.834457
262	4023		Class Change	3.00	0	38	T	0	0	5	40.808781	-76.836375
262	4023		Posted Speed	40.00	0	38	T	0	0	5	40.808781	-76.836375
262	4582		Class Change	4.00	0	37	T	0	0	5	40.807257	-76.836515
262	4582		Posted Speed	50.00	0	37	T	0	0	5	40.807257	-76.836515
262	8820		Class Change	3.00	0	39	B	0	0	5	40.796880	-76.842811

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
262	8820		Posted Speed	40.00	0	39	B	0	0	5	40.796880	-76.842811
262	9756		Class Change	4.00	0	41	T	0	0	5	40.794388	-76.843564
262	9756		Posted Speed	50.00	0	41	T	0	0	5	40.794388	-76.843564
264	10590		Up Milepost	264.00	0	43	T	0	0	5	40.792138	-76.844073
265	5267		Up Milepost	265.00	0	48	T	0	0	5	40.778258	-76.847963
266	5315		Up Milepost	266.00	0	46	B	0	0	5	40.764549	-76.841949
268	10588		Up Milepost	268.00	0	48	T	0	0	5	40.736009	-76.839647
269	5034		Up Milepost	269.00	0	47	T	0	0	5	40.722287	-76.839534
270	5582		Up Milepost	270.00	0	47	T	0	0	5	40.707615	-76.844629
271	5294		Up Milepost	271.00	0	48	C	0	0	5	40.695554	-76.855007
272	5311		Up Milepost	272.00	0	49	T	0	0	5	40.683381	-76.865415
273	5289		Up Milepost	273.00	0	48	T	0	0	5	40.673858	-76.879203
274	5296		Up Milepost	274.00	0	49	B	0	0	5	40.664898	-76.894079
275	5313		Up Milepost	275.00	0	48	T	0	0	5	40.652836	-76.904383
276	5309		Up Milepost	276.00	0	43	T	0	0	5	40.642692	-76.917840
277	5287		Up Milepost	277.00	0	39	T	0	0	5	40.632831	-76.931582
278	5327		Up Milepost	278.00	0	38	T	0	0	5	40.619290	-76.934757
278	2768		Class Change	3.00	0	38	B	0	0	5	40.611873	-76.934227
278	2768		Posted Speed	40.00	0	38	B	0	0	5	40.611873	-76.934227
278	4501		Class Change	4.00	0	40	T	0	0	5	40.607218	-76.934652
278	4501		Posted Speed	50.00	0	40	T	0	0	5	40.607218	-76.934652
279	5310		Up Milepost	279.00	0	42	T	0	0	5	40.605063	-76.935337
280	5299		Up Milepost	280.00	0	49	C	0	0	5	40.591479	-76.941671
281	5427		Up Milepost	281.00	0	49	T	0	0	5	40.581394	-76.955652
282	5237		Up Milepost	282.00	0	48	B	0	0	5	40.573768	-76.971551
283	5384		Up Milepost	283.00	0	46	T	0	0	5	40.562012	-76.974350
284	5269		Up Milepost	284.00	0	40	E	0	0	5	40.550203	-76.963877
284	4929		Class Change	3.00	0	36	T	0	0	5	40.536789	-76.963170
284	4929		Posted Speed	40.00	0	36	T	0	0	5	40.536789	-76.963170
285	5347		Up Milepost	285.00	0	36	B	0	0	5	40.535644	-76.963249
285	1241		Class Change	4.00	0	37	T	0	0	5	40.532437	-76.964652
285	1241		Posted Speed	50.00	0	37	T	0	0	5	40.532437	-76.964652
286	5323		Up Milepost	286.00	0	41	C	0	0	5	40.522813	-76.971858
287	5318		Up Milepost	287.00	0	45	C	0	0	5	40.510056	-76.964615
288	5317		Up Milepost	288.00	0	48	B	0	0	5	40.501875	-76.948893
289	5306		Up Milepost	289.00	0	45	T	0	0	5	40.490984	-76.936594
289	2871		Posted Speed	45.00	0	42	B	0	0	5	40.483691	-76.932815
289	3953		Posted Speed	50.00	0	42	E	0	0	5	40.480781	-76.932352
290	5285		Up Milepost	290.00	0	43	T	0	0	5	40.477156	-76.932763

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
292	10486		Up Milepost	292.00	0	49	C	0	0	5	40.452718	-76.948942
293	5587		Up Milepost	293.00	0	48	T	0	0	5	40.444283	-76.965612
294	5125		Up Milepost	294.00	0	47	C	0	0	5	40.434396	-76.978260
295	5308		Up Milepost	295.00	0	48	B	0	0	5	40.419985	-76.979032
296	5291		Up Milepost	296.00	0	48	T	0	0	5	40.407178	-76.986760
297	5294		Up Milepost	297.00	0	49	E	0	0	5	40.397987	-77.001180
298	5252		Up Milepost	298.00	0	47	C	0	0	5	40.391236	-77.017553
299	5248		Up Milepost	299.00	0	49	T	0	0	5	40.379864	-77.011156
300	5338		Up Milepost	300.00	0	49	T	0	0	5	40.372524	-76.994659
301	5319		Up Milepost	301.00	0	45	B	0	0	5	40.367569	-76.977026
302	5318		Up Milepost	302.00	0	36	T	0	0	5	40.369915	-76.958340
302	5100		Class Change	2.00	0	18	B	0	0	5	40.368000	-76.940616
302	5100		Posted Speed	20.00	0	18	B	0	0	5	40.368000	-76.940616
302	5622		Track Change	0.00	0	19	T	0	0	6	40.367411	-76.938914
304	10303		Up Milepost	304.00	0	19	C	0	0	6	40.360561	-76.925232
305	5255		Up Milepost	305.00	0	18	T	0	0	6	40.350432	-76.912705
305	4298		Class Change	1.00	0	7	T	0	0	6	40.341540	-76.904756
305	4298		Posted Speed	10.00	0	7	T	0	0	6	40.341540	-76.904756

Notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Rail Impact Values are unitless; indicating a location with a large vertical axle acceleration

Rail Cant Exceptions values indicate degrees.

(RSA) indicates possible Rail Seat Abrasion. The following fields are irrelevant for Cant Exceptions: LC, PC

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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

						Average					Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
1	0	180	215	4955	131	0	-327/41	-40	50	400	0	0	0/00	0	0	0	400	0	0	0	0	0	0	0
1	214	3947	214	4174	228	9	2/50	-0.05	10	36	214	4064	2/53	-0.35	0	0	36	42	48	52	57	61	65	
1	214	4174	214	4382	209	9	-2/53	0.24	10	36	214	4274	-2/56	0.38	0	0	36	41	47	52	56	60	64	
1	214	4382	214	4807	426	8	0/38	-0.03	10	40	214	4486	2/46	0.02	0	0	40	45	50	55	60	64	68	
1	214	4939	214	5357	419	7	-1/41	0.08	10	49	214	5248	-1/41	0.16	0	0	49	57	64	70	76	81	86	
2	214	6490	214	7517	1028	10	3/58	0.73	10	34	214	6925	4/11	0.37	0	0	34	38	42	46	50	53	56	
2	214	8335	615	97	473	9	-3/35	-0.91	10	38	214	8543	-3/43	-0.79	0	0	38	42	47	51	54	58	61	
2	615	378	615	1048	671	9	-1/52	-1.65	10	56	615	576	-2/03	-1.58	0	0	56	62	67	72	77	81	85	
2	615	1875	615	2019	145	7	-0/16	-0.43	10	131	615	1944	-0/16	-0.37	0	0	131	152	168	183	197	210	222	
2	615	2027	615	2455	429	9	-0/31	-0.44	10	85	615	2277	-0/40	-0.41	0	0	85	97	108	117	126	134	142	
2	615	3213	615	3651	439	8	0/26	-0.09	10	84	615	3420	0/35	-0.09	0	0	84	97	109	119	129	138	146	
2	615	4520	615	4653	134	8	-0/17	0.76	10	107	615	4612	-0/16	0.75	0	0	107	131	149	166	181	195	208	
2	615	5323	616	466	508	10	0/53	1.36	10	81	616	129	0/54	1.12	0	0	81	90	98	106	113	120	126	
2	616	945	616	5099	4155	10	0/55	0.96	10	73	616	2843	1/00	0.73	0	0	73	82	90	98	105	111	117	
2	617	324	617	466	100	2	-0/14	0.65	10	113	617	414	-0/14	0.76	0	0	113	138	158	176	192	207	221	
2	619	1769	619	2902	1134	14	2/56	1.53	20	45	619	2257	3/03	1.42	0	0	45	50	54	58	62	66	69	
5	620	4090	621	942	2147	25	-0/38	-1.01	40	81	621	796	-0/49	-0.77	0	0	81	91	100	109	117	124	131	
5	621	1161	621	1880	720	20	0/58	0.44	40	65	621	1321	1/03	0.11	0	0	65	74	83	91	98	105	111	
5	622	893	622	1284	392	22	-0/44	-0.67	40	78	622	1201	-0/49	-0.53	0	0	78	89	98	107	115	122	129	
5	622	1284	622	4323	3040	27	-0/42	-0.61	40	76	622	1336	-0/51	-0.48	0	0	76	86	95	104	112	119	126	
5	622	4610	622	5211	602	26	-0/22	-0.78	40	110	622	4896	-0/25	-0.67	0	0	110	126	138	150	161	171	181	
5	623	594	623	835	242	24	-0/16	-0.84	40	132	623	755	-0/17	-0.65	0	0	132	151	166	180	194	206	218	
5	623	835	623	2966	2132	24	-0/23	-0.74	40	110	623	2574	-0/26	-0.73	0	0	110	125	137	149	160	170	179	
5	624	306	624	1785	1480	36	1/34	0.93	40	57	624	1381	1/41	0.79	0	0	57	63	70	75	81	86	91	
5	624	1785	624	3857	2073	37	0/47	0.83	40	75	624	3591	0/56	0.68	0	0	75	84	92	100	108	114	121	
5	624	4619	625	735	1420	38	-1/08	-0.77	40	64	624	5011	-1/14	-0.63	0	0	64	73	80	87	93	99	105	
5	625	879	625	3194	2316	39	1/12	0.83	40	64	625	2235	1/19	0.78	0	0	64	71	79	85	91	97	102	
5	626	1498	626	3607	2110	40	-1/59	-0.84	40	51	626	1985	-2/05	-0.78	0	0	51	57	62	68	72	77	81	
5	626	4452	627	1342	2174	38	1/56	0.99	40	53	626	5227	1/58	0.88	0	0	53	59	65	70	75	80	84	
5	627	4236	627	5175	940	37	-0/48	-0.88	40	80	627	4630	-0/51	-0.83	0	0	80	90	99	107	114	121	128	
5	628	1470	628	2999	1530	39	-1/58	-0.83	40	52	628	2372	-2/01	-0.81	0	0	52	58	64	69	74	79	83	
5	628	4955	629	1855	2191	36	1/35	1.08	40	59	629	1442	1/37	0.87	0	0	59	65	72	78	83	88	93	
5	629	2928	629	3940	1013	32	-1/50	-2.28	40	63	629	3591	-1/52	-2.17	0	0	63	68	73	78	83	88	92	
5	629	4602	630	365	1097	30	2/40	1.57	40	48	629	5118	2/44	1.48	0	0	48	53	58	62	66	70	74	
5	630	4505	631	85	896	12	-1/57	-1.07	40	54	630	4869	-1/59	-1.03	0	0	54	60	65	71	76	80	85	
5	631	2149	631	2451	303	13	0/59	0.47	40	68	631	2326	1/07	0.61	0	0	68	77	84	92	98	105	111	
5	631	2541	631	2871	331	20	-1/05	-0.55	40	62	631	2684	-1/14	-0.3	0	0	62	70	78	85	92	98	103	
5	631	4307	632	328	1285	36	-0/26	-0.89	40	102	631	4968	-0/31	-0.79	0	0	102	115	127	137	147	156	165	
5	632	1386	632	2701	1316	38	0/26	1.24	40	102	632	2027	0/32	0.98	0	0	102	114	125	135	145	154	162	
5	632	5263	633	1325	1368	36	0/44	0.93	40	84	633	1133	0/46	0.81	0	0	84	94	103	112	120	127	134	
5	633	3266	634	1844	3865	37	2/15	2.54	40	58	633	3964	2/17	2.41	0	0	58	63	67	72	76	80	84	
5	634	4579	635	640	1369	37	-1/56	-3.75	40	69	635	11	-1/59	-3.62	0	0	69	73	78	83	87	91	95	
5	635	1000	635	3004	2005	38	-1/58	-3.83	40	68	635	2408	-2/01	-3.61	0	0	68	73	78	82	86	90	94	
5	635	4249	635	4455	207	38	-0/28	-0.17	40	99	635	4454	-0/27	-0.17	0	0	99	115	128	139	150	161	170	
5	635	4455	636	260	1100	38	-1/50	-1.04	40	53	635	4989	-1/58	-0.84	0	0	53	59	65	70	75	80	84	
5	636	2213	636	2584	372	38	0/44	0.48	40	82	636	2583	0/44	0.48	0	0	82	92	102	111	120	127	135	

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Binghamton, NY to Harrisburg, PA

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	636	2584	636	3429	846	37	0/57	0.34	40	68	636	3121	0/56	0.04	0	0	68	78	87	95	103	110	117	
5	636	4777	637	923	1448	37	-2/32	-2.01	40	50	637	5	-2/43	-1.75	0	0	50	54	59	63	67	71	75	
5	637	1288	637	3470	2183	37	2/26	1.49	40	50	637	2186	2/29	1.32	0	0	50	55	60	64	69	73	77	
5	637	4134	638	1291	2463	38	-2/29	-2.09	40	52	638	700	-2/34	-1.96	0	0	52	57	62	66	70	74	78	
5	638	2894	638	4688	1795	38	1/56	1.22	40	52	638	3372	2/01	0.77	0	0	52	58	64	69	74	78	83	
5	638	4913	639	1506	1898	38	-1/59	-1.86	40	58	639	367	-2/01	-1.8	0	0	58	64	69	74	78	83	87	
5	639	1506	639	2425	920	39	1/55	1.14	40	55	639	1782	1/56	1.06	0	0	55	61	66	72	77	81	86	
5	639	3661	639	5152	1492	39	-1/59	-2.85	40	64	639	4406	-2/02	-2.83	0	0	64	69	74	78	83	87	91	
5	640	601	640	2977	2377	38	1/56	2.08	40	60	640	2513	1/58	1.89	0	0	60	65	70	75	80	84	89	
5	640	3241	640	5179	1939	37	-2/29	-1.74	40	50	640	3848	-2/37	-1.6	0	0	50	55	59	64	68	72	76	
5	641	2101	641	3206	1106	37	-2/02	-2.34	40	60	641	2569	-2/07	-2.28	0	0	60	65	70	74	79	83	87	
5	641	3550	642	125	1872	36	1/56	1.58	40	56	641	4733	1/58	1.37	0	0	56	62	67	73	77	82	86	
5	642	628	642	3241	2614	33	-1/58	-2.5	40	62	642	2654	-1/59	-2.42	0	0	62	67	72	77	82	86	90	
5	642	4628	643	588	1384	23	1/59	1.62	25	55	642	5410	2/02	1.26	0	0	55	60	66	71	76	80	84	
5	643	2641	643	2824	184	33	0/32	0.64	40	99	643	2823	0/32	0.64	0	0	99	111	123	133	143	152	161	
5	643	2824	643	4014	1191	36	1/59	1.23	40	53	643	3127	2/03	1	0	0	53	59	64	69	74	79	83	
5	644	4479	645	1524	2359	38	1/42	1.42	40	58	645	96	1/44	1.05	0	0	58	64	70	76	81	86	90	
5	645	3621	645	4408	788	38	1/30	1.05	40	59	645	3906	1/34	0.83	0	0	59	66	73	79	84	89	94	
5	646	1310	646	1523	214	39	-0/30	-0.3	40	96	646	1522	-0/30	-0.3	0	0	96	110	123	134	144	153	163	
5	646	1523	646	1997	475	39	-2/15	-0.83	40	48	646	1865	-2/17	-0.7	0	0	48	54	59	64	69	73	77	
5	646	1997	646	5178	3182	39	-2/08	-1.08	40	48	646	2045	-2/16	-0.7	0	0	48	54	60	65	69	74	78	
5	647	431	647	4538	4108	38	1/56	0.85	40	51	647	1175	2/01	0.71	0	0	51	57	63	69	74	78	83	
5	648	458	648	3651	3194	39	-1/27	-1.04	40	61	648	1483	-1/31	-0.94	0	0	61	68	74	81	86	91	96	
5	648	4814	649	1410	1887	39	1/58	0.9	40	51	648	5202	2/04	0.76	0	0	51	57	63	68	73	77	82	
5	649	2392	649	3713	1322	38	-1/59	-1.09	40	52	649	2847	-2/03	-0.93	0	0	52	58	64	69	74	78	83	
5	649	4986	650	52	382	38	0/32	-0.23	40	75	649	5126	0/43	-0.19	0	0	75	86	97	107	116	124	132	
5	650	52	650	347	296	38	-0/31	-0.13	40	86	650	169	-0/40	-0.47	0	0	86	97	108	117	126	134	142	
5	650	2509	650	3898	1390	38	-0/53	-0.82	40	69	650	2840	-1/04	-0.63	0	0	69	78	86	94	100	107	113	
5	650	4241	651	608	1666	39	2/26	0.88	40	46	650	4738	2/31	0.81	0	0	46	52	57	62	66	70	74	
5	651	990	651	3311	2322	37	-2/58	-1.52	40	45	651	1491	-3/01	-1.35	0	0	45	50	54	58	62	66	69	
5	651	4404	652	1928	2804	39	0/54	0.84	40	74	651	4895	1/00	0.78	0	0	74	82	90	98	105	112	118	
5	652	2558	652	3805	1248	38	-1/56	-0.89	40	53	652	2914	-2/01	-0.92	0	0	53	59	64	69	74	79	83	
5	652	4101	653	3	1220	38	3/00	1.34	40	44	652	4511	3/10	1.25	0	0	44	48	53	57	61	64	68	
5	653	2289	653	4118	1830	38	2/54	1.42	40	45	653	3017	2/56	1.23	0	0	45	50	55	59	63	66	70	
5	654	2457	655	1909	4722	28	-1/56	-2.73	25	60	654	4085	-2/04	-2.16	0	0	60	65	70	75	79	83	87	
5	656	2538	656	4004	1467	37	-1/58	-2.16	40	59	656	3388	-2/02	-2.04	0	0	59	65	70	75	79	84	88	
5	658	510	658	2141	1632	34	1/56	3.54	40	68	658	826	1/56	3.32	0	0	68	73	78	82	87	91	95	
5	659	4861	660	2240	2690	39	0/56	0.93	40	74	660	224	1/00	0.86	0	0	74	83	91	98	105	112	118	
5	661	2322	661	4200	1879	40	-1/56	-2.55	40	61	661	3018	-1/56	-2.12	0	0	61	67	72	77	81	86	90	
5	662	2775	662	4780	2006	37	1/56	1.05	40	53	662	3881	1/59	0.94	0	0	53	59	65	70	75	80	84	
5	663	2101	663	4691	2591	36	-1/07	-1.42	40	72	663	4339	-1/09	-1.16	0	0	72	80	87	94	100	106	112	
5	664	3015	664	4038	1024	31	-0/56	-0.89	35	74	664	3277	-0/58	-0.75	0	0	74	83	91	99	106	113	119	
5	665	3892	665	5164	1273	32	3/48	1.58	35	40	665	4613	3/53	1.46	0	0	40	44	48	52	55	58	61	
5	665	5164	666	1568	1746	33	-4/13	-2.2	35	41	666	529	-4/20	-2.01	0	0	41	44	48	51	54	57	60	
5	666	1918	666	2884	967	33	4/46	2.67	35	41	666	2534	4/46	2.66	0	0	41	44	47	50	53	56	59	
5	666	2884	666	3993	1110	34	-4/26	-2.39	35	41	666	3474	-4/30	-2.32	0	0	41	44	48	51	54	57	59	

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							Average				Limiting Point														
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at								
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0		
5	666	3993	666	5096	1104	34	2/01	1.02	35	51	666	4435	2/07	0.79	0	0	51	56	62	67	72	76	81		
5	666	5096	667	1245	1407	34	4/54	3.45	35	43	667	822	4/59	3.37	0	0	43	45	48	51	54	57	59		
5	667	1245	667	1973	729	34	-4/28	-2.62	35	42	667	1598	-4/33	-2.65	0	0	42	45	49	52	55	57	60		
5	667	2566	667	3503	938	32	-5/53	-4.31	35	42	667	3095	-5/54	-4.26	0	0	42	44	47	49	52	54	56		
5	667	3503	668	94	1976	33	5/10	3.22	35	40	667	3823	5/34	3.09	0	0	40	42	45	48	50	53	55		
5	668	94	668	863	770	33	-2/31	-3.15	35	58	668	428	-2/35	-3.19	0	0	58	62	67	71	74	78	81		
5	668	1365	668	1979	615	33	1/50	0.93	35	54	668	1672	1/53	0.85	0	0	54	60	66	72	77	81	86		
5	668	3056	668	5101	2046	33	-4/42	-2.71	35	41	668	4047	-4/46	-2.53	0	0	41	44	47	50	53	56	58		
5	668	5180	669	2499	2626	31	3/27	1.79	35	40	669	297	4/13	1.8	0	0	40	44	48	51	54	57	60		
5	669	2983	669	3891	909	29	-1/34	-1.13	35	60	669	3308	-1/36	-1.03	0	0	60	67	73	79	84	89	94		
5	669	4191	669	4353	163	28	-0/15	-1.31	35	156	669	4292	-0/15	-1.36	0	0	156	174	190	205	218	231	243		
5	669	4472	670	1043	1455	28	-1/53	-1.15	35	52	670	720	-2/04	-1.01	0	0	52	58	64	69	74	78	83		
5	670	1043	670	2408	1366	26	1/19	1	35	45	670	1387	3/06	1.37	0	0	45	49	54	58	62	65	69		
5	670	2408	670	2981	574	24	2/00	1	35	52	670	2562	2/08	0.96	0	0	52	57	63	68	73	77	81		
5	670	2981	670	3816	836	20	-3/16	-1.28	35	43	670	3423	-3/16	-1.27	0	0	43	48	52	56	60	63	67		
5	670	4332	670	4550	219	20	0/23	1.05	35	112	670	4473	0/27	0.96	0	0	112	125	137	148	158	168	177		
5	670	4599	670	4972	374	20	-2/20	-0.75	20	46	670	4784	-2/28	-0.74	0	0	46	52	57	62	66	71	75		
5	670	4972	670	5253	282	18	0/58	-0.23	20	43	670	5062	2/02	-0.36	0	0	43	50	57	63	68	73	77		
5	670	5253	671	768	1062	19	6/48	0.73	20	27	671	384	6/53	0.46	0	0	27	30	33	36	39	41	44		
5	671	768	671	2336	1569	20	-5/00	-0.91	20	31	671	952	-5/16	-0.56	0	0	31	35	38	42	45	48	50		
5	671	4097	671	5713	1617	20	4/20	0.61	20	33	671	4518	4/19	0.3	0	0	33	37	41	45	49	52	55		
5	672	962	672	1925	964	19	-3/58	-0.95	40	37	672	1445	-4/02	-0.95	0	0	37	41	45	49	53	56	59		
5	672	2564	672	4458	1895	22	4/11	1.06	20	36	672	3903	4/18	1	0	0	36	40	44	48	51	54	57		
5	672	4458	672	5203	746	18	-4/02	-0.89	20	36	672	4784	-4/10	-0.87	0	0	36	40	44	48	51	55	58		
5	673	1472	673	2077	606	18	1/22	0.99	20	63	673	1748	1/26	0.98	0	0	63	70	77	83	89	94	99		
5	673	3177	673	3722	546	18	-4/53	-0.66	20	32	673	3510	-5/04	-0.6	0	0	32	36	39	43	46	49	52		
5	673	3722	673	4337	616	18	-4/05	-0.45	20	30	673	3820	-5/03	-0.12	0	0	30	34	38	41	44	47	50		
5	673	4337	673	5036	700	20	-1/18	-0.99	20	40	673	4525	-3/32	-0.93	0	0	40	44	48	52	56	60	63		
5	673	5036	674	778	844	19	-7/23	-0.82	20	27	674	331	-7/26	-0.75	0	0	27	30	33	36	38	41	43		
5	674	778	674	2196	1419	17	5/56	0.69	20	29	674	2049	5/59	0.43	0	0	29	32	36	39	42	44	47		
5	674	2196	674	2810	615	18	8/20	0.71	20	25	674	2555	8/19	0.6	0	0	25	28	31	33	36	38	40		
5	674	2810	674	3172	363	17	-1/28	-0.78	30	59	674	3040	-1/32	-0.81	0	0	59	67	73	79	85	90	95		
5	675	448	675	2219	1772	27	-2/28	-1.45	30	49	675	954	-2/31	-1.29	0	0	49	54	59	64	68	72	76		
5	675	2219	675	3663	1445	28	-3/52	-1.27	30	39	675	2649	-3/58	-1.25	0	0	39	43	47	51	54	57	60		
5	675	4321	675	5340	1020	28	5/26	1.52	30	34	675	4763	5/31	1.51	0	0	34	37	41	44	46	49	52		
5	675	5340	676	745	825	28	-5/17	-1.37	30	33	676	170	-5/32	-1.11	0	0	33	36	39	42	45	48	51		
5	676	2424	676	3099	676	27	3/53	1.49	30	40	676	2792	3/57	1.43	0	0	40	44	48	51	55	58	61		
5	676	3392	676	4534	1143	29	7/02	2.31	30	32	676	3808	7/20	2.34	0	0	32	35	37	40	42	44	47		
5	677	1026	677	1912	887	30	1/57	1.16	30	54	677	1476	2/00	1.14	0	0	54	60	66	71	76	80	85		
5	677	2221	677	3756	1536	30	-7/44	-2.15	30	30	677	3112	-7/44	-2.04	0	0	30	33	36	38	40	43	45		
5	677	4485	678	233	1010	29	6/01	2.06	30	34	677	4915	6/08	2.02	0	0	34	37	40	43	45	48	50		
5	678	398	678	1567	1170	29	-3/04	-1.1	30	39	678	817	-3/43	-1.03	0	0	39	44	48	52	55	58	62		
5	678	4218	678	5116	899	28	5/56	2.31	30	35	678	4521	6/20	2.28	0	0	35	37	40	43	45	48	50		
5	678	5116	679	884	998	28	-7/19	-3.12	30	34	679	553	-7/19	-2.89	0	0	34	36	39	41	43	46	48		
5	679	884	679	2188	1305	28	2/34	2.87	30	33	679	1209	6/17	1.72	0	0	33	36	39	41	44	46	49		
5	679	2188	679	3226	1039	29	5/24	2.71	30	38	679	2544	5/28	2.6	0	0	38	41	44	47	50	52	55		

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							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	679	3423	679	3715	293	29	-1/45	-0.78	30	56	679	3578	-1/44	-0.78	0	0	56	62	68	74	79	84	89	
5	679	3715	679	3982	268	29	1/31	0.51	30	52	679	3817	1/40	0.16	0	0	52	59	66	72	78	83	88	
5	680	1385	680	2130	746	27	-1/46	-0.92	30	56	680	1791	-1/45	-0.84	0	0	56	62	69	74	80	84	89	
5	680	2487	680	3634	1148	27	3/25	0.6	30	37	680	2815	3/46	0.62	0	0	37	41	46	50	53	57	60	
5	680	4821	681	445	1016	25	-7/07	-2.69	30	34	681	67	-7/04	-2.63	0	0	34	36	39	41	44	46	48	
5	681	1616	681	3005	1390	23	-9/33	-2.44	25	28	681	2329	-9/38	-2.42	0	0	28	30	33	35	37	39	41	
5	681	3005	681	3443	439	23	-327/41	-40	25	400	0	0	0/00	0	0	0	400	0	0	0	0	0	0	
5	681	3443	681	3998	556	25	8/35	1.84	25	28	681	3613	8/37	1.77	0	0	28	30	33	35	38	40	42	
5	682	191	682	1310	1120	23	3/52	0.91	25	37	682	489	4/05	0.83	0	0	37	41	45	48	52	55	58	
5	682	2563	682	3524	962	25	3/55	0.92	25	37	682	2876	4/04	0.86	0	0	37	41	45	49	52	55	58	
5	683	28	683	810	783	27	3/19	1.19	25	41	683	353	3/25	1.11	0	0	41	46	50	54	58	61	64	
5	683	1918	683	2748	831	24	-1/32	-1.09	25	59	683	2098	-1/37	-0.98	0	0	59	66	72	78	84	89	94	
5	683	3227	683	3726	500	24	-3/23	-1.3	25	42	683	3508	-3/26	-1.25	0	0	42	46	51	54	58	62	65	
5	683	4312	683	4850	539	25	-6/33	-1.61	25	31	683	4784	-6/38	-1.58	0	0	31	34	37	40	42	45	47	
5	683	4850	684	166	533	24	-6/29	-1.53	25	30	683	4940	-6/41	-1.25	0	0	30	33	36	39	41	44	46	
5	684	1585	684	1773	189	24	-0/23	-0.08	25	107	684	1772	-0/22	-0.08	0	0	107	125	140	153	165	176	187	
5	684	1773	684	2433	661	23	-3/07	-1.02	25	42	684	2047	-3/11	-0.96	0	0	42	47	51	55	59	63	66	
5	684	2792	684	3853	1062	24	9/23	2.65	25	29	684	3283	9/28	2.64	0	0	29	31	33	36	38	40	41	
5	684	4090	684	5144	1055	24	-1/47	-0.79	25	53	684	4491	-1/54	-0.81	0	0	53	60	66	71	76	81	85	
5	684	5298	685	1022	1154	24	7/20	1.31	25	28	685	236	7/32	1.19	0	0	28	31	34	36	39	41	43	
5	685	1219	685	1603	385	23	-327/41	-40	25	400	0	0	0/00	0	0	0	400	0	0	0	0	0	0	
5	685	1603	685	2171	569	23	-6/58	-1.45	25	29	685	1685	-7/05	-1.13	0	0	29	32	35	37	40	42	45	
5	685	2171	685	3120	950	24	7/05	1.12	25	28	685	2398	7/18	1	0	0	28	31	34	37	39	41	44	
5	685	4096	685	4780	685	23	-6/30	-1.05	25	29	685	4488	-6/35	-1.01	0	0	29	32	36	38	41	44	46	
5	685	5410	686	737	932	24	4/42	0.81	25	33	686	409	4/43	0.67	0	0	33	37	41	44	48	51	54	
5	686	1168	686	1633	466	24	-1/34	-0.79	25	58	686	1475	-1/31	-0.63	0	0	58	66	72	79	84	90	95	
5	686	1633	686	2712	1080	23	-3/37	-0.97	25	38	686	2353	-3/53	-0.84	0	0	38	42	46	50	53	57	60	
5	686	3191	686	4021	831	24	-1/38	-1.12	25	58	686	3501	-1/43	-0.98	0	0	58	64	70	76	81	86	91	
5	686	6016	687	405	968	15	-4/37	-1.13	25	35	686	6496	-4/38	-0.9	0	0	35	38	42	46	49	52	55	
5	687	405	687	2162	1758	23	3/23	1.09	25	35	687	649	4/28	0.84	0	0	35	39	43	46	50	53	56	
5	687	2162	687	2566	405	23	3/33	0.56	25	37	687	2278	3/42	0.59	0	0	37	42	46	50	54	57	60	
5	687	2566	687	3024	459	24	-0/45	-0.85	25	80	687	3023	-0/51	-0.83	0	0	80	90	98	107	114	121	128	
5	687	3024	687	3709	686	26	-3/02	-0.99	25	42	687	3203	-3/01	-0.73	0	0	42	47	52	56	60	64	67	
5	687	3906	687	4478	573	27	7/54	1.02	25	26	687	4143	7/59	0.9	0	0	26	29	32	35	37	39	42	
5	687	4765	687	5234	470	20	10/15	2.2	25	27	687	4996	10/16	2.2	0	0	27	29	31	33	35	37	39	
5	688	951	688	2570	1620	24	-4/39	-1.19	25	34	688	1144	-5/26	-1.33	0	0	34	37	40	43	46	49	52	
5	688	4638	688	4738	101	24	-0/15	-0.01	25	127	688	4691	-0/15	0.07	0	0	127	149	167	184	199	212	225	
5	689	3721	689	3956	236	25	0/34	0.56	25	82	689	3854	0/45	0.54	0	0	82	92	102	111	119	127	134	
5	689	4043	690	89	326	25	-0/25	-0.48	25	108	689	4185	-0/26	-0.62	0	0	108	123	136	148	159	169	178	
5	690	1426	690	2296	871	25	-3/45	-0.58	25	37	690	1930	-3/44	-0.58	0	0	37	41	46	50	53	57	60	
5	691	1295	691	2501	1207	21	2/59	0.65	25	41	691	1826	3/04	0.64	0	0	41	46	51	55	59	63	67	
5	691	3875	691	4690	816	26	0/21	0.73	25	114	691	4059	0/20	0.15	0	0	114	132	147	160	173	185	196	
5	692	1094	692	1653	560	22	-1/19	-0.84	25	64	692	1433	-1/20	-0.85	0	0	64	71	78	85	91	97	102	
5	692	2799	692	3349	551	23	-1/05	-0.84	25	66	692	3034	-1/14	-0.78	0	0	66	74	81	88	94	100	106	
5	692	3903	692	4517	615	25	-2/34	-0.46	25	43	692	4233	-2/43	-0.44	0	0	43	48	53	58	62	66	70	
5	692	4653	692	4885	233	24	1/01	-0.3	25	59	692	4788	1/08	-0.2	0	0	59	69	77	85	92	99	105	

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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point														
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at								
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0		
+	5	692 4910	693 347	616	23	6/59	1.8	25 30	692 5169	7/07	1.58	0 0			0 0		30	33	36	39	41	43	46		
	5	693 937	693 1605	669	24	-3/20	-1.66	25 44	693 1484	-3/14	-1.5	0 0			0 0		44	49	53	57	61	64	68		
	5	693 1605	693 2372	768	23	-4/39	-2.02	40 38	693 1788	-4/44	-1.75	61 1			61 1		38	41	45	48	51	54	56		
	5	693 2372	693 3175	804	25	3/44	2.49	40 45	693 2699	3/46	2.37	0 0			0 0		45	49	52	56	59	62	65		
	5	693 3175	693 3863	689	26	-2/46	-1.67	40 49	693 3504	-2/46	-1.67	0 0			0 0		49	54	58	62	66	70	74		
	5	693 4767	693 7093	2327	36	0/53	0.72	40 74	693 5994	1/01	0.91	0 0			0 0		74	82	90	98	105	111	117		
	5	693 10029	695 131	726	37	-1/57	-1.17	40 52	693 10301	-2/07	-1.03	0 0			0 0		52	58	63	69	73	78	82		
	5	695 604	695 739	136	37	0/32	-0.06	40 89	695 738	0/32	-0.06	0 0			0 0		89	103	115	126	136	146	155		
	5	695 739	695 1680	942	37	4/04	2.61	40 44	695 1192	4/08	2.61	0 0			0 0		44	47	51	54	57	60	63		
	5	695 2078	695 3024	947	37	-3/28	-2.52	40 46	695 2600	-3/35	-2.32	0 0			0 0		46	50	54	57	60	64	67		
+	5	695 3252	695 4161	910	37	4/47	3.61	40 44	695 3756	4/49	3.5	0 0			0 0		44	47	50	53	55	58	60		
	5	695 4336	695 4963	628	37	-5/04	-2.92	40 41	695 4649	-5/13	-3.08	0 0			0 0		41	44	47	49	52	55	57		
	5	695 4963	696 1520	1980	39	3/54	3.4	40 46	696 166	4/13	3.3	0 0			0 0		46	49	52	56	59	61	64		
	5	696 3558	696 4204	647	36	-4/03	-1.69	40 39	696 3907	-4/10	-1.47	57 2			57 2		39	43	47	50	53	56	59		
	5	696 4566	696 4809	244	37	1/02	0.57	40 70	696 4808	1/02	0.57	0 0			0 0		70	79	87	95	102	109	115		
	5	696 4809	697 139	749	37	2/07	0.86	40 50	696 5095	2/13	0.89	0 0			0 0		50	56	61	66	71	75	79		
	5	697 139	697 1504	1366	38	-1/29	-1.78	40 63	697 1028	-1/40	-1.63	0 0			0 0		63	69	75	80	85	90	95		
	5	697 1504	697 3882	2379	39	-3/02	-1.65	40 45	697 2261	-3/05	-1.35	0 0			0 0		45	49	54	58	62	65	69		
	5	697 4283	697 5019	737	40	0/59	0.29	40 66	697 4541	1/03	0.2	0 0			0 0		66	75	84	91	99	105	111		
	5	698 817	698 1299	483	39	-0/19	-0.41	40 120	698 1205	-0/20	-0.41	0 0			0 0		120	138	153	166	179	190	201		
5	698 1585	698 2083	499	38	1/32	0.8	40 53	698 1717	1/38	0.19	0 0			0 0		53	60	67	73	79	84	89			
5	698 2485	698 3477	993	38	-1/40	-1.28	40 59	698 2811	-1/43	-1.19	0 0			0 0		59	65	71	77	82	87	92			
5	698 4067	699 460	1692	39	1/28	0.64	40 58	698 4683	1/30	0.49	0 0			0 0		58	65	72	78	84	89	95			
5	699 2725	699 3006	282	38	-0/44	-0.68	40 84	699 2997	-0/44	-0.64	0 0			0 0		84	95	105	113	122	130	137			
5	699 3006	700 419	2631	38	-0/33	-0.88	40 64	699 3315	-1/22	-0.93	0 0			0 0		64	71	78	85	90	96	101			
5	700 1865	700 2355	491	38	-0/29	-0.91	40 101	700 2038	-0/35	-1.25	0 0			0 0		101	113	124	133	142	150	158			
5	700 3152	700 3801	650	38	-2/27	-1.78	40 52	700 3553	-2/31	-1.79	0 0			0 0		52	57	62	66	70	74	78			
5	701 769	701 1420	652	39	-0/36	-0.94	40 90	701 1061	-0/43	-1.09	0 0			0 0		90	100	109	118	126	134	141			
5	701 2167	701 3371	1205	39	0/58	0.96	40 70	701 2334	1/06	0.74	0 0			0 0		70	78	86	93	100	106	112			
5	701 4831	702 255	610	38	-0/33	-0.67	40 83	701 5065	-0/48	-0.9	0 0			0 0		83	93	102	110	118	126	132			
5	702 255	702 1116	862	37	3/00	1.48	40 45	702 888	3/00	1.34	0 0			0 0		45	50	54	59	63	66	70			
5	702 1255	702 1649	395	37	-0/53	-0.86	40 78	702 1502	-0/55	-0.91	0 0			0 0		78	87	96	104	111	118	124			
5	702 1649	702 1663	15	37	0/15	0.23	40 130	702 1649	0/16	0.1	0 0			0 0		130	150	167	183	197	210	223			
5	702 1663	702 2313	651	37	3/05	1.63	40 44	702 2020	3/15	1.48	0 0			0 0		44	49	53	57	61	64	67			
5	702 2401	702 2880	480	37	-1/28	-0.92	40 59	702 2603	-1/36	-0.96	0 0			0 0		59	66	72	78	84	89	94			
5	702 4169	702 4812	644	37	-1/17	-0.77	40 62	702 4441	-1/18	-0.48	0 0			0 0		62	70	77	84	90	96	102			
5	703 199	703 569	371	38	-0/28	-0.73	40 93	703 375	-0/36	-0.72	0 0			0 0		93	106	116	126	135	144	152			
5	703 1358	703 1731	374	37	-0/21	-1.14	40 95	703 1467	-0/37	-0.91	0 0			0 0		95	107	117	127	136	144	152			
5	703 4248	703 5094	847	35	-1/54	-0.93	40 52	703 4683	-1/59	-0.76	0 0			0 0		52	58	64	69	74	79	83			
5	704 1239	704 2035	797	32	3/31	1.67	40 43	704 1682	3/38	1.63	0 0			0 0		43	47	51	54	58	61	64			
5	704 2035	704 2821	787	32	-3/55	-2.36	40 43	704 2401	-3/58	-2.13	0 0			0 0		43	46	50	54	57	60	63			
5	704 3572	704 4236	665	32	-1/46	-0.92	40 55	704 3869	-1/48	-0.82	0 0			0 0		55	61	67	73	78	83	88			
5	704 4648	705 80	785	33	-2/49	-0.08	35 39	704 5171	-2/52	-0.01	46 0			46 0		39	44	50	54	59	63	67			
5	705 257	705 823	567	33	2/54	1.72	35 48	705 594	2/55	1.74	0 0			0 0		48	52	57	61	65	69	72			
5	705 1676	705 2335	660	33	2/16	1.35	35 52	705 2022	2/16	1.35	0 0			0 0		52	58	63	68	72	76	80			
5	705 2335	705 3915	1581	33	-6/20	-3.63	35 38	705 3093	-6/23	-3.56	0 0			0 0		38	41	43	46	48	50	52			

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							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	705	4827	706	445	761	33	-6/19	-3.63	35	39	706	122	-6/18	-3.63	0	0	39	41	44	46	49	51	53	
5	706	1213	706	1936	724	35	1/45	0.85	40	56	706	1603	1/46	0.81	0	0	56	62	68	74	79	84	89	
5	706	2726	707	200	2875	39	0/34	0.92	40	87	706	4401	0/40	0.57	0	0	87	98	108	118	127	135	142	
5	707	1298	707	2040	743	38	-2/46	-0.51	40	42	707	1720	-2/46	-0.51	0	0	42	48	53	57	62	66	70	
5	707	2040	707	2145	106	38	-0/14	-0.08	40	128	707	2113	-0/15	0.01	0	0	128	151	168	185	199	213	226	
5	707	2573	707	3450	878	38	-0/36	-0.63	40	86	707	3160	-0/44	-0.79	0	0	86	96	106	115	123	131	138	
5	707	4298	708	174	1220	38	1/02	0.8	40	69	707	5019	1/04	0.61	0	0	69	78	86	93	100	107	113	
5	708	2062	708	2857	796	39	1/11	0.79	40	65	708	2535	1/17	0.83	0	0	65	73	80	86	93	98	104	
5	708	3499	708	4072	574	38	1/10	0.66	40	64	708	3818	1/19	0.72	0	0	64	71	78	85	91	97	102	
5	708	4735	709	1144	1695	36	-2/09	-1.12	40	49	708	5242	-2/37	-1.31	0	0	49	53	58	63	67	71	75	
5	709	1259	709	1764	506	36	2/41	0.75	40	45	709	1759	2/41	0.74	0	0	45	50	55	59	64	68	71	
5	709	1764	709	2655	892	36	3/14	1.11	40	41	709	1952	3/22	0.97	0	0	41	45	50	54	58	61	65	
5	709	4557	709	5211	655	38	1/34	0.75	40	57	709	4916	1/41	0.82	0	0	57	63	70	75	81	86	91	
5	710	1390	710	1945	556	40	-1/52	-1.15	40	55	710	1665	-1/56	-1.08	0	0	55	61	66	72	77	81	86	
5	710	1945	710	2811	867	39	2/22	0.87	40	48	710	2274	2/23	0.83	0	0	48	53	59	64	68	72	76	
5	710	3139	710	4401	1263	39	1/40	0.68	40	55	710	3908	1/43	0.64	0	0	55	62	68	74	79	84	89	
5	710	4401	711	261	1202	39	1/50	0.68	40	49	710	4786	2/13	0.79	0	0	49	55	61	66	70	75	79	
5	711	368	711	1472	1105	38	-1/21	-0.65	40	60	711	616	-1/27	-0.73	0	0	60	68	75	81	87	92	97	
5	711	2181	711	2360	180	38	0/22	-0.14	40	97	711	2261	0/26	-0.11	0	0	97	112	125	138	149	160	169	
5	711	2365	711	3046	682	37	0/59	0.7	40	71	711	2880	0/59	0.55	0	0	71	81	89	97	104	111	117	
5	711	3568	711	4722	1155	37	1/35	0.76	40	56	711	4116	1/41	0.65	0	0	56	62	69	74	80	85	90	
5	711	4770	712	153	693	37	0/55	0.81	40	72	711	4973	1/00	0.61	0	0	72	81	89	97	104	110	117	
5	712	327	712	918	592	37	2/32	0.69	40	44	712	727	2/40	0.69	0	0	44	50	55	59	64	68	72	
5	712	3615	713	242	1940	39	1/24	0.86	40	59	712	4419	1/28	0.6	0	0	59	67	74	80	86	91	96	
5	713	3663	714	524	2176	35	-0/38	-0.69	40	84	713	4062	-0/44	-0.66	0	0	84	95	105	114	122	130	137	
5	714	6257	714	8239	1941	12	-2/59	-2.01	40	46	714	6582	-3/05	-1.52	0	0	46	50	55	59	62	66	69	
5	714	8945	714	10090	1146	21	2/53	2.71	40	52	714	9754	2/59	2.69	0	0	52	56	60	64	68	71	74	
5	716	884	716	1279	396	24	0/21	-0.16	40	103	716	1226	0/23	-0.19	0	0	103	119	134	147	159	171	181	
5	716	1539	716	1896	358	24	-0/22	-0.01	40	91	716	1654	-0/30	0.05	0	0	91	106	118	130	140	150	159	
5	716	3527	716	4543	1017	21	5/29	3.47	40	40	716	3976	5/32	3.33	0	0	40	43	46	49	51	54	56	
5	716	4543	716	5059	517	23	-1/34	0.07	40	47	716	4930	-1/37	0.5	0	0	47	55	63	69	75	81	86	
5	717	214	717	435	222	24	0/29	-0.18	40	77	717	331	0/38	-0.35	0	0	77	90	102	113	122	131	140	
5	717	964	717	2415	1452	24	-1/14	-0.42	40	60	717	1784	-1/14	-0.17	0	0	60	69	77	84	90	96	102	
5	717	3340	717	3818	479	25	-0/35	-0.51	40	87	717	3746	-0/37	-0.34	0	0	87	100	111	121	131	139	147	
5	717	4419	717	4923	505	24	0/54	-0.21	40	62	717	4665	0/57	-0.43	0	0	62	73	82	91	99	106	113	
5	717	4944	718	811	1194	24	-0/31	-0.41	40	83	717	5303	-0/37	-0.02	0	0	83	96	107	117	127	135	144	
5	718	1044	718	1689	646	24	0/56	0.27	40	66	718	1191	0/50	-0.44	0	0	66	78	88	97	106	114	121	
5	718	2138	718	3252	1115	24	2/07	1.34	40	52	718	2862	2/13	1.15	0	0	52	57	62	67	72	76	80	
5	718	4191	718	4828	638	23	2/34	1.44	40	49	718	4571	2/40	1.44	0	0	49	53	58	63	67	71	74	
5	719	2724	719	3436	713	37	-0/25	-0.26	40	98	719	3180	-0/30	-0.42	0	0	98	112	124	135	145	155	164	
5	719	3915	719	4399	485	38	-0/47	-0.18	40	74	719	4125	-0/49	-0.11	0	0	74	85	94	103	112	119	126	
5	719	4977	720	134	473	38	0/18	0.2	40	117	719	5194	0/20	0.15	0	0	117	134	149	163	175	187	199	
5	720	134	720	692	559	38	-0/33	-0.05	40	79	720	229	-0/40	0.01	0	0	79	92	103	113	122	130	138	
5	720	692	720	940	249	38	0/22	0.3	40	110	720	807	0/23	0.27	0	0	110	125	138	151	163	174	184	
5	720	3543	720	4532	990	36	-3/20	-2.43	40	47	720	4006	-3/22	-2.28	0	0	47	51	55	59	62	66	69	
5	721	550	721	1237	688	38	-1/48	-0.98	40	55	721	896	-1/49	-0.92	0	0	55	62	68	73	78	83	88	

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							Average				Limiting Point														
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at								
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0		
5	721	1461	721	2362	902	39	-1/21	-0.51	40	57	721	1716	-1/23	-0.19	0	0	57	65	73	79	85	91	97		
5	722	2440	722	3847	1408	37	2/01	0.83	40	50	722	3198	2/06	0.72	0	0	50	56	62	67	72	77	81		
5	723	800	723	1431	632	38	0/26	0.85	40	108	723	1112	0/29	0.94	0	0	108	121	132	143	153	163	171		
5	723	1709	723	2474	766	37	0/28	0.67	40	99	723	2221	0/34	0.86	0	0	99	111	122	132	141	150	158		
5	723	3166	723	3753	588	37	-0/30	-0.1	40	88	723	3546	-0/35	-0.23	0	0	88	102	113	123	133	142	150		
5	723	3753	723	4311	559	37	0/30	1.15	40	99	723	3862	0/37	1.18	0	0	99	109	119	128	137	145	153		
5	723	4638	724	542	1236	37	-0/39	-0.26	40	76	724	63	-0/49	-0.32	0	0	76	86	96	104	112	120	127		
5	724	853	724	1337	485	37	-0/32	-0.55	40	92	724	1146	-0/36	-0.62	0	0	92	104	115	125	134	143	151		
5	724	1337	724	1743	407	38	0/23	0.85	40	108	724	1410	0/27	0.7	0	0	108	122	134	145	156	166	175		
5	724	2041	724	2490	450	38	-0/58	-0.34	40	69	724	2334	-0/59	-0.32	0	0	69	79	88	95	103	110	116		
5	724	4338	724	5155	818	39	0/31	0.78	40	83	724	5005	0/43	0.43	0	0	83	94	104	113	122	130	137		
5	724	5297	725	493	538	39	-0/26	-0.63	40	89	725	136	-0/31	0.03	0	0	89	104	116	128	138	147	156		
5	725	1557	725	1971	415	39	0/50	0.93	40	80	725	1742	0/52	0.92	0	0	80	89	98	106	114	121	127		
5	725	2897	725	3485	589	38	0/35	0.36	40	80	725	3067	0/41	0.01	0	0	80	91	102	112	121	129	137		
5	725	5181	726	347	700	38	-1/27	-1	40	58	725	5414	-1/34	-0.65	0	0	58	65	71	78	83	88	93		
5	726	347	726	805	459	38	0/36	0.89	40	88	726	645	0/44	1.01	0	0	88	98	107	116	124	131	139		
5	726	1250	726	2608	1359	37	-0/25	-0.64	40	99	726	1504	-0/32	-0.72	0	0	99	112	124	134	144	153	161		
5	726	3709	727	79	1427	34	-0/28	-0.85	40	83	726	4050	-0/54	-1.32	0	0	83	91	100	107	114	121	127		
5	727	79	727	1563	1485	32	0/27	0.77	40	90	727	163	0/33	0.15	0	0	90	103	115	126	136	145	154		
5	727	3915	727	4273	359	26	-0/18	-0.21	40	123	727	4178	-0/18	-0.23	0	0	123	141	157	172	185	197	209		
5	728	1373	728	1988	616	23	-0/38	-0.74	25	86	728	1521	-0/42	-0.69	0	0	86	97	107	116	125	133	140		
5	728	3544	728	4035	492	25	-0/25	-0.42	40	101	728	3848	-0/28	-0.47	0	0	101	116	128	140	150	160	169		
+	5	728	4495	729	51	809	28	-1/31	-0.47	40	56	728	5047	-1/34	-0.44	0	0	56	63	70	76	82	87	92	
	5	729	1041	729	2572	1532	34	0/52	0.9	40	76	729	1340	0/58	0.83	0	0	76	84	93	100	107	114	120	
	5	729	2662	729	4738	2077	37	-1/16	-0.39	40	54	729	3932	-1/22	0.25	0	0	54	62	70	77	84	90	95	
	5	729	4738	730	66	645	38	-0/20	-0.51	40	115	729	5265	-0/22	-0.51	0	0	115	131	145	158	170	181	191	
5	730	66	730	516	451	38	0/47	0.68	40	81	730	203	0/49	0.73	0	0	81	91	100	108	116	124	131		
5	730	612	730	802	191	38	0/28	0.16	40	94	730	801	0/31	0.21	0	0	94	107	119	130	140	150	159		
5	730	802	730	1134	333	38	1/02	0.65	40	69	730	953	1/08	0.78	0	0	69	77	85	92	98	104	110		
5	730	1134	730	1723	590	38	-2/36	-0.69	40	44	730	1435	-2/43	-0.76	0	0	44	49	54	59	63	67	71		
5	730	2298	730	4141	1844	38	-4/12	-2.5	40	42	730	3296	-4/08	-2.05	0	0	42	45	49	52	55	58	61		
5	730	4141	731	93	1266	39	2/13	0.77	40	48	730	5082	2/17	0.75	0	0	48	54	59	64	69	73	77		
5	731	93	731	828	736	40	-1/58	-0.65	40	51	731	614	-1/59	-0.62	0	0	51	57	63	68	73	78	83		
5	731	2852	731	3919	1068	39	3/00	2.11	40	49	731	3592	3/01	2.06	0	0	49	53	57	61	65	68	72		
5	731	3919	731	4392	474	39	-2/14	-0.75	40	49	731	4071	-2/14	-0.73	0	0	49	54	60	65	70	74	78		
5	731	4392	731	4556	165	39	0/31	-0.07	40	90	731	4555	0/31	-0.07	0	0	90	104	117	128	139	149	158		
5	731	4556	731	5133	578	38	1/20	0.59	40	61	731	4984	1/22	0.55	0	0	61	68	76	82	88	94	99		
+	5	731	5133	732	148	297	38	1/30	0.41	40	56	732	1	1/26	0.09	0	0	56	63	71	78	84	89	95	
	5	732	148	732	1112	965	37	2/45	1.64	40	40	732	499	3/23	0.76	29	1	40	44	49	53	57	60	64	
+	5	732	1112	732	1922	811	36	4/08	2.26	40	40	732	1341	4/16	1.68	53	1	40	43	47	50	53	56	59	
	5	732	1922	732	2908	987	37	0/47	1.04	40	84	732	2184	0/49	0.98	0	0	84	93	102	110	118	125	132	
	5	732	3581	732	4308	728	38	1/37	1.18	40	58	732	3798	1/41	0.97	0	0	58	64	71	76	82	87	92	
	5	732	4551	733	204	813	39	1/25	0.89	40	62	732	4993	1/28	0.88	0	0	62	68	75	81	87	92	98	
	5	733	204	733	727	524	39	-2/31	-1	40	47	733	498	-2/38	-1.01	0	0	47	52	57	61	65	69	73	
	5	733	727	733	1558	832	39	1/26	0.96	40	60	733	870	1/34	1.01	0	0	60	67	73	79	85	90	95	
	5	733	1558	733	3089	1532	39	-0/56	-1.18	40	65	733	2098	-1/26	-1.2	0	0	65	72	78	84	90	95	100	

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							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	733	3816	733	4869	1054	38	-0/54	-1.23	40	80	733	4268	-0/55	-1.11	0	0	80	89	97	105	112	119	126	
5	733	5032	734	1048	1498	39	-0/49	-1.11	40	74	734	147	-1/05	-1.19	0	0	74	82	90	97	103	109	115	
5	734	1607	734	2712	1106	39	-1/38	-0.63	40	55	734	2187	-1/42	-0.62	0	0	55	62	68	74	80	85	89	
5	734	2712	734	3810	1099	38	0/47	0.95	40	84	734	3454	0/48	0.92	0	0	84	93	102	111	118	126	133	
5	735	1039	735	2272	1234	37	0/31	1.06	40	102	735	1712	0/33	1.02	0	0	102	114	125	135	144	153	161	
5	735	4067	736	1028	2248	39	0/40	0.72	40	81	736	564	0/48	0.63	0	0	81	90	100	108	116	124	131	
5	736	1496	736	2197	702	38	1/53	1.07	40	55	736	1939	1/53	1.06	0	0	55	61	67	73	78	82	87	
5	736	2709	736	3228	520	38	1/23	0.7	40	60	736	2962	1/28	0.67	0	0	60	67	74	80	86	91	96	
5	736	4312	736	4956	645	39	1/04	0.62	40	67	736	4700	1/08	0.64	0	0	67	76	84	91	97	104	109	
5	737	1246	737	2135	890	40	-2/03	-0.79	40	50	737	1699	-2/10	-0.79	0	0	50	56	61	66	71	76	80	
5	737	3765	737	4029	265	39	1/04	0.6	40	69	737	4028	1/05	0.6	0	0	69	78	86	93	100	106	112	
5	737	4029	737	4457	429	39	1/52	0.49	40	50	737	4122	1/56	0.39	0	0	50	56	63	68	73	78	83	
5	737	4457	738	53	889	40	-2/17	-1.21	40	51	737	4997	-2/17	-1.18	0	0	51	56	62	67	71	75	79	
5	738	768	738	1399	632	39	1/22	0.82	40	62	738	1147	1/23	0.79	0	0	62	70	77	83	89	95	100	
5	738	4693	739	717	1264	39	2/21	1.5	40	52	738	5121	2/29	1.62	0	0	52	56	61	66	70	74	78	
5	739	717	739	1301	585	39	-2/50	-0.64	40	42	739	961	-2/53	-0.61	0	0	42	47	52	57	61	65	68	
5	739	2263	739	3721	1459	38	3/04	1.97	40	47	739	2790	3/05	1.83	0	0	47	51	56	60	63	67	70	
5	739	3843	739	4543	701	39	1/59	0.93	40	51	739	4116	2/07	0.78	0	0	51	56	62	67	72	76	81	
5	739	5216	740	433	627	38	-1/59	-1.04	40	53	740	200	-2/05	-1.08	0	0	53	59	64	69	74	78	83	
5	740	975	740	1498	524	37	-1/53	-1	40	54	740	1243	-1/58	-1.01	0	0	54	60	65	71	76	80	85	
5	740	1498	740	2201	704	37	4/02	3.52	40	48	740	1891	4/09	3.63	0	0	48	51	54	57	60	63	65	
5	740	2389	740	3274	886	38	-3/15	-4.08	40	56	740	2846	-3/15	-4.05	0	0	56	59	63	66	69	72	75	
5	741	2397	741	4347	1951	39	-2/58	-1.74	40	46	741	3108	-3/00	-1.46	0	0	46	51	55	59	63	67	70	
5	742	1547	742	2975	1429	38	-2/01	-1.06	40	51	742	2702	-2/03	-0.76	0	0	51	57	63	68	73	78	82	
5	742	2975	742	3491	517	38	0/22	0.25	40	90	742	3085	0/26	-0.52	0	0	90	107	121	134	146	157	167	
5	742	4155	743	141	1306	39	-1/58	-0.92	40	53	742	5124	-1/58	-0.84	0	0	53	59	65	70	75	80	84	
5	743	2941	743	3792	852	38	-2/35	-1.88	40	52	743	3530	-2/32	-1.77	0	0	52	56	61	66	70	74	77	
5	743	4440	744	607	1481	38	1/26	0.82	40	60	743	5234	1/28	0.65	0	0	60	67	74	80	86	91	96	
5	744	1161	744	1761	601	39	0/53	0.59	40	75	744	1415	0/55	0.62	0	0	75	84	93	101	108	115	122	
5	744	3230	744	5131	1902	37	0/58	0.66	40	71	744	3633	0/59	0.5	0	0	71	81	89	97	104	111	117	
5	745	959	745	2798	1840	37	0/47	0.78	40	78	745	2191	0/51	0.59	0	0	78	87	96	105	112	120	126	
5	745	2798	745	4454	1657	39	-0/40	0.03	40	72	745	4161	-0/44	0.3	0	0	72	84	95	104	113	121	129	
5	745	4662	746	77	727	39	1/09	0.34	40	61	745	4913	1/14	0.23	0	0	61	70	77	85	91	97	103	
5	746	1335	746	2735	1401	39	-0/50	-0.71	40	56	746	1701	-1/55	-1.19	0	0	56	62	67	73	78	82	87	
5	746	2735	746	2942	208	39	-1/13	-0.53	40	62	746	2889	-1/13	-0.26	0	0	62	70	78	85	92	98	104	
5	746	2942	746	3748	807	39	-1/29	-0.44	40	52	746	3272	-1/43	-0.31	0	0	52	60	66	72	78	83	88	
5	746	3748	746	4633	886	38	-3/21	-3.56	40	52	746	4007	-3/23	-3.48	0	0	52	56	59	63	66	69	72	
5	746	4633	747	146	860	37	2/56	2.13	40	48	746	4932	3/03	1.85	0	0	48	52	56	60	64	67	71	
5	747	1621	747	2866	1246	37	0/20	0.06	40	106	747	2242	0/22	-0.13	0	0	106	122	137	150	162	174	185	
5	747	2866	747	4901	2036	37	0/25	0.12	40	84	747	3112	0/33	-0.28	0	0	84	98	110	121	132	141	150	
5	748	800	748	1583	784	34	3/05	2.26	40	48	748	1249	3/14	2.25	0	0	48	52	56	60	63	67	70	
5	748	4246	749	223	1309	33	-0/38	0.37	35	54	749	11	-1/07	0.67	0	0	54	65	74	82	89	96	103	
5	749	496	749	503	8	32	0/15	0.98	35	151	749	496	0/15	0.97	0	0	151	168	184	199	213	226	238	
5	749	503	749	904	402	32	0/20	0.01	35	104	749	757	0/23	-0.1	0	0	104	119	133	146	158	170	180	
5	749	1320	749	1909	590	30	-0/42	-0.73	35	73	749	1585	-0/55	-0.46	0	0	73	83	92	100	107	114	121	
5	749	2655	749	3309	655	27	-2/19	-1.55	35	53	749	2982	-2/21	-1.6	0	0	53	58	63	67	72	76	80	

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							Average				Limiting Point														
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at								
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0		
5	749	3451	749	4621	1171	25	-1/50	-1.22	35	56	749	4237	-1/53	-1.12	0	0	56	62	68	73	78	83	87		
5	750	184	750	900	717	18	-1/57	-1.38	20	54	750	508	-1/59	-1.14	0	0	54	60	66	71	76	81	85		
5	750	1015	750	1280	266	17	1/00	1.05	20	70	750	1138	1/11	1.07	0	0	70	78	85	92	98	104	110		
5	750	1280	750	1816	537	17	-2/16	-0.07	20	44	750	1550	-2/16	-0.07	0	0	44	50	56	61	66	71	75		
5	750	3270	750	3905	636	16	0/38	-0.13	20	73	750	3524	0/44	-0.24	0	0	73	85	95	105	114	122	130		
5	750	5007	751	149	473	10	2/04	0.37	10	47	750	5282	2/14	0.39	0	0	47	53	58	64	68	73	77		
5	751	748	751	1602	855	10	-0/19	-0.19	10	108	751	1366	-0/22	-0.11	0	0	108	125	140	153	165	176	187		
5	751	2833	751	3923	1091	10	3/44	1.2	10	39	751	3535	3/57	1.13	0	0	39	43	47	50	54	57	60		
5	751	4061	752	357	1207	9	-6/26	-2.15	30	33	751	4379	-7/04	-2.31	0	0	33	35	38	40	43	45	47		
5	752	357	752	1977	1621	18	1/48	1	30	53	752	1383	1/59	0.9	0	0	53	59	65	70	75	80	84		
5	259	2984	259	3736	753	35	1/27	1.87	50	69	259	3499	1/29	1.9	0	0	69	75	81	87	92	97	102		
5	259	3928	259	4167	240	36	0/56	1.92	50	86	259	4166	0/56	1.92	0	0	86	94	102	109	116	122	128		
5	259	4167	259	5004	838	38	2/02	2.62	50	62	259	4434	2/05	2.66	0	0	62	67	72	76	81	85	89		
5	259	5279	260	1007	1027	40	-3/00	-3.68	50	54	260	492	-3/08	-3.52	0	0	54	58	62	65	69	72	75		
5	260	2534	260	3791	1258	38	1/29	1.64	50	64	260	2975	1/35	1.61	0	0	64	70	77	82	87	92	97		
5	260	4228	260	5005	778	37	1/50	2.31	50	63	260	4645	1/53	2.3	0	0	63	69	74	79	83	88	92		
5	260	5148	261	541	685	36	-2/28	-3.04	50	59	261	209	-2/32	-3.14	0	0	59	63	67	71	75	79	82		
5	261	1251	261	1783	533	38	0/34	0.99	50	93	261	1627	0/41	1.14	0	0	93	103	113	122	130	138	145		
5	261	3222	261	3746	525	38	-0/19	-0.89	50	130	261	3643	-0/19	-0.91	0	0	130	148	162	175	187	199	210		
5	261	4269	261	5217	949	38	0/58	1.16	50	76	261	4690	1/02	1.15	0	0	76	84	92	99	106	112	118		
5	262	517	262	1263	747	37	-4/21	-3.63	40	46	262	904	-4/23	-3.58	0	0	46	49	52	55	58	61	63		
5	262	2276	262	3545	1270	37	-3/19	-1.96	40	45	262	3078	-3/17	-1.78	301	-1	45	50	54	58	61	65	68		
5	262	4609	262	7289	2681	38	1/05	0.91	50	59	262	5073	1/44	1.21	0	0	59	65	71	76	82	86	91		
5	262	7461	262	7795	335	38	-0/26	-0.7	50	106	262	7690	-0/29	-0.82	0	0	106	119	131	142	152	162	170		
5	262	8429	262	9398	970	40	-4/47	-2.99	40	42	262	8891	-4/48	-2.98	0	0	42	45	48	51	54	57	59		
5	264	301	264	981	681	45	2/22	2.46	50	56	264	677	2/26	2.41	0	0	56	61	66	70	74	78	81		
5	264	2941	264	4502	1562	47	-2/20	-2.56	50	57	264	3524	-2/22	-2.5	0	0	57	62	67	71	75	79	83		
5	265	270	265	1727	1458	48	-2/11	-2.53	50	59	265	877	-2/14	-2.48	0	0	59	64	69	73	77	81	85		
5	265	1994	265	2771	778	47	1/08	0.89	50	68	265	2433	1/14	1	0	0	68	75	83	89	95	101	107		
5	265	5311	266	1169	1175	46	0/52	0.9	50	76	266	265	0/56	0.86	0	0	76	85	94	102	109	116	122		
5	266	4367	266	5119	753	48	2/02	1.35	50	54	266	4703	2/10	1.37	0	0	54	59	64	69	74	78	82		
5	266	5471	266	5901	431	48	1/15	1.17	50	69	266	5884	1/15	1.13	0	0	69	76	83	90	96	102	107		
5	266	5901	266	6935	1035	48	1/15	1.08	50	66	266	6249	1/21	1.08	0	0	66	73	80	86	92	98	103		
5	266	7689	266	9102	1414	48	-1/44	-1.83	50	60	266	8090	-1/49	-1.61	0	0	60	66	72	77	82	87	91		
5	266	9851	266	10518	668	48	-1/56	-1.47	50	56	266	10209	-2/04	-1.64	0	0	56	62	67	72	77	81	85		
5	268	251	268	1308	1058	48	2/01	2.4	50	61	268	735	2/03	2.38	0	0	61	66	71	76	80	85	89		
5	269	130	269	899	770	47	1/25	1.92	50	67	269	504	1/31	1.81	0	0	67	74	80	85	91	96	101		
5	269	1563	269	2266	704	46	1/45	2.01	50	64	269	1890	1/46	2.01	0	0	64	69	75	80	85	90	94		
5	269	3279	269	3946	668	46	1/25	1.35	50	63	269	3515	1/31	1.19	0	0	63	70	76	82	88	93	98		
5	270	622	270	1799	1178	48	1/46	2.06	50	63	270	1201	1/47	2.04	0	0	63	69	74	80	84	89	93		
5	270	4242	271	335	1389	48	-0/19	-1	50	127	270	5215	-0/20	-0.92	0	0	127	143	157	170	182	193	204		
5	271	388	271	661	274	48	0/19	0.84	50	129	271	540	0/20	0.82	0	0	129	144	158	171	184	195	206		
5	272	1361	272	3867	2507	48	1/01	1.39	50	58	272	1864	2/03	1.91	0	0	58	64	69	74	78	83	87		
5	273	537	273	2000	1464	49	-0/57	-0.98	50	76	273	1054	-0/58	-0.98	0	0	76	85	93	101	108	115	121		
5	273	5284	274	1628	1642	49	-2/01	-2.06	50	58	274	1335	-2/05	-1.89	0	0	58	63	68	73	78	82	86		
5	274	2696	274	3761	1066	49	2/20	2.24	50	56	274	3283	2/22	2.23	0	0	56	61	66	70	74	78	82		

Exception Report
Curve Analysis Section
Milepost 215 to Milepost 305

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Run Date: 04/22/2019
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Binghamton, NY to Harrisburg, PA

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	275	2070	275	4076	2007	46	0/47	0.86	50	79	275	2521	0/53	0.83	0	0	79	88	97	105	112	119	126	
5	276	1643	276	2952	1310	41	-1/05	-0.93	50	65	276	2335	-1/18	-0.92	0	0	65	73	80	87	93	99	104	
5	277	539	277	3211	2673	38	-2/26	-2.57	50	56	277	1017	-2/29	-2.5	0	0	56	61	65	69	73	77	81	
5	277	3537	277	5240	1704	38	2/00	1.91	50	57	277	4003	2/13	1.98	0	0	57	62	67	71	76	80	84	
5	278	337	278	796	460	38	-2/44	-3.63	50	59	278	782	-2/43	-3.57	0	0	59	63	67	70	74	77	81	
5	278	796	278	1766	971	38	-2/41	-3.51	50	57	278	836	-2/44	-3.33	0	0	57	61	65	69	73	76	80	
5	278	2725	278	4067	1343	38	3/20	2.46	40	48	278	3290	3/23	2.47	0	0	48	52	56	59	63	66	69	
5	279	1773	280	668	4196	49	0/28	0.93	50	95	279	4919	0/35	0.78	0	0	95	107	118	128	137	145	153	
5	280	668	280	4380	3713	49	0/34	0.96	50	73	280	2628	1/01	0.73	0	0	73	81	90	97	104	111	117	
5	281	808	281	1129	322	49	0/28	0.78	50	96	281	987	0/36	0.88	0	0	96	107	118	128	136	145	153	
5	281	3115	281	3624	510	49	-0/25	-1.06	50	114	281	3505	-0/27	-1.13	0	0	114	127	139	150	160	170	179	
5	281	5149	282	1897	1987	49	-0/57	-1.07	50	74	282	738	-1/01	-0.94	0	0	74	83	91	99	105	112	118	
5	282	1897	282	5133	3237	48	-2/57	-3.99	50	57	282	2229	-2/53	-3.54	0	0	57	61	64	68	72	75	78	
5	283	156	283	1089	934	45	1/54	1.87	50	59	283	613	1/58	1.76	0	0	59	64	70	75	79	84	88	
5	283	1772	283	2525	754	44	1/52	1.86	50	60	283	2115	1/55	1.83	0	0	60	65	71	76	81	85	89	
5	283	4177	284	347	1441	41	1/54	2.13	50	59	283	5038	2/14	2.44	0	0	59	64	69	73	77	81	85	
5	284	1422	284	2138	717	38	1/45	1.89	50	62	284	1689	1/47	1.86	0	0	62	68	74	79	84	88	93	
5	284	5055	284	5272	218	36	1/34	1.35	40	63	284	5192	1/31	1.13	0	0	63	69	76	82	87	92	97	
5	284	5272	285	651	728	36	2/56	2.33	40	49	285	404	3/08	2.19	0	0	49	53	57	61	64	68	71	
5	285	2301	285	3640	1340	40	1/25	1.4	50	65	285	3155	1/27	1.28	0	0	65	72	78	84	90	95	100	
5	285	4328	286	2526	3523	43	-2/11	-2.46	50	58	285	4637	-2/16	-2.29	0	0	58	63	67	72	76	80	84	
5	286	4462	287	945	1803	45	-1/26	-1.56	50	65	286	4740	-1/29	-1.42	0	0	65	72	78	84	89	95	99	
5	287	5251	288	151	219	48	1/14	1.07	50	65	288	77	1/14	0.71	0	0	65	73	81	87	94	100	105	
5	288	151	288	884	734	48	1/46	1.38	50	57	288	334	1/53	1.3	0	0	57	63	69	74	79	83	88	
5	288	2479	288	2909	431	47	0/47	0.78	50	83	288	2651	0/47	0.79	0	0	83	93	102	110	118	126	133	
5	288	2909	288	3226	318	47	-0/32	-0.88	50	92	288	3066	-0/40	-0.99	0	0	92	103	113	123	131	139	147	
5	288	3434	288	4686	1253	47	2/02	1.73	50	56	288	4170	2/08	1.72	0	0	56	61	67	71	76	80	84	
5	289	703	289	1335	633	44	1/56	1.96	50	60	289	1062	2/01	1.99	0	0	60	65	70	75	79	84	88	
5	289	2760	289	4035	1276	42	3/14	3.4	50	51	289	3351	3/17	3.08	0	0	51	55	59	62	66	69	72	
5	290	2164	290	2769	606	47	2/30	2.65	50	56	290	2475	2/34	2.67	0	0	56	60	65	69	73	77	80	
5	290	4013	290	5022	1010	48	1/58	1.79	50	57	290	4308	2/05	1.69	0	0	57	62	67	72	77	81	85	
5	290	6490	290	7402	913	49	1/37	1.69	50	63	290	7085	1/40	1.69	0	0	63	69	75	81	86	91	95	
5	290	7874	290	8847	974	49	1/08	1.2	50	61	290	8317	1/55	1.93	0	0	61	66	71	76	81	85	90	
5	290	9424	292	72	1136	49	0/28	1	50	100	290	10220	0/33	0.85	0	0	100	112	123	133	142	151	159	
5	293	600	293	1484	885	48	-0/53	-0.88	50	77	293	957	-0/56	-0.84	0	0	77	86	94	102	109	116	122	
5	293	2288	293	3052	765	47	-1/59	-1.92	50	58	293	2620	-2/03	-1.9	0	0	58	64	69	74	78	83	87	
5	293	3329	293	4153	825	47	-1/58	-2.16	50	60	293	3710	-1/59	-1.97	0	0	60	65	70	75	80	84	88	
5	293	4683	294	1021	1465	47	-2/32	-3.11	50	56	294	471	-2/43	-2.94	0	0	56	60	64	68	72	75	79	
5	294	2491	294	3211	721	49	-1/53	-1.88	50	60	294	2870	-1/55	-1.86	0	0	60	66	71	76	81	85	90	
5	294	4396	294	4910	515	48	0/32	0.67	50	86	294	4658	0/44	0.76	0	0	86	96	106	115	123	130	138	
5	294	5259	295	1427	1478	48	1/57	1.67	50	57	295	812	1/59	1.61	0	0	57	63	68	73	78	83	87	
5	295	3159	295	4190	1032	49	3/01	3.88	50	57	295	3717	3/02	3.86	0	0	57	60	64	68	71	74	77	
5	296	2211	297	64	3149	50	0/43	0.91	50	70	296	2438	1/06	0.75	0	0	70	78	86	93	100	106	112	
5	297	2963	297	4338	1376	47	-0/47	-0.98	50	79	297	4337	-0/58	-1.2	0	0	79	87	96	103	110	117	123	
5	297	4338	298	4314	5230	48	-2/17	-2.63	50	57	298	3098	-2/27	-2.54	0	0	57	61	66	70	74	78	82	
5	300	1513	300	2788	1276	49	-1/02	-0.8	50	71	300	2429	-1/05	-0.8	0	0	71	79	87	94	101	107	113	

Exception Report
Curve Analysis Section
Milepost 215 to Milepost 305

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Binghamton, NY to Harrisburg, PA

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

						Average				Limiting Point													
Track	Starting	Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0
5	300	3175	300	3399	225	47	-0/34	-0.14	50	89	300	3398	-0/34	-0.14	0	0	89	102	114	125	134	144	152
5	300	3399	300	4293	895	47	-1/56	-1.81	50	58	300	3820	-2/02	-1.83	0	0	58	63	69	74	78	82	87
5	300	5042	301	756	1035	45	-1/35	-1.39	50	61	301	294	-1/38	-1.37	0	0	61	68	74	80	85	90	95
5	301	935	301	1544	610	44	-0/46	-0.89	50	79	301	1097	-0/49	-0.65	0	0	79	90	99	107	115	122	129
5	301	2720	301	3590	871	41	-1/19	-0.94	50	64	301	3147	-1/22	-0.91	0	0	64	71	78	84	90	96	101
5	301	4392	301	5251	860	38	2/01	3.37	50	64	301	4646	2/06	3.06	0	0	64	69	74	78	82	86	90
5	302	1171	302	4322	3152	30	0/53	1.04	50	73	302	2225	1/01	0.79	0	0	73	81	90	97	104	110	117
5	302	5070	302	5304	235	18	2/46	-0.22	20	38	302	5200	2/47	-0.24	0	0	38	43	49	54	58	63	67
5	302	5304	302	5545	242	18	-2/29	-0.65	20	44	302	5400	-2/35	-0.59	0	0	44	50	55	60	64	68	72
6	302	7063	302	8175	1113	17	0/55	1.32	20	77	302	7317	1/03	1.33	0	0	77	85	92	99	106	112	118
6	302	8799	304	529	2035	19	2/20	1.21	20	43	302	9239	2/40	0.43	0	0	43	48	53	58	63	67	71
6	304	733	304	1762	1030	18	-4/39	-1.72	20	37	304	1180	-4/55	-1.66	0	0	37	40	44	47	50	53	55
6	304	1862	304	2385	524	19	-1/29	-0.8	20	59	304	2046	-1/25	-0.48	0	0	59	67	74	81	87	92	98
6	304	2691	304	3499	809	17	-0/56	-1.36	20	76	304	3233	-1/03	-1.3	0	0	76	84	92	99	106	112	118
6	304	4018	304	4289	272	18	2/22	1	20	49	304	4201	2/22	1.01	0	0	49	55	60	65	69	73	77
6	304	4289	304	4530	242	18	-2/53	-0.04	20	38	304	4388	-2/56	0.01	0	0	38	44	49	54	58	62	66
6	305	1690	305	2304	615	11	2/46	0.71	20	42	305	2265	2/56	0.57	0	0	42	47	52	56	60	64	68
6	305	2304	305	3783	1480	8	3/11	1.13	20	38	305	2478	3/53	0.94	0	0	38	42	46	50	54	57	60

Notes:

+ Maximum curve speed is limited at qualified cant deficiency.
However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Exception Report
Exception Summary Section
Milepost 215 to Milepost 305
Binghamton, NY to Harrisburg, PA

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Run Date: 04/22/2019
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MP		FT		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd	Lim		Pst	Trk
				Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot				
				EXC	FT	Drop	EXC	FT	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	Cls	Cls		
644	5155	-	-	-	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	3	5				
677	5342	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	24	-	-	2	3	5				
680	5356	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	5					
687	6635	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	31	-	-	-	-	1	3	-	-	1	2	5				
693	1988	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	56	-	1	18	1	1	0	3	5				
696	5421	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	3	5				
697	5417	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	61	-	1	4	-	-	2	3	5				
714	5313	-	-	-	-	-	-	-	-	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	5				
		-	-	-	1	3	1	1	-	1	4	-	-	-	-	-	-	1	31	-	2	117	-	5	49	1	2							

Total Miles: 188.10
Exceptions per 100 Miles: 6.91
CY18 National Average Exceptions per 100 miles: 5.0

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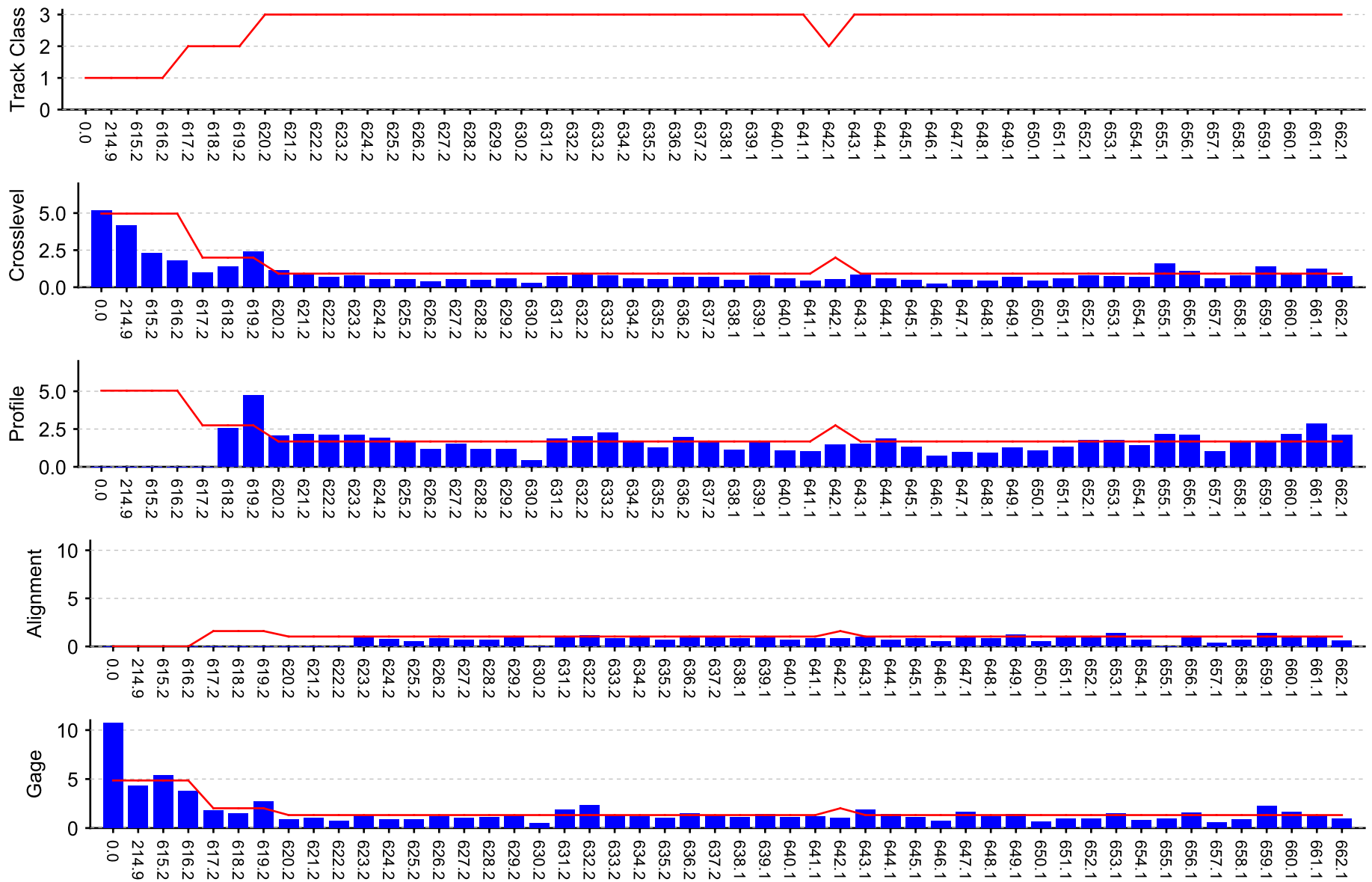
Run Date: 2019-04-22

Run ID: 2019042201

Milepost 215 to Milepost 305

Binghamton, NY

- Harrisburg, PA



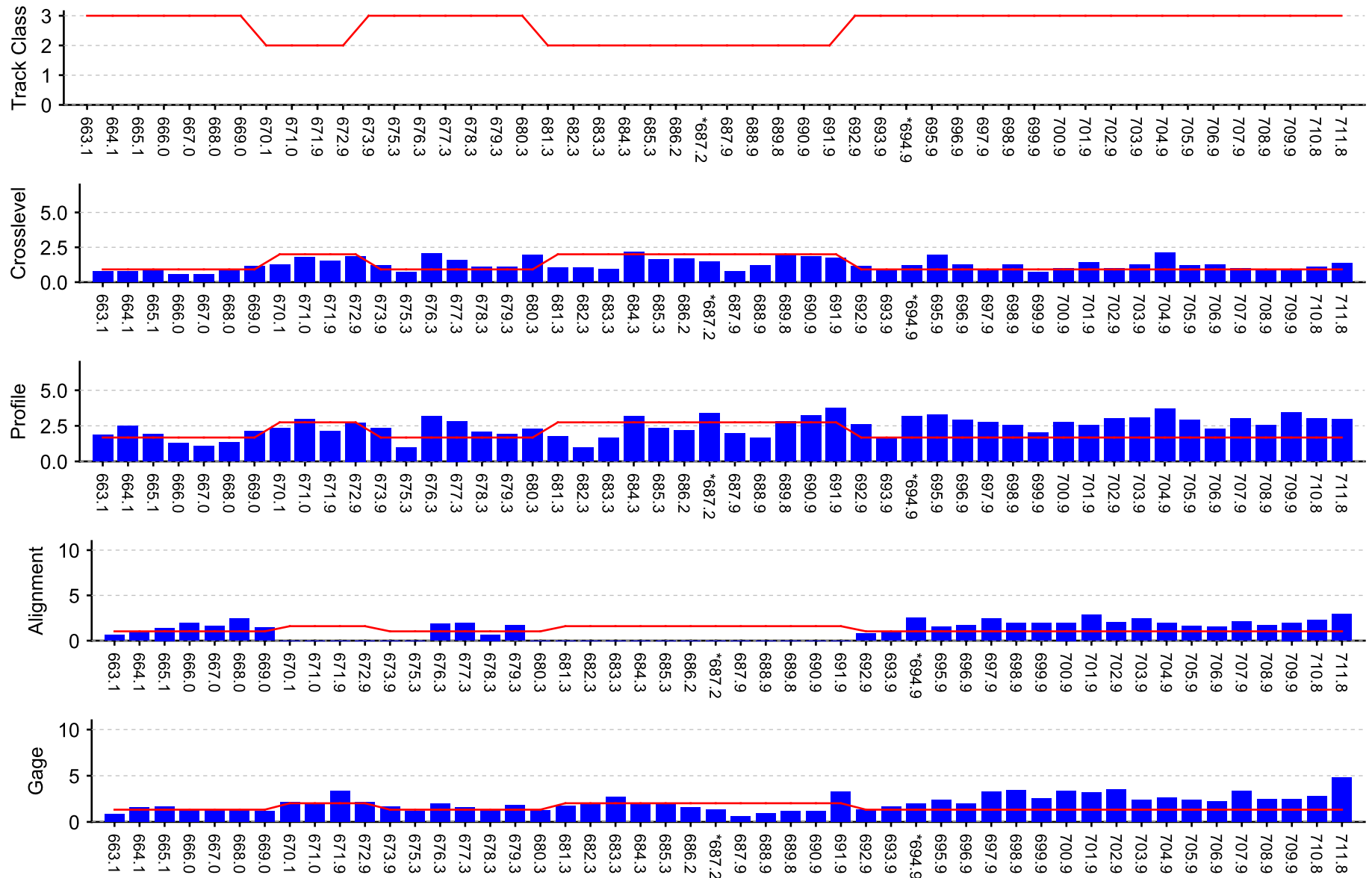
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Milepost 215 to Milepost 305

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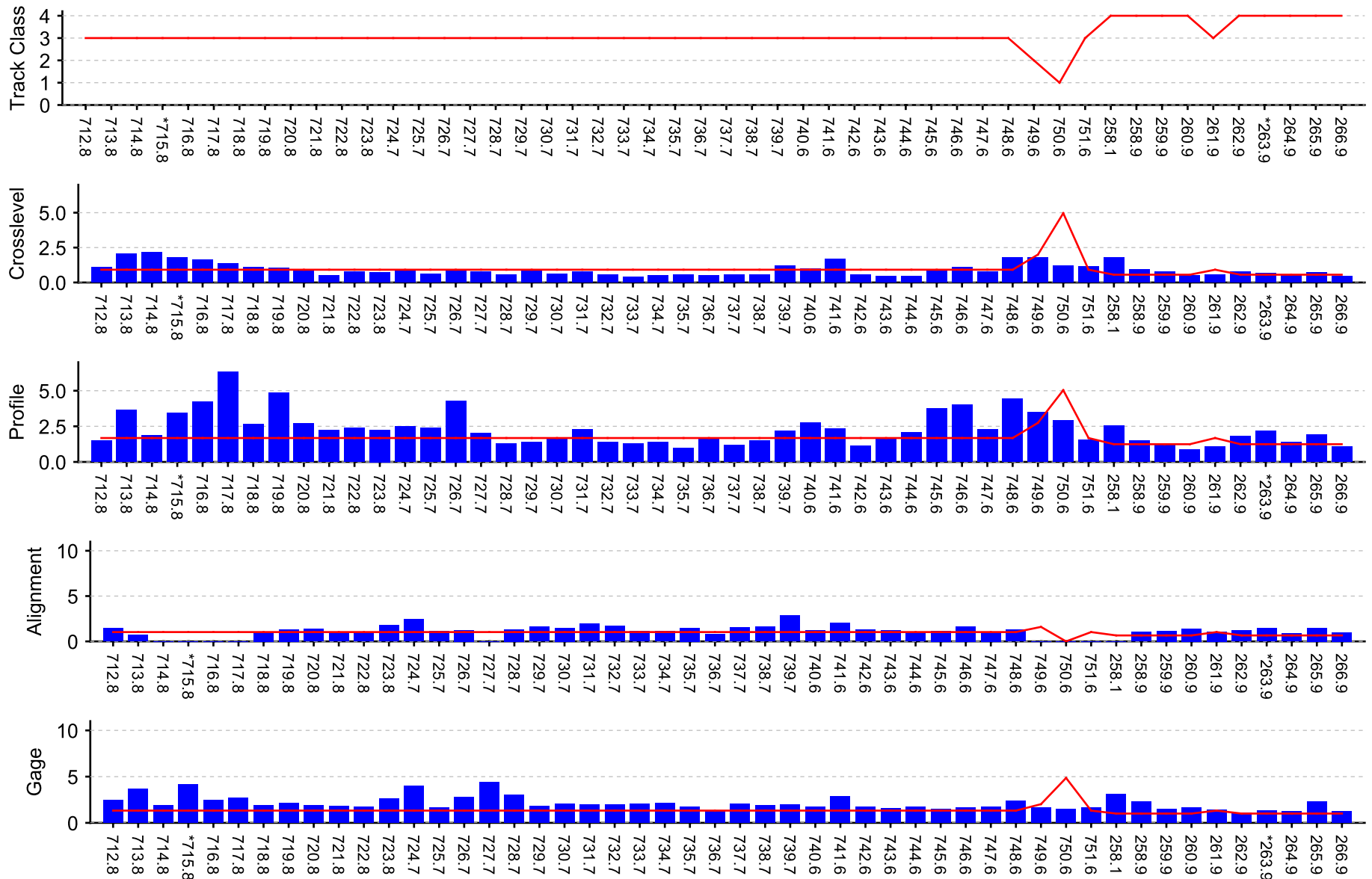
Run Date: 2019-04-22

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Milepost 215 to Milepost 305

Binghamton, NY

- Harrisburg, PA



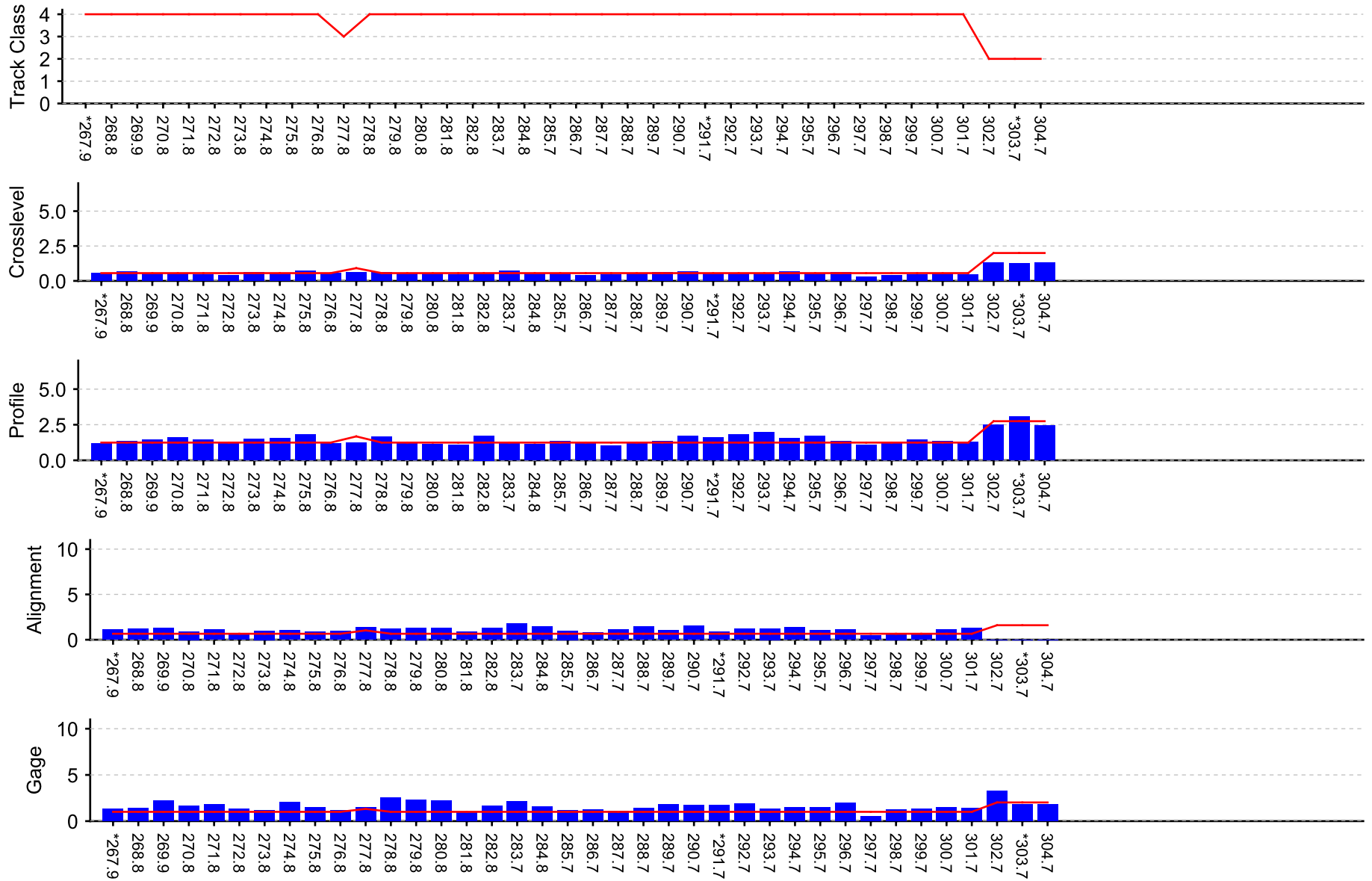
Track Quality Index

Milepost 215 to Milepost 305

Binghamton, NY

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Exception Report
Class Plus 1 Exception List Section
Milepost 215 to Milepost 305
Binghamton, NY to Harrisburg, PA

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Run Date: 04/22/2019
Run ID: 2019042201

MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	144		Railroad	NS -	0	3	T	0	0	7		
0	188		Track Change	0.00	0	4	B	0	0	7		
0	188		Class Change	1.00	0	4	B	0	0	7		
0	188		Posted Speed	10.00	0	4	B	0	0	7		
0	188		State Line	NY	0	4	B	0	0	7		
0	189		Subdivision	SOUTHE	0	4	B	0	0	7		
215	189		Down Milepost	215.00	0	4	B	0	0	7		
215	4753		Track Change	0.00	0	4	B	0	0	1		
215	4753		Class Change	4.00	0	4	B	0	0	1		
215	4753		Posted Speed	50.00	0	4	B	0	0	1		
215	5063		Class Change	3.00	0	5	T	0	0	1	42.104071	-75.907777
215	5063		Posted Speed	30.00	0	5	T	0	0	1	42.104071	-75.907777
214	5118		Down Milepost	214.00	0	6	T	0	0	1	42.104071	-75.907572
214	3949		Class Change	1.00	0	9	B	0	0	1	42.103985	-75.893073
214	3949		Posted Speed	10.00	0	9	B	0	0	1	42.103985	-75.893073
214	5518		Track Change	0.00	0	11	T	0	0	2	42.103765	-75.887322
214	6058		Subdivision	SUNBUR	0	9	T	0	0	2	42.103755	-75.885339
615	8709		Up Milepost	615.00	0	10	E	0	0	2	42.101566	-75.876257
616	5363		Up Milepost	616.00	0	8	B	0	0	2	42.098712	-75.856977
617	5465		Up Milepost	617.00	0	8	T	0	0	2	42.091034	-75.840495
617	5294		Class Change	2.00	0	9	T	0	0	2	42.079246	-75.829232
617	5294		Posted Speed	20.00	0	9	T	0	0	2	42.079246	-75.829232
618	5305		Up Milepost	618.00	0	9	T	0	0	2	42.079220	-75.829206
619	5125		Up Milepost	619.00	0	16	T	0	0	2	42.067805	-75.818312
620	5298		Up Milepost	620.00	0	16	T	0	0	2	42.054676	-75.810943
620	1300		Class Change	3.00	0	18	T	0	0	2	42.051206	-75.809894
620	1300		Posted Speed	40.00	0	18	T	0	0	2	42.051206	-75.809894
620	1526		Track Change	0.00	0	19	T	0	0	5	42.050603	-75.809713
621	5293		Up Milepost	621.00	0	23	C	0	0	5	42.040605	-75.806417
621	4236		Class Change	1.00	0	9	T	0	0	5	42.029892	-75.800554
621	4236		Posted Speed	10.00	0	9	T	0	0	5	42.029892	-75.800554
621	5294		Class Change	3.00	0	13	T	0	0	5	42.027194	-75.799162
621	5294		Posted Speed	40.00	0	13	T	0	0	5	42.027194	-75.799162
622	5310		Up Milepost	622.00	0	13	T	0	0	5	42.027150	-75.799139
623	5296		Up Milepost	623.00	0	25	T	0	0	5	42.015336	-75.788423
624	5278		Up Milepost	624.00	0	29	T	0	0	5	42.006885	-75.772770
624	4194		State Line	PA	0	38	T	0	0	5	41.997915	-75.763766
625	5302		Up Milepost	625.00	0	38	C	0	0	5	41.995109	-75.762242
626	5308		Up Milepost	626.00	0	38	T	0	0	5	41.981470	-75.756546

Exception Report
Class Plus 1 Exception List Section
Milepost 215 to Milepost 305
Binghamton, NY to Harrisburg, PA

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
627	5282		Up Milepost	627.00	0	38	C	0	0	5	41.968823	-75.748604
628	5321		Up Milepost	628.00	0	37	T	0	0	5	41.954570	-75.745199
629	5289		Up Milepost	629.00	0	36	C	0	0	5	41.941632	-75.737171
630	5332		Up Milepost	630.00	0	30	C	0	0	5	41.927431	-75.733472
631	5314		Up Milepost	631.00	0	12	E	0	0	5	41.912928	-75.734437
632	5262		Up Milepost	632.00	0	36	C	0	0	5	41.898656	-75.732017
633	5304		Up Milepost	633.00	0	35	B	0	0	5	41.884342	-75.729019
634	5285		Up Milepost	634.00	0	36	C	0	0	5	41.870456	-75.731924
635	5306		Up Milepost	635.00	0	37	C	0	0	5	41.867469	-75.750556
636	5293		Up Milepost	636.00	0	37	C	0	0	5	41.857533	-75.763663
637	5300		Up Milepost	637.00	0	37	C	0	0	5	41.843985	-75.770392
638	5304		Up Milepost	638.00	0	38	C	0	0	5	41.830758	-75.776501
638	198	24	Gage Wide	57.68	4	38	C	3	4	5	41.830228	-75.776635
639	5303		Up Milepost	639.00	0	38	B	0	0	5	41.816542	-75.775727
640	5294		Up Milepost	640.00	0	39	T	0	0	5	41.802232	-75.774434
641	5300		Up Milepost	641.00	0	37	T	0	0	5	41.788204	-75.774180
642	5295		Up Milepost	642.00	0	34	E	0	0	5	41.774618	-75.767955
643	5422		Up Milepost	643.00	0	23	C	0	0	5	41.762289	-75.758669
643	506		Class Change	2.00	0	24	E	0	0	5	41.761067	-75.757804
643	506		Posted Speed	25.00	0	24	E	0	0	5	41.761067	-75.757804
643	978		Class Change	3.00	0	25	T	0	0	5	41.759888	-75.757104
643	978		Posted Speed	40.00	0	25	T	0	0	5	41.759888	-75.757104
644	5155		Up Milepost	644.00	0	38	T	0	0	5	41.748996	-75.753133
644	1579	27	Gage Narrow	55.87	3	38	T	0	4	5	41.744688	-75.752717
644	4420	28	Crosslevel	-1.68	7	38	T	3	4	5	41.736943	-75.751963
645	5312		Up Milepost	645.00	0	38	C	0	0	5	41.734507	-75.751981
646	5302		Up Milepost	646.00	0	38	T	0	0	5	41.722147	-75.761724
647	5282		Up Milepost	647.00	0	38	T	0	0	5	41.709502	-75.765339
648	5321		Up Milepost	648.00	0	39	T	0	0	5	41.696625	-75.767185
649	5289		Up Milepost	649.00	0	39	C	0	0	5	41.683221	-75.772060
650	5314		Up Milepost	650.00	0	38	E	0	0	5	41.669582	-75.778098
651	5297		Up Milepost	651.00	0	39	C	0	0	5	41.655255	-75.780395
652	5278		Up Milepost	652.00	0	38	C	0	0	5	41.641986	-75.779118
653	5316		Up Milepost	653.00	0	39	E	0	0	5	41.627749	-75.776091
654	5285		Up Milepost	654.00	0	34	T	0	0	5	41.615277	-75.783279
655	5268		Up Milepost	655.00	0	25	C	0	0	5	41.604536	-75.794834
655	1692		Class Change	2.00	0	25	C	0	0	5	41.600163	-75.793082
655	1692		Posted Speed	25.00	0	25	C	0	0	5	41.600163	-75.793082
656	5396		Up Milepost	656.00	0	25	T	0	0	5	41.591783	-75.785416

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
656	139		Class Change	3.00	0	25	T	0	0	5	41.591567	-75.784975
656	139		Posted Speed	40.00	0	25	T	0	0	5	41.591567	-75.784975
657	5234		Up Milepost	657.00	0	37	T	0	0	5	41.581779	-75.772206
658	5312		Up Milepost	658.00	0	34	T	0	0	5	41.574203	-75.755707
659	5268		Up Milepost	659.00	0	39	T	0	0	5	41.563110	-75.743931
660	5309		Up Milepost	660.00	0	39	C	0	0	5	41.550781	-75.733698
661	5285		Up Milepost	661.00	0	37	T	0	0	5	41.536703	-75.729851
662	5218		Up Milepost	662.00	0	37	T	0	0	5	41.523635	-75.723721
662	367	31	Crosslevel	-1.74	20	38	T	3	4	5	41.522856	-75.722880
662	675	32	Crosslevel	-1.37	6	39	T	3	4	5	41.522205	-75.722171
662	1341	33	Crosslevel	-1.50	17	40	T	3	4	5	41.520803	-75.720628
663	5408		Up Milepost	663.00	0	37	T	0	0	5	41.511105	-75.714215
664	5289		Up Milepost	664.00	0	31	T	0	0	5	41.497554	-75.708538
664	2371		Posted Speed	35.00	0	30	T	0	0	5	41.492241	-75.703605
665	5290		Up Milepost	665.00	0	32	T	0	0	5	41.486095	-75.696855
666	5340		Up Milepost	666.00	0	33	B	0	0	5	41.474700	-75.685282
667	5256		Up Milepost	667.00	0	34	B	0	0	5	41.466646	-75.670226
667	261	34	Gage Wide	57.64	3	34	C	3	4	5	41.466105	-75.669612
668	5383		Up Milepost	668.00	0	34	E	0	0	5	41.453244	-75.666180
668	4484	35	L Align 62	1.73	8	31	C	3	4	5	41.442287	-75.672023
668	4491	36	R Align 62	1.79	14	31	C	2	4	5	41.442270	-75.672011
668	4542	38	R Align 62	-1.84	17	30	C	2	4	5	41.442150	-75.671917
668	4545	37	L Align 62	-1.77	10	30	C	2	4	5	41.442143	-75.671911
669	5305		Up Milepost	669.00	0	31	B	0	0	5	41.440690	-75.669953
670	4882		Up Milepost	670.00	0	28	B	0	0	5	41.428234	-75.671427
670	4836		Class Change	2.00	0	19	C	0	0	5	41.415217	-75.673406
670	4836		Posted Speed	20.00	0	19	C	0	0	5	41.415217	-75.673406
671	5545		Up Milepost	671.00	0	19	B	0	0	5	41.413279	-75.673614
672	5945		Up Milepost	672.00	0	17	T	0	0	5	41.398988	-75.679739
673	5351		Up Milepost	673.00	0	18	T	0	0	5	41.389845	-75.693506
674	5100		Up Milepost	674.00	0	20	B	0	0	5	41.382717	-75.708386
674	3104		Class Change	3.00	0	17	E	0	0	5	41.376641	-75.712728
674	3104		Posted Speed	30.00	0	17	E	0	0	5	41.376641	-75.712728
675	3173		Up Milepost	675.00	0	17	T	0	0	5	41.376625	-75.712981
676	5418		Up Milepost	676.00	0	28	B	0	0	5	41.366322	-75.722546
677	5342		Up Milepost	677.00	0	29	T	0	0	5	41.354363	-75.729629
677	2324	47	Warp 62	1.88	51	30	B	3	4	5	41.352792	-75.737772
677	2324	46	Twist 31ft*	-1.56	25	30	B	2	4	5	41.352792	-75.737772
677	4513	49	Twist 31ft*	1.45	20	30	B	2	4	5	41.347960	-75.740101

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
678	5260		Up Milepost	678.00	0	28	E	0	0	5	41.345972	-75.740429
679	5228		Up Milepost	679.00	0	27	B	0	0	5	41.332511	-75.745685
679	1419	55	Twist 31ft*	-1.12	2	27	E	3	4	5	41.328768	-75.746129
680	5356		Up Milepost	680.00	0	28	T	0	0	5	41.322465	-75.756932
680	2772	58	L Align 62	1.86	12	26	B	2	4	5	41.318826	-75.765751
680	2774	57	R Align 62	1.71	8	26	B	3	4	5	41.318823	-75.765757
681	5390		Up Milepost	681.00	0	25	C	0	0	5	41.317685	-75.775052
681	1592		Class Change	2.00	0	19	T	0	0	5	41.314525	-75.778981
681	1592		Posted Speed	25.00	0	19	T	0	0	5	41.314525	-75.778981
681	4297	59	Crosslevel	-1.89	5	24	T	2	3	5	41.308093	-75.777438
682	5207		Up Milepost	682.00	0	24	T	0	0	5	41.305614	-75.777765
683	5286		Up Milepost	683.00	0	27	T	0	0	5	41.296196	-75.790843
684	5215		Up Milepost	684.00	0	24	E	0	0	5	41.291353	-75.807843
685	5428		Up Milepost	685.00	0	24	B	0	0	5	41.277873	-75.813814
686	5603		Up Milepost	686.00	0	25	B	0	0	5	41.273392	-75.832367
687	6635		Up Milepost	687.00	0	11	C	0	0	5	41.265876	-75.852991
687	3730	61	R Runoff*	3.28	31	27	T	1	3	5	41.261153	-75.863843
687	3956	63	L Align 62	-1.92	12	28	B	2	3	5	41.260901	-75.864587
687	3958	62	R Align 62	-1.93	6	28	B	2	3	5	41.260899	-75.864594
687	4769	65	Twist 31ft*	1.93	9	21	B	1	3	5	41.260730	-75.867492
688	5465		Up Milepost	688.00	0	20	T	0	0	5	41.261346	-75.869851
688	1096	66	R Align 62	-1.86	1	23	B	2	3	5	41.262711	-75.873390
689	6158		Up Milepost	689.00	0	21	T	0	0	5	41.256468	-75.889103
690	4278		Up Milepost	690.00	0	24	C	0	0	5	41.249875	-75.901945
690	5211	67	Crosslevel	1.98	8	25	T	2	3	5	41.239669	-75.914849
690	5398	68	Crosslevel	2.02	2	25	T	1	3	5	41.239260	-75.915254
691	5511		Up Milepost	691.00	0	25	T	0	0	5	41.239011	-75.915500
692	5213		Up Milepost	692.00	0	24	T	0	0	5	41.231145	-75.930668
693	5177		Up Milepost	693.00	0	23	C	0	0	5	41.224674	-75.947247
693	1988		Class Change	3.00	0	23	C	0	0	5	41.222884	-75.953960
693	1988		Posted Speed	40.00	0	23	C	0	0	5	41.222884	-75.953960
693	2136	70	Twist 31ft*	1.79	24	23	E	1	4	5	41.222590	-75.954317
693	2174	72	Warp 62	2.17	56	23	E	2	4	5	41.222512	-75.954403
695	10622		Up Milepost	695.00	0	37	E	0	0	5	41.210529	-75.980122
695	739	74	Twist 31ft*	1.14	1	37	S	3	4	5	41.209487	-75.982413
696	5421		Up Milepost	696.00	0	37	C	0	0	5	41.206940	-75.998853
697	5417		Up Milepost	697.00	0	37	E	0	0	5	41.215910	-76.013932
697	287	77	Twist 31ft*	-1.65	8	37	B	2	4	5	41.216462	-76.014671
697	302	79	Warp 62	2.11	61	38	B	2	4	5	41.216490	-76.014711

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
698	5204		Up Milepost	698.00	0	39	T	0	0	5	41.215612	-76.030226
699	5297		Up Milepost	699.00	0	38	C	0	0	5	41.207597	-76.046144
699	712	80	Crosslevel	1.39	6	38	T	3	4	5	41.206928	-76.048564
700	5216		Up Milepost	700.00	0	38	C	0	0	5	41.201899	-76.063357
701	5347		Up Milepost	701.00	0	38	T	0	0	5	41.192280	-76.077820
701	137	81	Gage Wide	57.62	1	38	T	3	4	5	41.191998	-76.078146
702	5184		Up Milepost	702.00	0	38	E	0	0	5	41.182050	-76.090736
702	3784	84	Crosslevel	1.46	6	37	T	3	4	5	41.177373	-76.102809
703	5432		Up Milepost	703.00	0	38	T	0	0	5	41.175459	-76.108208
704	5228		Up Milepost	704.00	0	34	T	0	0	5	41.168002	-76.124314
704	2589	85	Twist 31ft*	1.12	1	32	E	3	4	5	41.163748	-76.131755
704	5317		Posted Speed	35.00	0	33	E	0	0	5	41.158075	-76.138085
705	5351		Up Milepost	705.00	0	33	E	0	0	5	41.157989	-76.138139
705	1811	86	Twist 31ft*	1.38	4	33	B	2	4	5	41.153817	-76.141648
706	5141		Up Milepost	706.00	0	33	B	0	0	5	41.145498	-76.144166
706	548		Posted Speed	40.00	0	34	T	0	0	5	41.144167	-76.143277
707	5399		Up Milepost	707.00	0	39	C	0	0	5	41.131982	-76.136647
708	5342		Up Milepost	708.00	0	38	C	0	0	5	41.118162	-76.130769
709	5284		Up Milepost	709.00	0	36	C	0	0	5	41.103981	-76.127594
710	5356		Up Milepost	710.00	0	39	T	0	0	5	41.089849	-76.124484
711	5340		Up Milepost	711.00	0	38	C	0	0	5	41.076074	-76.129494
712	5308		Up Milepost	712.00	0	37	C	0	0	5	41.065702	-76.142700
713	5311		Up Milepost	713.00	0	39	E	0	0	5	41.061258	-76.160801
714	5313		Up Milepost	714.00	0	30	C	0	0	5	41.061856	-76.179955
714	3283	87	Crosslevel	1.38	2	21	T	3	4	5	41.060366	-76.191644
714	5698	88	Crosslevel	1.46	5	13	T	3	4	5	41.059213	-76.200233
714	5744	90	Crosslevel	1.91	48	13	T	2	4	5	41.059193	-76.200397
714	5790	91	Crosslevel	1.80	40	13	T	2	4	5	41.059171	-76.200561
714	5898	92	Crosslevel	1.53	10	13	T	3	4	5	41.059119	-76.200944
714	5919	93	Crosslevel	1.52	13	13	T	3	4	5	41.059109	-76.201018
714	5944	94	Crosslevel	1.46	6	13	T	3	4	5	41.059098	-76.201107
714	5998	95	Crosslevel	1.42	5	13	T	3	4	5	41.059072	-76.201299
714	6050	96	Crosslevel	1.67	21	13	T	3	4	5	41.059047	-76.201485
714	6093	97	Crosslevel	1.51	26	13	T	3	4	5	41.059025	-76.201638
714	6105	98	Crosslevel	1.37	3	13	T	3	4	5	41.059019	-76.201681
714	6120	99	Crosslevel	1.52	14	13	T	3	4	5	41.059012	-76.201735
714	6142	100	Crosslevel	1.38	4	13	T	3	4	5	41.059002	-76.201813
714	6155	101	Crosslevel	1.38	2	13	T	3	4	5	41.058996	-76.201860
714	6176	102	Crosslevel	1.36	1	13	T	3	4	5	41.058986	-76.201935

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714	6197	103	Crosslevel	1.40	8	13	T	3	4	5	41.058977	-76.202011
716	10551		Up Milepost	716.00	0	24	T	0	0	5	41.051171	-76.213114
716	2339	104	L Runoff*	1.80	31	23	T	3	4	5	41.047504	-76.220039
716	3342		Posted Speed	35.00	0	22	T	0	0	5	41.045913	-76.222990
716	4432		Posted Speed	40.00	0	22	E	0	0	5	41.044780	-76.226533
716	4448	105	Twist 31ft*	-1.13	4	22	E	3	4	5	41.044779	-76.226591
717	5315		Up Milepost	717.00	0	24	T	0	0	5	41.044568	-76.229714
718	5325		Up Milepost	718.00	0	23	C	0	0	5	41.040274	-76.247946
719	5331		Up Milepost	719.00	0	24	T	0	0	5	41.036785	-76.266276
720	5314		Up Milepost	720.00	0	38	C	0	0	5	41.037394	-76.285451
721	5260		Up Milepost	721.00	0	36	T	0	0	5	41.035863	-76.304162
722	5381		Up Milepost	722.00	0	37	T	0	0	5	41.027604	-76.320115
723	5309		Up Milepost	723.00	0	38	T	0	0	5	41.020261	-76.336378
724	5330		Up Milepost	724.00	0	37	C	0	0	5	41.016384	-76.354918
725	5340		Up Milepost	725.00	0	38	B	0	0	5	41.010948	-76.372812
726	5532		Up Milepost	726.00	0	38	C	0	0	5	41.006288	-76.391795
727	5055		Up Milepost	727.00	0	32	E	0	0	5	41.000954	-76.408603
728	5389		Up Milepost	728.00	0	25	T	0	0	5	40.994998	-76.426387
728	1783		Class Change	2.00	0	23	C	0	0	5	40.993068	-76.432297
728	1783		Posted Speed	25.00	0	23	C	0	0	5	40.993068	-76.432297
728	3408		Class Change	3.00	0	25	T	0	0	5	40.991087	-76.437554
728	3408		Posted Speed	40.00	0	25	T	0	0	5	40.991087	-76.437554
729	5251		Up Milepost	729.00	0	28	E	0	0	5	40.988622	-76.443347
730	5315		Up Milepost	730.00	0	38	E	0	0	5	40.980172	-76.458755
731	5312		Up Milepost	731.00	0	39	E	0	0	5	40.967598	-76.464786
732	5280		Up Milepost	732.00	0	38	C	0	0	5	40.953346	-76.465431
733	5158		Up Milepost	733.00	0	39	C	0	0	5	40.948792	-76.481759
734	5480		Up Milepost	734.00	0	39	C	0	0	5	40.948204	-76.501355
735	5320		Up Milepost	735.00	0	38	T	0	0	5	40.941477	-76.518291
736	5285		Up Milepost	736.00	0	39	C	0	0	5	40.935936	-76.535864
737	5320		Up Milepost	737.00	0	40	T	0	0	5	40.936518	-76.554844
738	5291		Up Milepost	738.00	0	40	E	0	0	5	40.938061	-76.573721
739	5238		Up Milepost	739.00	0	39	C	0	0	5	40.938096	-76.592598
739	2963	116	Gage Wide	57.63	2	38	C	3	4	5	40.940375	-76.602816
740	5408		Up Milepost	740.00	0	38	B	0	0	5	40.945167	-76.608873
741	5298		Up Milepost	741.00	0	38	T	0	0	5	40.955182	-76.622591
742	5276		Up Milepost	742.00	0	38	T	0	0	5	40.960110	-76.639181
743	5318		Up Milepost	743.00	0	39	E	0	0	5	40.954281	-76.656279
744	5312		Up Milepost	744.00	0	38	C	0	0	5	40.942374	-76.667100

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745	5309		Up Milepost	745.00	0	37	T	0	0	5	40.933109	-76.681656
746	5310		Up Milepost	746.00	0	39	E	0	0	5	40.928154	-76.699605
746	4276	118	Twist 31ft*	1.17	3	38	E	3	4	5	40.922761	-76.712907
747	5345		Up Milepost	747.00	0	37	E	0	0	5	40.920350	-76.715057
748	5244		Up Milepost	748.00	0	35	T	0	0	5	40.911470	-76.729805
748	4074	119	Crosslevel	1.52	16	33	T	3	4	5	40.907754	-76.743560
748	4102	120	Crosslevel	1.50	11	33	T	3	4	5	40.907735	-76.743658
748	5315		Posted Speed	35.00	0	32	C	0	0	5	40.906783	-76.747845
749	5330		Up Milepost	749.00	0	32	C	0	0	5	40.906768	-76.747898
749	82	121	Rev Elevation	1.39	3	32	C	3	4	5	40.906688	-76.748174
749	96	122	Rev Elevation	1.49	13	32	C	3	4	5	40.906674	-76.748221
749	153	123	Rev Elevation	1.38	7	32	C	3	4	5	40.906617	-76.748413
749	189	124	Rev Elevation	1.58	9	32	E	3	4	5	40.906580	-76.748533
750	5316		Up Milepost	750.00	0	19	T	0	0	5	40.899482	-76.764144
750	224		Class Change	2.00	0	18	B	0	0	5	40.899027	-76.764690
750	224		Posted Speed	20.00	0	18	B	0	0	5	40.899027	-76.764690
750	5316		Class Change	1.00	0	10	C	0	0	5	40.887276	-76.774487
750	5316		Posted Speed	10.00	0	10	C	0	0	5	40.887276	-76.774487
751	5329		Up Milepost	751.00	0	10	C	0	0	5	40.887246	-76.774518
752	4976		Up Milepost	752.00	0	1	E	0	0	5	40.877308	-76.786330
752	132		Subdivision	BUFFAL	0	6	E	0	0	5	40.876951	-76.786389
752	308		Class Change	3.00	0	10	E	0	0	5	40.876471	-76.786381
752	308		Posted Speed	30.00	0	10	E	0	0	5	40.876471	-76.786381
258	2901		Up Milepost	258.00	0	18	T	0	0	5	40.869679	-76.788622
258	696		Class Change	2.00	0	17	T	0	0	5	40.867918	-76.789569
258	696		Posted Speed	20.00	0	17	T	0	0	5	40.867918	-76.789569
258	4788		Class Change	4.00	0	18	T	0	0	5	40.857557	-76.795133
258	4788		Posted Speed	50.00	0	18	T	0	0	5	40.857557	-76.795133
258	4825	129	L Prof 62	-1.43	5	18	T	4	5	5	40.857463	-76.795183
259	6429		Up Milepost	259.00	0	21	T	0	0	5	40.853396	-76.797359
259	3463	133	R Align 62	0.74	2	35	C	4	5	5	40.844643	-76.802112
259	3465	134	L Align 62	0.97	17	35	C	4	5	5	40.844638	-76.802115
260	5297		Up Milepost	260.00	0	39	B	0	0	5	40.840613	-76.805977
261	5290		Up Milepost	261.00	0	36	B	0	0	5	40.828963	-76.816966
262	5332		Up Milepost	262.00	0	38	T	0	0	5	40.818216	-76.829922
262	509		Class Change	3.00	0	38	T	0	0	5	40.817296	-76.831296
262	509		Posted Speed	40.00	0	38	T	0	0	5	40.817296	-76.831296
262	2033		Class Change	4.00	0	38	T	0	0	5	40.813923	-76.834457
262	2033		Posted Speed	50.00	0	38	T	0	0	5	40.813923	-76.834457

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
262	4023		Class Change	3.00	0	38	T	0	0	5	40.808781	-76.836375
262	4023		Posted Speed	40.00	0	38	T	0	0	5	40.808781	-76.836375
262	4582		Class Change	4.00	0	37	T	0	0	5	40.807257	-76.836515
262	4582		Posted Speed	50.00	0	37	T	0	0	5	40.807257	-76.836515
262	6733	136	R Align 31	0.66	2	37	C	4	5	5	40.801707	-76.838814
262	6733	137	R Align 62	1.10	19	37	C	4	5	5	40.801707	-76.838814
262	6743	138	L Align 62	0.92	17	37	C	4	5	5	40.801684	-76.838832
262	8820		Class Change	3.00	0	39	B	0	0	5	40.796880	-76.842811
262	8820		Posted Speed	40.00	0	39	B	0	0	5	40.796880	-76.842811
262	9756		Class Change	4.00	0	41	T	0	0	5	40.794388	-76.843564
262	9756		Posted Speed	50.00	0	41	T	0	0	5	40.794388	-76.843564
264	10590		Up Milepost	264.00	0	43	T	0	0	5	40.792138	-76.844073
265	5267		Up Milepost	265.00	0	48	T	0	0	5	40.778258	-76.847963
265	1438	139	Twist 31ft*	0.98	12	47	E	4	5	5	40.774429	-76.846962
266	5315		Up Milepost	266.00	0	46	B	0	0	5	40.764549	-76.841949
266	1630	140	L Align 62	-0.95	18	47	T	4	5	5	40.760217	-76.840582
266	2301	141	L Align 62	0.88	4	47	T	4	5	5	40.758409	-76.840161
266	2301	142	R Align 62	0.94	5	47	T	4	5	5	40.758409	-76.840161
268	10588		Up Milepost	268.00	0	48	T	0	0	5	40.736009	-76.839647
269	5034		Up Milepost	269.00	0	47	T	0	0	5	40.722287	-76.839534
270	5582		Up Milepost	270.00	0	47	T	0	0	5	40.707615	-76.844629
271	5294		Up Milepost	271.00	0	48	C	0	0	5	40.695554	-76.855007
272	5311		Up Milepost	272.00	0	49	T	0	0	5	40.683381	-76.865415
272	2825	146	R Align 31	-0.63	2	47	C	4	5	5	40.677342	-76.871633
273	5289		Up Milepost	273.00	0	48	T	0	0	5	40.673858	-76.879203
274	5296		Up Milepost	274.00	0	49	B	0	0	5	40.664898	-76.894079
275	5313		Up Milepost	275.00	0	48	T	0	0	5	40.652836	-76.904383
276	5309		Up Milepost	276.00	0	43	T	0	0	5	40.642692	-76.917840
277	5287		Up Milepost	277.00	0	39	T	0	0	5	40.632831	-76.931582
278	5327		Up Milepost	278.00	0	38	T	0	0	5	40.619290	-76.934757
278	1225	147	R Align 62	0.85	12	38	C	4	5	5	40.615991	-76.935406
278	1227	148	L Align 62	0.86	13	38	C	4	5	5	40.615986	-76.935406
278	1273	149	R Align 62	-0.87	16	38	C	4	5	5	40.615861	-76.935391
278	1279	150	L Align 62	-0.84	14	38	C	4	5	5	40.615844	-76.935388
278	1452	151	Twist 31ft*	0.91	5	38	E	4	5	5	40.615377	-76.935295
278	2768		Class Change	3.00	0	38	B	0	0	5	40.611873	-76.934227
278	2768		Posted Speed	40.00	0	38	B	0	0	5	40.611873	-76.934227
278	4501		Class Change	4.00	0	40	T	0	0	5	40.607218	-76.934652
278	4501		Posted Speed	50.00	0	40	T	0	0	5	40.607218	-76.934652

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
279	5310		Up Milepost	279.00	0	42	T	0	0	5	40.605063	-76.935337
279	2714	152	R Align 31	0.66	5	48	C	4	5	5	40.597884	-76.937782
279	2715	153	R Align 62	0.79	6	48	C	4	5	5	40.597882	-76.937783
280	5299		Up Milepost	280.00	0	49	C	0	0	5	40.591479	-76.941671
281	5427		Up Milepost	281.00	0	49	T	0	0	5	40.581394	-76.955652
282	5237		Up Milepost	282.00	0	48	B	0	0	5	40.573768	-76.971551
283	5384		Up Milepost	283.00	0	46	T	0	0	5	40.562012	-76.974350
283	3813	154	L Align 62	-1.07	7	42	T	4	5	5	40.553807	-76.966043
283	3819	155	L Align 62	-1.06	4	42	T	4	5	5	40.553793	-76.966032
284	5269		Up Milepost	284.00	0	40	E	0	0	5	40.550203	-76.963877
284	1327	157	R Align 62	1.03	9	38	T	4	5	5	40.546619	-76.963132
284	1328	156	L Align 62	1.09	8	38	T	4	5	5	40.546616	-76.963131
284	4929		Class Change	3.00	0	36	T	0	0	5	40.536789	-76.963170
284	4929		Posted Speed	40.00	0	36	T	0	0	5	40.536789	-76.963170
285	5347		Up Milepost	285.00	0	36	B	0	0	5	40.535644	-76.963249
285	1241		Class Change	4.00	0	37	T	0	0	5	40.532437	-76.964652
285	1241		Posted Speed	50.00	0	37	T	0	0	5	40.532437	-76.964652
286	5323		Up Milepost	286.00	0	41	C	0	0	5	40.522813	-76.971858
286	2340	158	Twist 31ft*	0.90	5	43	E	4	5	5	40.516691	-76.970786
287	5318		Up Milepost	287.00	0	45	C	0	0	5	40.510056	-76.964615
288	5317		Up Milepost	288.00	0	48	B	0	0	5	40.501875	-76.948893
289	5306		Up Milepost	289.00	0	45	T	0	0	5	40.490984	-76.936594
289	2871		Posted Speed	45.00	0	42	B	0	0	5	40.483691	-76.932815
289	3505	159	L Align 62	-0.97	16	42	C	4	5	5	40.482004	-76.932310
289	3508	160	R Align 62	-1.06	22	42	C	4	5	5	40.481996	-76.932310
289	3543	162	L Align 62	1.42	27	42	C	4	5	5	40.481900	-76.932303
289	3543	161	R Align 62	1.46	24	42	C	4	5	5	40.481900	-76.932303
289	3953		Posted Speed	50.00	0	42	E	0	0	5	40.480781	-76.932352
290	5285		Up Milepost	290.00	0	43	T	0	0	5	40.477156	-76.932763
292	10486		Up Milepost	292.00	0	49	C	0	0	5	40.452718	-76.948942
293	5587		Up Milepost	293.00	0	48	T	0	0	5	40.444283	-76.965612
293	4947	163	Twist 31ft*	-0.94	11	47	B	4	5	5	40.434832	-76.977970
294	5125		Up Milepost	294.00	0	47	C	0	0	5	40.434396	-76.978260
294	3927	164	R Align 62	-1.05	5	49	T	4	5	5	40.423764	-76.979265
295	5308		Up Milepost	295.00	0	48	B	0	0	5	40.419985	-76.979032
296	5291		Up Milepost	296.00	0	48	T	0	0	5	40.407178	-76.986760
297	5294		Up Milepost	297.00	0	49	E	0	0	5	40.397987	-77.001180
297	2987	165	L Align 31	-0.61	1	47	B	4	5	5	40.394737	-77.010981
298	5252		Up Milepost	298.00	0	47	C	0	0	5	40.391236	-77.017553

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
299	5248		Up Milepost	299.00	0	49	T	0	0	5	40.379864	-77.011156
300	5338		Up Milepost	300.00	0	49	T	0	0	5	40.372524	-76.994659
300	3189	166	L Align 62	0.74	1	48	B	4	5	5	40.368613	-76.984501
301	5319		Up Milepost	301.00	0	45	B	0	0	5	40.367569	-76.977026
302	5318		Up Milepost	302.00	0	36	T	0	0	5	40.369915	-76.958340
302	5100		Class Change	2.00	0	18	B	0	0	5	40.368000	-76.940616
302	5100		Posted Speed	20.00	0	18	B	0	0	5	40.368000	-76.940616
302	5622		Track Change	0.00	0	19	T	0	0	6	40.367411	-76.938914
304	10303		Up Milepost	304.00	0	19	C	0	0	6	40.360561	-76.925232
305	5255		Up Milepost	305.00	0	18	T	0	0	6	40.350432	-76.912705
305	4298		Class Change	1.00	0	7	T	0	0	6	40.341540	-76.904756
305	4298		Posted Speed	10.00	0	7	T	0	0	6	40.341540	-76.904756

Notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Rail Impact Values are unitless; indicating a location with a large vertical axle acceleration

Rail Cant Exceptions values indicate degrees.

(RSA) indicates possible Rail Seat Abrasion. The following fields are irrelevant for Cant Exceptions: LC, PC

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		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot			
MP	FT	EXC	FT	Drop	EXC	FT	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	Cls	Cls	Trk
638	5304	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5	
644	5155	-	-	-	1	3	-	-	-	1	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	4	5	
662	5218	-	-	-	-	-	-	-	-	3	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5	
667	5256	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5	
668	5383	-	-	-	-	-	4	49	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	5	
677	5342	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	51	-	2	45	2	-	2	4	5
679	5228	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	3	4	5
680	5356	-	-	-	-	-	2	20	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	5	
681	1592	-	-	-	-	-	-	-	-	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	5	
687	6635	-	-	-	-	-	2	18	-	-	-	-	-	-	-	-	-	-	1	31	1	-	-	-	1	9	1	-	1	3	5
688	5465	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	5	
690	4278	-	-	-	-	-	-	-	-	2	10	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	5	
693	1988	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	56	1	1	24	1	-	1	4	5
695	10622	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	3	4	5
697	5417	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	61	1	1	8	1	-	2	4	5
699	5297	-	-	-	-	-	-	-	-	1	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5
701	5347	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5
702	5184	-	-	-	-	-	-	-	-	1	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5
704	5228	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	3	4	5
705	5351	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	1	-	2	4	5
714	5313	-	-	-	-	-	-	-	-	16	208	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	5
716	10551	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	31	-	-	-	-	1	4	-	-	3	4	5
739	5238	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5
746	5310	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	3	4	5
748	5244	-	-	-	-	-	-	-	-	2	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5
749	5330	-	-	-	-	-	-	-	-	4	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5
258	4788	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5	-	-	-	-	-	-	-	-	-	-	-	4	5	5
259	6429	-	-	-	-	-	2	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5

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		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl		Tot	Lim	Pst
MP	FT	Exc	FT	Drop	Exc	FT	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	Cls	Cls	Trk
262	4582	-	-	-	-	-	3	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
265	5267	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	12	-	-	4	5	5
266	5315	-	-	-	-	-	3	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
272	5311	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
278	5327	-	-	-	-	-	4	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5	-	-	4	5	5
279	5310	-	-	-	-	-	2	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
283	5384	-	-	-	-	-	2	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
284	5269	-	-	-	-	-	2	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
286	5323	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5	-	-	4	5	5
289	5306	-	-	-	-	-	4	89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
293	5587	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	11	-	-	4	5	5
294	5125	-	-	-	-	-	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
297	5294	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
300	5338	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
		4	10	-	1	3	35	364	4	31	344	3	-	-	-	1	5	-	2	62	1	3	168	2	15	134	6	-			

Total Miles: 188.10
Exceptions per 100 Miles: 48.91
CY18 National Average Exceptions per 100 miles: 5.0

Exception Report
Alignment 62 MCO Stations
Milepost 215 to Milepost 305
Binghamton, NY to Harrisburg, PA

Page 1 of 1
Run Date: 04/22/2019
Run ID: 2019042201

	MP	FT	Parameter		Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
	680	2772	L Align 62		1.86	1	26	B	2	3	5	41.318826	-75.765751
	MP	FT	LAlign62	LAlignMCO	RAlign62	RAlignMCO	Curve		Xlevel		Gage		
1	680	2710	-1.0	1.62			2.48		0.89		56.59		
2	680	2726	-0.98	1.97			2.8		0.76		56.53		
3	680	2741	-0.09	2.99			3.09		1.1		56.54		
4	680	2757	1.22	4.36			3.35		0.73		56.71		
5	680	2772	1.86	5.12			3.52		0.4		56.74		
6	680	2787	0.88	4.38			3.66		0.72		56.59		
7	680	2803	-0.74	3.03			3.75		0.74		56.64		
8	680	2818	-1.19	2.71			3.77		0.63		56.69		
9	680	2834	-0.58	3.21			3.72		0.75		56.62		
AVG				3.27									

DOTX 219 Geometry Car

United States Department of Transportation

AUTOMATED TRACK INSPECTION PROGRAM

TRACK GEOMETRY INSPECTION REPORT

Philadelphia, PA to Enola, PA

Railroad: NORFOLK SOUTHERN CORPORATION (NS)

Survey Number: 2005

Mile Post 5 to Mile Post 999



Prepared for:

United States Department of Transportation
Federal Railroad Administration
Office of Safety
Washington, D.C.

Prepared by:

ENSCO, Inc.
5400 Port Royal Rd
Springfield, VA 22151



Testing Cert. 2411.01

Approved By:

Survey Director:

CLAYTON SHANK

Signature

Date

Under the U.S. Department of Transportation, Federal Railroad Administration (FRA), Office of Safety Assurance and Compliance, Automated Track Inspection Program and in accordance with 49 CFR 213 Federal Track Safety Standards, this Track Geometry Inspection Report provides a list of exceptions that relate only to the time and date the track was inspected and the required remedial action taken. This compliance report is offered only to the track owner and is not to be reproduced to others in whole or part without the expressed written consent of the FRA and the track owner. FRA requests any reprinting be labeled as a copy of the original.

NOTES

An Automated Track Inspection Program (ATIP) Track Geometry Inspection Report (TGIR) is generated for each ATIP survey. The TGIR summarizes the data collected and can be used in conjunction with the strip chart. The TGIR is generated electronically onboard the car and hard copies are distributed as follows:

1. One (1) copy is provided to onboard railroad representative, as requested
2. One (1) copy is provided to onboard FRA Inspector, as requested
3. One (1) copy is archived for FRA management

Following ATIP Compliance survey operations, electronic copies of TGIRs are distributed via email, to a list of recipients designated by FRA and railroad management.

The TGIR may consist of ten (10) parts;

1. Cover,
2. Notes,
3. Exception List,
4. Curve Analysis,
5. Exception Summary,
6. Track Quality Index (TQI),
7. GRMS Exception List (if equipped),
8. Class+1 (C+1) Exception List,
9. C+1 Exception Summary,
10. Alinement MCO worksheet.

Track measurement sample frequency is once per foot.

Exceptions may not be reported for Alinement and Profile parameters when ATIP car speed is less than fifteen (15) and five (5) miles per hour, respectively.

Exception List symbols/notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49CFR 213.57(b).

Rail Impact Values are unit-less; indicating a location with a large vertical axle acceleration.

Rail Cant Exception denoted with (RSA) indicates possible Rail Seat Abrasion.

The following fields are not applicable for Limited Speed, Ride Quality [in classes 1-5], and Rail Cant:

Limited Class (LC); Posted Class (PC).

All Exception Parameter values are reported in inches, except for the following:

- Limiting Speed (Vmax) expressed in: MPH
- Ride Quality; Carbody Lateral, Carbody Vertical, Truck Lateral expressed in: g (gravitational acceleration)
- Rail Cant; Left (L) and Right (R), NEG[ative] and POS[itive] expressed in: angular degrees (°)

For Alinement exceptions: Negative (-) values indicate rail shifting to the right and Positive (+) values indicate rail shifting to the left, referencing direction of ATIP car travel during testing.

Alinement exceptions reported in turnout paths are considered Federal Track Safety Standard Advisory.

For Rail Cant exceptions: Negative (-) values indicate an outward shift in the rail angle, and Positive (+) values indicate an inward shift in the rail angle. Rail Cant exceptions have a minimum length of 15 feet.

A complete description of the information provided in the TGIR is available at

<https://www.fra.dot.gov/eLib/Details/L04545>

ATIP survey exceptions are available for review the next business day, and ATIP track measurement foot by foot data is available the following week at: https://tdms.fra.dot.gov/tdms_lite

Exception Report
Exception List Section
Milepost 5 to Milepost 999
Philadelphia, PA to Enola, PA

Page 1 of 6
Run Date: 11/08/2019
Run ID: 2019110801

MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	144		Track Change	0.00	0	8	C	0	0	5	40.006302	-75.193964
0	144		Posted Speed	50.00	0	8	C	0	0	5	40.006302	-75.193964
0	144		State Line	PA	0	8	C	0	0	5	40.006302	-75.193964
0	145		Railroad	NS -	0	8	C	0	0	5	40.006305	-75.193966
0	146		Subdivision	HARRIS	0	8	E	0	0	5	40.006305	-75.193970
0	179		Class Change	3.00	0	9	E	0	0	5	40.006312	-75.194089
0	179		Posted Speed	30.00	0	9	E	0	0	5	40.006312	-75.194089
0	181		Track Change	0.00	0	9	E	0	0	1	40.006313	-75.194097
5	294		Up Milepost	5.00	0	12	E	0	0	1	40.006366	-75.194509
6	5128		Up Milepost	6.00	0	27	T	0	0	1	40.009674	-75.204242
7	4765		Up Milepost	7.00	0	27	T	0	0	1	40.018045	-75.216905
8	5781		Up Milepost	8.00	0	27	T	0	0	1	40.027438	-75.232779
8	3238	4	L Align 62	-1.93	8	28	E	2	3	1	40.033223	-75.241434
8	3421		Track Change	0.00	0	29	C	0	0	5	40.033586	-75.241884
8	5091		Posted Speed	40.00	0	26	C	0	0	5	40.036985	-75.245924
9	5334		Up Milepost	9.00	0	27	C	0	0	5	40.037499	-75.246475
9	1992		Track Change	0.00	0	27	E	0	0	1	40.041623	-75.250970
10	5267		Up Milepost	10.00	0	36	B	0	0	1	40.047691	-75.259497
11	5442		Up Milepost	11.00	0	35	E	0	0	1	40.059380	-75.271450
12	5047		Up Milepost	12.00	0	34	C	0	0	1	40.071062	-75.280926
13	5126		Up Milepost	13.00	0	36	T	0	0	1	40.069128	-75.297962
14	5296		Up Milepost	14.00	0	35	T	0	0	1	40.072632	-75.314882
15	5423		Up Milepost	15.00	0	33	T	0	0	1	40.085834	-75.322094
16	5400		Up Milepost	16.00	0	27	T	0	0	1	40.100408	-75.325003
17	4684		Up Milepost	17.00	0	20	T	0	0	1	40.105904	-75.338274
18	5902		Up Milepost	18.00	0	18	T	0	0	1	40.110844	-75.357861
18	303		Class Change	4.00	0	19	T	0	0	1	40.111134	-75.358872
18	303		Posted Speed	50.00	0	19	T	0	0	1	40.111134	-75.358872
19	5354		Up Milepost	19.00	0	14	C	0	0	1	40.114861	-75.376172
20	5388		Up Milepost	20.00	0	17	C	0	0	1	40.115621	-75.395293
21	5367		Up Milepost	21.00	0	42	T	0	0	1	40.108864	-75.412014
22	5380		Up Milepost	22.00	0	47	T	0	0	1	40.107205	-75.430602
23	5322		Up Milepost	23.00	0	47	C	0	0	1	40.106660	-75.449359
24	4433		Up Milepost	24.00	0	45	C	0	0	1	40.102642	-75.463806
26	5001		Up Milepost	26.00	0	42	E	0	0	1	40.124390	-75.482368
27	5345		Up Milepost	27.00	0	30	C	0	0	1	40.127778	-75.500013
27	2382		Class Change	3.00	0	29	T	0	0	1	40.132032	-75.506399
27	2382		Posted Speed	30.00	0	29	T	0	0	1	40.132032	-75.506399
27	3689		Track Change	0.00	0	29	T	0	0	5	40.134578	-75.509663

Exception Report
Exception List Section
Milepost 5 to Milepost 999
Philadelphia, PA to Enola, PA

Page 2 of 6
Run Date: 11/08/2019
Run ID: 2019110801

MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
27	10475		Posted Speed	35.00	0	28	C	0	0	5	40.149160	-75.521461
29	10536		Up Milepost	29.00	0	28	C	0	0	5	40.149205	-75.521674
29	3428		Class Change	4.00	0	34	T	0	0	5	40.155912	-75.525122
29	3428		Posted Speed	50.00	0	34	T	0	0	5	40.155912	-75.525122
30	5758		Up Milepost	30.00	0	38	C	0	0	5	40.161949	-75.522843
31	4812		Up Milepost	31.00	0	45	T	0	0	5	40.173037	-75.531177
32	5325		Up Milepost	32.00	0	43	T	0	0	5	40.183844	-75.543490
33	5304		Up Milepost	33.00	0	40	T	0	0	5	40.197269	-75.550624
33	1346		Track Change	0.00	0	38	T	0	0	1	40.200672	-75.552438
33	4573	111	Lmt Speed 3	43.00	491	36	C		4	1	40.208649	-75.557286
34	5309		Up Milepost	34.00	0	36	E	0	0	1	40.209885	-75.559326
34	156		Class Change	3.00	0	36	E	0	0	1	40.210049	-75.559841
34	156		Posted Speed	40.00	0	36	E	0	0	1	40.210049	-75.559841
35	5284		Up Milepost	35.00	0	37	C	0	0	1	40.206351	-75.576672
35	2839		Class Change	4.00	0	39	T	0	0	1	40.212088	-75.582155
35	2839		Posted Speed	50.00	0	39	T	0	0	1	40.212088	-75.582155
36	5304		Up Milepost	36.00	0	41	C	0	0	1	40.218273	-75.585543
36	3068		Posted Speed	45.00	0	42	C	0	0	1	40.225233	-75.591600
36	3969		Posted Speed	50.00	0	42	B	0	0	1	40.227633	-75.592292
37	5299		Up Milepost	37.00	0	41	B	0	0	1	40.231087	-75.593745
37	1250		Class Change	3.00	0	39	B	0	0	1	40.234435	-75.594513
37	1250		Posted Speed	40.00	0	39	B	0	0	1	40.234435	-75.594513
37	4423		Class Change	4.00	0	39	E	0	0	1	40.238519	-75.603166
37	4423		Posted Speed	50.00	0	39	E	0	0	1	40.238519	-75.603166
39	10630		Up Milepost	39.00	0	47	C	0	0	1	40.237434	-75.625208
40	5252		Up Milepost	40.00	0	46	C	0	0	1	40.243359	-75.642254
41	5318		Up Milepost	41.00	0	47	T	0	0	1	40.247201	-75.660464
42	5310		Up Milepost	42.00	0	40	T	0	0	1	40.246626	-75.678184
43	5300		Up Milepost	43.00	0	21	T	0	0	1	40.247108	-75.696079
44	5280		Up Milepost	44.00	0	22	T	0	0	1	40.251745	-75.713908
45	5326		Up Milepost	45.00	0	31	C	0	0	1	40.257648	-75.731026
45	1894		Posted Speed	45.00	0	30	C	0	0	1	40.261543	-75.735455
45	4350		Posted Speed	50.00	0	32	E	0	0	1	40.262887	-75.743839
46	5279		Up Milepost	46.00	0	35	T	0	0	1	40.262625	-75.747137
47	5301		Up Milepost	47.00	0	47	T	0	0	1	40.261122	-75.765942
48	5182		Up Milepost	48.00	0	47	T	0	0	1	40.267682	-75.781383
49	5425		Up Milepost	49.00	0	46	T	0	0	1	40.271782	-75.799001
50	5227		Up Milepost	50.00	0	46	T	0	0	1	40.271871	-75.817165
51	5215		Up Milepost	51.00	0	40	T	0	0	1	40.278172	-75.833844

Exception Report
Exception List Section
Milepost 5 to Milepost 999
Philadelphia, PA to Enola, PA

Page 3 of 6
Run Date: 11/08/2019
Run ID: 2019110801

MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
52	5586		Up Milepost	52.00	0	34	T	0	0	1	40.285733	-75.851160
52	3093	155	Twist 31ft*	-1.14	3	34	E	3	4	1	40.289500	-75.860986
53	4905		Up Milepost	53.00	0	33	B	0	0	1	40.290577	-75.867299
54	5236		Up Milepost	54.00	0	30	T	0	0	1	40.298247	-75.881627
54	1208		Class Change	3.00	0	28	T	0	0	1	40.300920	-75.884130
54	1208		Posted Speed	30.00	0	28	T	0	0	1	40.300920	-75.884130
54	1772		Class Change	4.00	0	27	E	0	0	1	40.302035	-75.885521
54	1772		Posted Speed	50.00	0	27	E	0	0	1	40.302035	-75.885521
54	1810		Track Change	0.00	0	27	T	0	0	2	40.302111	-75.885613
54	3333		Class Change	3.00	0	30	T	0	0	2	40.305185	-75.889276
54	3333		Posted Speed	30.00	0	30	T	0	0	2	40.305185	-75.889276
14	4813		Down Milepost	14.00	0	29	T	0	0	2	40.308179	-75.892841
13	5421		Down Milepost	13.00	0	27	C	0	0	2	40.317209	-75.906196
12	5471		Down Milepost	12.00	0	26	C	0	0	2	40.306440	-75.914163
11	5298		Down Milepost	11.00	0	29	T	0	0	2	40.314145	-75.929814
10	5243		Down Milepost	10.00	0	25	B	0	0	2	40.323324	-75.938744
9	5604		Down Milepost	9.00	0	14	C	0	0	2	40.337539	-75.942872
9	1751		Class Change	2.00	0	21	T	0	0	2	40.340108	-75.948130
9	1751		Posted Speed	25.00	0	21	T	0	0	2	40.340108	-75.948130
9	5396		Up Milepost	9.00	0	25	C	0	0	2	40.337874	-75.960331
9	1803		Track Change	0.00	0	23	E	0	0	1	40.334788	-75.965290
9	2456		Class Change	4.00	0	25	B	0	0	1	40.333516	-75.966932
9	2456		Posted Speed	50.00	0	25	B	0	0	1	40.333516	-75.966932
63	11996		Up Milepost	63.00	0	47	T	0	0	1	40.325798	-75.998967
64	5710		Up Milepost	64.00	0	47	T	0	0	1	40.323210	-76.019068
65	5009		Up Milepost	65.00	0	48	B	0	0	1	40.320918	-76.036702
67	5460		Up Milepost	67.00	0	46	C	0	0	1	40.327019	-76.073421
68	5293		Up Milepost	68.00	0	47	C	0	0	1	40.329391	-76.091854
69	5338		Up Milepost	69.00	0	47	T	0	0	1	40.335792	-76.108757
70	5255		Up Milepost	70.00	0	48	T	0	0	1	40.343578	-76.124523
71	5309		Up Milepost	71.00	0	48	T	0	0	1	40.351447	-76.140452
72	5322		Up Milepost	72.00	0	45	C	0	0	1	40.356240	-76.158032
73	5220		Up Milepost	73.00	0	47	T	0	0	1	40.354779	-76.176572
74	4814		Up Milepost	74.00	0	45	B	0	0	1	40.353373	-76.193679
75	5859		Up Milepost	75.00	0	49	T	0	0	1	40.356776	-76.213939
76	5509		Up Milepost	76.00	0	45	B	0	0	1	40.359236	-76.233356
77	5226		Up Milepost	77.00	0	48	T	0	0	1	40.360250	-76.251615
78	5282		Up Milepost	78.00	0	49	T	0	0	1	40.361010	-76.269949
79	4910		Up Milepost	79.00	0	46	C	0	0	1	40.365274	-76.286519

Exception Report
Exception List Section
Milepost 5 to Milepost 999
Philadelphia, PA to Enola, PA

Page 4 of 6
Run Date: 11/08/2019
Run ID: 2019110801

MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
80	5563		Up Milepost	80.00	0	47	T	0	0	1	40.364861	-76.306399
81	5755		Up Milepost	81.00	0	46	C	0	0	1	40.364254	-76.326911
82	5058		Up Milepost	82.00	0	48	T	0	0	1	40.358026	-76.343000
83	5642		Up Milepost	83.00	0	46	C	0	0	1	40.350832	-76.360802
84	5011		Up Milepost	84.00	0	43	T	0	0	1	40.348267	-76.378391
85	5292		Up Milepost	85.00	0	39	T	0	0	1	40.345701	-76.396998
86	5284		Up Milepost	86.00	0	38	T	0	0	1	40.344008	-76.415725
87	5599		Up Milepost	87.00	0	39	T	0	0	1	40.342559	-76.435629
88	5792		Up Milepost	88.00	0	41	C	0	0	1	40.342927	-76.456215
89	4170		Up Milepost	89.00	0	48	T	0	0	1	40.340584	-76.470792
90	6008		Up Milepost	90.00	0	47	T	0	0	1	40.337164	-76.491772
91	5298		Up Milepost	91.00	0	46	T	0	0	1	40.334141	-76.510275
92	4503		Up Milepost	92.00	0	47	T	0	0	1	40.331566	-76.525993
93	5321		Up Milepost	93.00	0	47	T	0	0	1	40.328524	-76.544578
94	5654		Up Milepost	94.00	0	47	T	0	0	1	40.324139	-76.563872
96	10673		Up Milepost	96.00	0	45	T	0	0	1	40.312704	-76.598929
97	5339		Up Milepost	97.00	0	46	T	0	0	1	40.306967	-76.616448
98	5342		Up Milepost	98.00	0	47	T	0	0	1	40.301227	-76.633977
99	5201		Up Milepost	99.00	0	43	T	0	0	1	40.291476	-76.646748
99	2335	269	Lmt Speed 3+	49.00	2445	36	C		4	1	40.286486	-76.651723
100	4673		Up Milepost	100.00	0	34	C	0	0	1	40.283977	-76.659386
101	5809		Up Milepost	101.00	0	29	T	0	0	1	40.275150	-76.676333
103	5315		Up Milepost	103.00	0	11	E	0	0	1	40.267020	-76.711700
103	2693		Class Change	3.00	0	18	B	0	0	1	40.267279	-76.721297
103	2693		Posted Speed	40.00	0	18	B	0	0	1	40.267279	-76.721297
103	2823		Track Change	0.00	0	19	E	0	0	2	40.267285	-76.721760
103	3185		Class Change	4.00	0	22	E	0	0	2	40.267290	-76.723056
103	3185		Posted Speed	50.00	0	22	E	0	0	2	40.267290	-76.723056
103	3587		Class Change	3.00	0	23	S	0	0	2	40.267321	-76.724487
103	3587		Posted Speed	40.00	0	23	S	0	0	2	40.267321	-76.724487
104	5186		Up Milepost	104.00	0	23	B	0	0	2	40.266845	-76.730153
105	5347		Up Milepost	105.00	0	28	B	0	0	2	40.266917	-76.747962
106	5422		Up Milepost	106.00	0	26	T	0	0	2	40.264680	-76.766831
107	5529		Up Milepost	107.00	0	28	B	0	0	2	40.262909	-76.786414
108	5035		Up Milepost	108.00	0	28	T	0	0	2	40.256420	-76.802009
110	5006		Up Milepost	110.00	0	23	C	0	0	2	40.258471	-76.839119
111	4139		Up Milepost	111.00	0	18	T	0	0	2	40.257525	-76.853829
111	1754		Posted Speed	30.00	0	16	C	0	0	2	40.257120	-76.860057
111	3034		Class Change	2.00	0	17	T	0	0	2	40.256817	-76.864611

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
111	3034		Posted Speed	25.00	0	17	T	0	0	2	40.256817	-76.864611
111	9186		Subdivision	PITTSBU	0	23	T	0	0	2	40.267082	-76.879301
105	9479		Up Milepost	105.00	0	23	T	0	0	2	40.267811	-76.879728
105	203		Class Change	4.00	0	23	T	0	0	2	40.268316	-76.880020
105	203		Posted Speed	50.00	0	23	T	0	0	2	40.268316	-76.880020
105	218		Posted Speed	79.00	0	23	T	0	0	2	40.268354	-76.880042
105	630		Class Change	3.00	0	21	T	0	0	2	40.269380	-76.880643
105	630		Posted Speed	35.00	0	21	T	0	0	2	40.269380	-76.880643
105	2298		Posted Speed	30.00	0	18	B	0	0	2	40.273496	-76.883175
105	3865		Class Change	4.00	0	19	B	0	0	2	40.277179	-76.885985
105	3865		Posted Speed	60.00	0	19	B	0	0	2	40.277179	-76.885985
106	5259		Up Milepost	106.00	0	20	T	0	0	2	40.280836	-76.887285
106	1229		Posted Speed	79.00	0	18	T	0	0	2	40.284143	-76.888064
107	5302		Up Milepost	107.00	0	16	T	0	0	2	40.294918	-76.891700
107	2331		Class Change	3.00	0	12	C	0	0	2	40.301105	-76.893659
107	2331		Posted Speed	30.00	0	12	C	0	0	2	40.301105	-76.893659
107	3330		Class Change	4.00	0	18	T	0	0	2	40.303827	-76.893859
107	3330		Posted Speed	79.00	0	18	T	0	0	2	40.303827	-76.893859
108	5308		Up Milepost	108.00	0	18	T	0	0	2	40.309234	-76.893826
108	3944		Posted Speed	55.00	0	10	T	0	0	2	40.320011	-76.893760
109	5302		Up Milepost	109.00	0	11	E	0	0	2	40.323701	-76.893309
109	2291		Posted Speed	79.00	0	14	T	0	0	2	40.329315	-76.896195
109	4400		Class Change	3.00	0	15	B	0	0	2	40.333720	-76.901046
109	4400		Posted Speed	35.00	0	15	B	0	0	2	40.333720	-76.901046
109	6262		Class Change	4.00	0	15	T	0	0	2	40.334420	-76.906968
109	6262		Posted Speed	45.00	0	15	T	0	0	2	40.334420	-76.906968
109	8079		Class Change	3.00	0	11	T	0	0	2	40.332647	-76.913027
109	8079		Posted Speed	35.00	0	11	T	0	0	2	40.332647	-76.913027
109	8758		Track Change	0.00	0	8	E	0	0	7	40.331980	-76.915291
109	8785		Class Change	1.00	0	8	E	0	0	7	40.331952	-76.915380
109	8785		Posted Speed	10.00	0	8	E	0	0	7	40.331952	-76.915380
109	10229		Class Change	2.00	0	11	E	0	0	7	40.329099	-76.916949
109	10229		Posted Speed	20.00	0	11	E	0	0	7	40.329099	-76.916949
109	10507		Subdivision	PORT	0	9	E	0	0	7	40.328509	-76.916323
109	15275		Class Change	1.00	0	4	T	0	0	7	40.316730	-76.916635
109	15275		Posted Speed	10.00	0	4	T	0	0	7	40.316730	-76.916635
109	15985	310	Warp 62	3.23	61	7	T	0	1	7	40.315055	-76.917914
109	23458		Subdivision	PORT	0	8	C	0	0	7	40.295761	-76.925818
999	26190		Down Milepost	999.00	0	9	T	0	0	7	40.288295	-76.926352

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
999	2852	345	L Cant NEG*(141RE)	-3.60	76	8	B		1	7	40.281197	-76.923854
70	3439		Down Milepost	70.00	0	9	E	0	0	7	40.279841	-76.922740

Notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Rail Impact Values are unitless; indicating a location with a large vertical axle acceleration

Rail Cant Exceptions values indicate degrees.

(RSA) indicates possible Rail Seat Abrasion. The following fields are irrelevant for Cant Exceptions: LC, PC

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Milepost 5 to Milepost 999
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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
1	0	0	5	2453	619	14	4/40	1.24	30	25	0	132	8/53	1.03	26	0	25	28	31	33	35	38	40	
1	5	2867	5	3972	1106	24	1/06	1.04	30	51	5	3079	2/11	0.89	0	0	51	56	62	67	71	76	80	
1	6	166	6	1019	854	27	1/59	1.11	30	53	6	809	2/04	1.07	0	0	53	59	64	70	74	79	83	
1	6	1157	6	1963	807	26	-2/57	-0.06	30	37	6	1647	-3/05	0.03	0	0	37	42	47	52	56	60	64	
1	6	1963	6	2601	639	26	4/20	1.8	30	40	6	2237	4/23	1.82	0	0	40	43	47	50	53	56	59	
1	6	3114	6	4380	1267	27	1/25	1.15	30	63	6	3390	1/30	1.14	0	0	63	69	76	82	88	93	98	
1	6	4380	6	4757	378	27	1/22	0.92	30	62	6	4467	1/27	0.94	0	0	62	69	76	82	88	93	98	
1	7	576	7	1764	1189	27	-4/39	-0.83	30	32	7	850	-4/46	-0.43	0	0	32	36	40	43	47	50	53	
1	7	1866	7	2638	773	28	3/55	1.56	30	41	7	2338	3/55	1.54	0	0	41	44	48	52	55	58	61	
1	7	2985	7	3314	330	27	-2/45	0	30	39	7	3204	-2/49	-0.06	0	0	39	45	50	55	59	63	67	
1	7	3314	7	3687	374	27	-2/47	0.08	30	39	7	3385	-2/47	0.08	0	0	39	44	50	55	59	63	67	
1	7	3978	7	5160	1183	28	2/07	0.92	30	42	7	4426	2/57	0.71	0	0	42	47	52	57	61	64	68	
1	8	466	8	1538	1073	27	-1/18	-0.91	30	61	8	667	-1/26	-0.78	0	0	61	69	76	82	88	93	98	
1	8	1977	8	3101	1125	28	1/33	0.84	30	53	8	2350	2/02	0.96	0	0	53	59	64	70	74	79	83	
1	8	3101	8	3299	199	28	-1/55	0.46	30	43	8	3230	-1/56	0.45	0	0	43	51	57	63	69	74	79	
5	8	3299	8	3511	213	29	1/27	0.06	30	52	8	3410	1/35	0.03	0	0	52	60	67	73	79	85	90	
5	8	4995	8	5103	109	26	0/23	0.26	40	108	8	5102	0/24	0.26	0	0	108	123	137	149	160	171	181	
5	8	5103	9	391	624	27	1/02	0.93	40	67	8	5185	1/14	0.89	0	0	67	75	82	89	95	101	107	
5	9	1039	9	1863	825	27	-1/37	-0.86	40	54	9	1275	-1/53	-0.83	0	0	54	60	66	72	77	81	86	
1	9	1863	9	2071	209	27	1/00	0.04	40	61	9	1946	1/07	-0.05	0	0	61	71	79	87	94	100	106	
1	9	2071	9	2404	334	28	-0/26	-0.22	40	95	9	2328	-0/30	-0.24	0	0	95	110	122	133	143	153	162	
1	9	2718	9	3608	891	32	-1/35	-0.57	40	55	9	3289	-1/42	-0.65	0	0	55	62	68	74	80	85	90	
1	9	3608	9	4142	535	34	3/47	2.92	40	47	9	3914	3/47	2.92	0	0	47	51	54	57	61	64	67	
1	9	5135	10	688	822	36	0/47	0.98	40	83	10	520	0/49	0.94	0	0	83	93	102	110	118	125	132	
1	10	4897	10	5050	154	35	0/16	-0.08	40	126	10	4987	0/16	-0.07	0	0	126	147	164	180	195	208	221	
1	10	5086	11	141	499	35	2/17	1.73	40	54	10	5365	2/19	1.72	0	0	54	59	64	68	73	77	81	
1	11	4209	12	716	1556	34	-2/39	-2.51	40	49	11	4526	-3/09	-2.32	0	0	49	53	57	61	64	68	71	
1	12	716	12	2449	1734	36	-3/31	-2.38	40	43	12	1067	-4/08	-2.37	0	0	43	46	50	53	56	59	62	
1	12	2449	12	3048	600	37	1/56	0.91	40	53	12	2629	1/59	0.95	0	0	53	59	65	70	75	80	84	
1	12	3316	12	3820	505	36	-1/17	-0.86	40	63	12	3533	-1/18	-0.65	0	0	63	71	78	85	91	97	102	
1	12	3820	12	4531	712	36	1/10	1.15	40	65	12	4026	1/17	0.74	0	0	65	72	80	86	92	98	104	
1	13	542	13	1539	998	36	2/40	1.9	40	50	13	975	2/49	1.84	0	0	50	54	58	63	66	70	74	
1	13	2437	13	2919	483	36	2/44	2.85	40	53	13	2795	2/47	2.47	0	0	53	57	61	65	69	73	76	
1	13	2919	13	4133	1215	35	3/00	2.67	40	51	13	3057	3/07	2.57	0	0	51	54	58	62	66	69	72	
1	14	184	14	4147	3964	35	1/03	1.06	40	64	14	3629	1/22	0.97	0	0	64	72	78	85	91	96	101	
1	15	1834	15	2058	225	32	-0/43	-0.66	40	85	15	2030	-0/42	-0.55	0	0	85	96	106	115	124	132	139	
1	15	2058	15	2567	510	32	-0/50	-0.88	40	79	15	2373	-0/52	-0.84	0	0	79	89	98	106	114	121	127	
1	15	4330	15	5265	936	28	-0/51	-0.7	40	75	15	5103	-0/58	-0.82	0	0	75	84	92	100	107	113	120	
1	16	9	16	464	456	27	-1/02	-2.04	40	83	16	463	-1/03	-2.09	0	0	83	91	98	104	111	117	122	
1	16	464	16	1018	555	26	-2/04	-2.03	40	54	16	690	-2/25	-1.89	0	0	54	59	63	68	72	76	80	
1	16	1018	16	2780	1763	25	-3/11	-1.97	40	46	16	2531	-3/19	-1.92	0	0	46	50	54	58	62	65	68	
1	17	1965	17	4045	2081	15	1/25	1.52	40	63	17	2333	1/29	1.1	0	0	63	70	76	82	88	93	98	
1	17	5117	17	5695	579	16	-3/46	-2.72	40	46	17	5423	-3/46	-2.69	0	0	46	50	53	57	60	63	66	
1	18	680	18	975	296	20	-1/47	0.17	50	47	18	843	-1/48	0.22	30	-1	47	54	61	67	73	78	83	
1	18	1350	18	1733	384	21	-1/05	-1.01	50	71	18	1605	-1/12	-1.22	0	0	71	78	86	92	98	104	110	
1	18	5024	19	690	987	14	-2/00	-2.55	50	61	19	353	-2/02	-2.33	0	0	61	66	71	76	80	85	89	

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Run Date: 11/08/2019
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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

						Average					Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
1	19	911	19	1442	532	11	2/19	1.54	50	52	19	1132	2/22	1.47	0	0	52	57	62	67	71	75	79	
1	19	1965	19	2581	617	12	-1/56	-1.7	50	56	19	2221	-2/04	-1.62	0	0	56	62	67	72	77	81	85	
1	19	4603	20	2118	2905	34	-1/28	-1.94	50	66	19	4939	-1/31	-1.66	0	0	66	72	79	84	90	95	100	
1	20	3221	20	4382	1162	40	2/32	1.75	50	50	20	3818	2/42	1.78	0	0	50	55	59	64	68	71	75	
1	21	1534	21	3624	2091	46	1/30	1.04	50	55	21	2000	1/53	0.94	0	0	55	61	67	72	77	82	86	
1	22	1789	22	3180	1392	47	-1/29	-1.62	50	64	22	2221	-1/36	-1.57	0	0	64	70	76	82	87	92	97	
1	22	4598	23	853	1579	47	-2/20	-2.84	50	59	23	449	-2/22	-2.81	0	0	59	64	68	72	76	80	84	
1	23	988	23	2075	1088	47	1/27	1.54	50	62	23	1252	1/32	1.21	0	0	62	69	75	81	87	92	97	
1	23	3028	24	1375	2782	46	2/58	3.71	50	53	23	3400	3/30	3.94	0	0	53	56	60	63	66	69	72	
1	24	1628	24	2883	1256	47	1/54	1.5	50	56	24	2066	2/01	1.49	0	0	56	62	67	72	77	81	86	
1	24	3785	24	5292	1508	47	2/33	3.38	50	56	24	5090	2/53	3.36	0	0	56	60	64	68	71	74	78	
1	24	5292	24	5823	532	46	2/55	3.53	50	56	24	5380	2/59	3.49	0	0	56	59	63	67	70	74	77	
1	24	5976	24	9995	4021	46	-2/51	-3.65	50	54	24	7129	-2/59	-3.23	0	0	54	58	62	66	69	73	76	
1	25	3920	26	100	1183	43	-1/56	-1.65	50	57	25	4271	-1/58	-1.5	0	0	57	63	68	73	78	83	87	
1	26	1207	26	2721	1515	41	1/57	2.14	50	59	26	1720	2/07	2.07	0	0	59	64	69	73	78	82	86	
1	26	2721	26	3821	1101	36	1/23	2.16	50	54	26	2851	2/25	2	0	0	54	59	64	68	72	76	80	
1	26	5145	27	877	1079	30	0/34	1.29	50	85	27	838	0/49	1.18	0	0	85	95	103	111	119	126	133	
1	27	877	27	1660	784	29	0/49	1.28	50	80	27	1225	0/58	1.33	0	0	80	88	96	103	110	117	123	
5	27	3754	27	4689	936	29	5/04	2.47	30	38	27	4020	5/10	2.29	0	0	38	41	44	47	50	53	55	
5	27	4869	27	5263	395	29	1/10	0.03	30	55	27	5036	1/32	0.26	0	0	55	62	69	76	82	87	92	
5	27	5263	27	6227	965	29	1/29	0.73	30	54	27	5461	1/43	0.53	0	0	54	61	67	73	79	84	89	
5	27	6416	27	7183	768	28	-5/42	-1.86	30	33	27	6776	-5/56	-1.41	0	0	33	36	39	42	44	47	50	
5	27	7183	27	7686	504	29	-6/01	-1.51	30	32	27	7322	-6/08	-1.41	0	0	32	35	38	41	44	46	49	
5	27	9734	29	282	1086	29	-3/37	-2.04	35	44	27	10013	-3/46	-2.03	0	0	44	47	51	55	58	61	64	
5	29	282	29	3216	2935	34	4/26	3.28	35	41	29	879	5/04	3.02	0	0	41	44	47	50	53	55	58	
5	29	3516	29	4925	1410	33	-1/53	-1.77	50	58	29	4438	-2/02	-1.76	0	0	58	63	68	73	78	82	86	
5	29	5073	30	1650	2337	47	-1/57	-1.88	50	59	30	1118	-1/59	-1.77	0	0	59	64	69	74	79	83	88	
5	30	2877	30	4149	1273	47	-1/55	-2.24	50	59	30	3931	-2/05	-2.04	0	0	59	64	69	74	78	82	86	
5	31	1855	31	4201	2347	44	0/47	1.25	50	75	31	3322	1/01	0.95	0	0	75	83	91	99	106	112	118	
5	31	4201	31	5180	980	44	0/56	1.39	50	75	31	4532	1/05	1.28	0	0	75	83	90	97	104	110	116	
1	33	3051	33	3806	756	35	-1/22	-0.64	50	60	33	3477	-1/27	-0.7	0	0	60	68	74	81	87	92	97	
1	33	4179	33	4670	492	36	-3/35	-2	50	43	33	4573	-3/31	-1.64	97	1	43	47	51	55	59	62	65	
1	33	4670	34	680	1321	37	-2/47	-1.62	40	43	33	4988	-4/05	-2.29	363	0	43	46	50	53	56	59	62	
1	34	680	34	2284	1605	37	-3/16	-1.13	40	42	34	1817	-3/17	-1.08	0	0	42	47	51	55	59	62	66	
1	34	4187	35	295	1394	37	3/55	3.01	40	46	34	4705	3/56	2.86	0	0	46	49	53	56	59	62	65	
1	35	295	35	2044	1750	38	3/55	3.01	40	45	35	425	4/03	2.81	0	0	45	49	52	55	58	61	64	
1	35	3124	35	3337	214	38	-0/33	-0.68	50	97	35	3336	-0/33	-0.68	0	0	97	110	121	131	141	150	158	
1	35	3337	35	4226	890	40	-2/01	-1.95	50	58	35	3613	-2/07	-1.97	0	0	58	63	68	73	77	81	85	
1	35	5153	36	1355	1508	42	-0/37	-0.86	50	89	36	1283	-0/36	-0.41	0	0	89	102	113	123	132	141	149	
1	36	2353	36	3670	1318	42	3/31	3.82	45	52	36	3189	3/34	3.8	0	0	52	55	59	62	65	68	71	
1	36	3821	36	4896	1076	42	-1/27	-1.33	50	62	36	4189	-1/35	-1.27	0	0	62	68	75	80	86	91	96	
1	36	5199	37	916	1018	40	2/28	3.43	50	60	37	313	2/34	3.43	0	0	60	64	68	72	76	79	83	
1	37	1008	37	3700	2693	39	-3/04	-3.37	40	50	37	2302	-3/58	-4.07	0	0	50	53	57	60	63	65	68	
1	37	3700	37	4440	741	39	-2/56	-4.13	50	57	37	3924	-3/07	-4.19	0	0	57	61	64	68	71	74	77	
1	37	9611	39	782	1803	47	2/00	1.26	50	52	37	10007	2/02	0.87	0	0	52	58	64	69	74	78	83	
1	39	4660	40	756	1350	46	-0/56	-0.83	50	71	40	607	-1/05	-0.84	0	0	71	80	87	95	101	108	114	

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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
1	40	756	40	1214	459	45	-0/56	-1.04	50	69	40	899	-1/05	-0.72	0	0	69	78	86	93	100	106	112	
1	40	2396	40	3178	783	45	0/56	1.29	50	70	40	3177	1/13	1.18	0	0	70	78	85	92	98	104	109	
1	40	3178	40	3687	510	46	1/16	1.26	50	64	40	3262	1/27	1.19	0	0	64	71	78	84	89	95	100	
1	40	5054	40	5184	131	47	-0/16	0.75	50	98	40	5114	-0/17	1.04	0	0	98	122	142	159	174	188	201	
1	41	1316	41	4366	3051	46	-1/53	-2.43	50	59	41	2463	-1/59	-1.96	0	0	59	65	70	75	80	84	88	
1	42	546	42	3195	2650	35	1/56	2.09	50	59	42	1069	2/03	1.94	0	0	59	64	69	74	78	83	87	
1	44	3371	45	1109	3066	31	1/03	1.92	50	59	44	4074	2/32	3.21	0	0	59	63	67	71	75	79	82	
1	45	1248	45	4434	3187	31	-1/55	-2.42	50	51	45	1859	-3/34	-3.5	0	0	51	54	58	61	64	67	70	
1	47	96	47	1032	937	47	0/57	0.97	50	70	47	430	1/02	0.56	0	0	70	79	87	94	101	108	114	
1	48	972	48	2629	1658	47	2/58	3.57	50	55	48	1751	3/04	3.41	0	0	55	58	62	66	69	72	75	
1	48	694	48	2658	1965	47	-2/00	-0.95	50	52	48	2123	-2/02	-0.79	0	0	52	58	63	69	74	78	83	
1	48	3420	48	4865	1446	46	-2/01	-1.03	50	52	48	3862	-2/02	-0.82	0	0	52	58	63	69	73	78	82	
1	49	1173	49	1925	753	46	-1/56	-1.72	50	57	49	1463	-2/03	-1.68	0	0	57	62	68	73	77	82	86	
1	49	1925	49	3224	1300	46	1/56	1.5	50	56	49	2216	1/55	1.2	0	0	56	62	67	73	78	82	87	
1	49	3265	49	4913	1649	47	2/00	1.39	50	55	49	4087	2/04	1.34	0	0	55	60	66	71	76	80	84	
1	50	3297	50	4028	732	42	0/51	1.95	50	89	50	3878	0/54	1.99	0	0	89	97	105	112	119	125	132	
1	52	1895	52	3158	1264	34	-1/59	-1.44	50	55	52	2376	-1/59	-1.23	0	0	55	61	66	72	76	81	85	
1	52	4718	53	521	710	33	-1/31	-0.81	50	59	53	331	-1/32	-0.74	0	0	59	66	73	79	85	90	95	
1	53	1062	53	2715	1654	31	2/40	4.45	50	62	53	1777	2/44	4.26	0	0	62	65	69	73	76	80	83	
1	53	2884	53	3246	363	30	1/06	2.83	50	87	53	3245	1/07	2.83	0	0	87	93	100	106	112	118	123	
1	53	3246	53	4798	1553	30	1/01	2.28	50	67	53	3417	1/53	2.89	0	0	67	72	77	82	86	90	95	
1	54	61	54	1125	1065	29	-2/05	-1.65	50	55	54	599	-2/12	-1.71	0	0	55	60	66	70	75	79	83	
1	54	1232	54	1535	304	28	-1/46	-0.63	30	53	54	1384	-1/47	-0.46	0	0	53	59	66	71	77	82	87	
1	54	1535	54	1787	253	28	1/50	-0.18	50	44	54	1654	1/52	-0.48	0	0	44	51	58	64	70	75	80	
2	14	829	14	1627	799	29	2/56	3.64	30	54	14	1196	3/04	3.29	0	0	54	58	62	65	69	72	75	
2	14	2144	14	3143	1000	29	-4/08	-1.84	30	41	14	2813	-4/08	-1.77	0	0	41	44	48	51	55	58	60	
2	14	3143	14	3955	813	27	3/47	1.61	30	41	14	3428	3/48	1.46	0	0	41	45	49	52	56	59	62	
2	14	3955	13	643	2111	28	-6/02	-3.71	30	37	14	4496	-6/59	-3.73	0	0	37	39	42	44	46	48	51	
2	13	643	13	1086	444	27	-6/49	-1.86	30	32	13	1085	-6/48	-1.86	0	0	32	35	37	40	43	45	47	
2	13	1086	13	1452	367	27	-6/47	-1.43	30	30	13	1133	-6/47	-1.4	0	0	30	33	36	39	42	44	46	
2	13	2963	12	436	2946	28	4/58	1.61	30	35	13	5310	5/01	1.35	0	0	35	39	42	45	48	51	54	
2	12	995	12	1228	234	28	0/18	0.27	30	121	12	1118	0/19	0.28	0	0	121	138	153	167	180	192	203	
2	12	1519	12	1768	250	28	-1/22	0.26	30	53	12	1702	-1/23	0.24	0	0	53	62	70	77	83	89	95	
2	12	1768	12	1956	189	28	1/31	0.14	30	49	12	1852	1/38	-0.21	0	0	49	57	64	71	77	82	87	
2	12	2411	12	2767	357	28	-1/03	-0.85	30	70	12	2648	-1/01	-0.56	0	0	70	79	88	95	102	109	115	
2	12	2767	12	3075	309	28	-4/33	-0.79	30	33	12	2897	-4/42	-0.54	0	0	33	37	41	44	47	50	53	
2	12	3299	12	4390	1092	28	-1/37	-1.15	30	56	12	3645	-1/50	-1.02	0	0	56	62	68	73	78	83	88	
2	11	1793	11	4299	2507	27	3/55	1.19	30	38	11	2997	4/00	1.1	0	0	38	42	46	50	53	57	60	
2	11	5052	10	1401	1594	25	-3/58	-2.1	30	41	10	1092	-4/01	-1.83	0	0	41	45	49	52	56	59	62	
2	10	2132	10	3629	1498	25	3/59	1.2	30	38	10	3258	4/08	1.2	0	0	38	42	46	49	53	56	59	
2	10	4067	9	569	2108	22	-3/56	-1.64	30	40	10	4516	-4/11	-1.58	0	0	40	43	47	50	54	57	60	
2	9	1785	9	2925	1141	21	-6/07	-1.4	25	31	9	2304	-6/09	-1.27	0	0	31	34	38	41	43	46	48	
2	9	4489	9	4666	178	24	0/17	-0.17	25	119	9	4572	0/17	-0.16	0	0	119	137	154	169	183	196	208	
2	9	4802	9	5053	252	23	-1/44	-1.07	25	57	9	4994	-1/43	-0.93	0	0	57	64	70	76	81	86	91	
2	9	5053	9	821	1166	25	-1/20	-1.19	25	57	9	5095	-1/44	-1.05	0	0	57	64	70	76	81	86	90	
2	9	821	9	1192	372	22	-2/01	-0.99	25	53	9	1037	-2/02	-1	0	0	53	59	64	70	75	79	83	

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							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
1	9	1571	9	1811	241	23	-2/25	0.39	25	39	9	1696	-2/28	0.42	0	0	39	45	51	56	61	66	70	
1	9	1811	9	2088	278	24	1/31	0.35	25	52	9	1939	1/39	0.12	0	0	52	59	66	72	78	83	88	
1	9	2243	9	2425	183	24	0/18	-0.09	25	112	9	2356	0/20	-0.11	0	0	112	129	145	159	172	184	196	
1	9	2425	9	4422	1998	37	1/10	1.6	50	71	9	3375	1/16	1.51	0	0	71	78	85	91	97	103	108	
1	9	6124	9	7574	1451	43	0/55	1.04	50	76	9	6402	0/58	0.96	0	0	76	85	93	101	108	114	121	
1	64	4857	65	7788	2812	48	0/56	1.21	50	77	65	6463	0/59	1.08	0	0	77	85	93	101	108	114	120	
1	65	2068	65	3932	1865	48	-0/27	-0.89	50	107	65	2386	-0/26	-0.61	0	0	107	122	134	146	157	167	176	
1	65	4806	67	934	1590	47	0/58	1.87	50	80	65	5134	1/04	1.79	0	0	80	87	95	102	108	114	120	
1	67	1142	67	3748	2607	48	-0/58	-1.61	50	80	67	3252	-1/01	-1.59	0	0	80	88	96	103	110	116	122	
1	67	4444	68	2744	3595	48	0/57	0.67	50	68	68	566	1/04	0.47	0	0	68	77	85	92	99	106	112	
1	71	1311	71	3591	2281	47	-0/54	-0.89	50	72	71	2649	-1/04	-0.89	0	0	72	81	89	96	103	109	115	
1	71	3752	72	588	2160	45	-0/57	-1.3	50	75	71	5223	-1/02	-1.16	0	0	75	84	92	99	106	112	118	
1	73	4725	74	387	478	45	0/48	1.03	50	76	74	214	0/56	0.8	0	0	76	85	93	101	108	115	122	
1	74	387	74	2737	2351	46	0/58	0.96	50	70	74	2656	1/00	0.42	0	0	70	79	87	95	102	109	115	
1	74	4155	74	5573	1419	49	-0/56	-1.04	50	70	74	4497	-1/07	-0.83	0	0	70	78	86	93	100	106	112	
1	75	5460	76	1172	1223	45	0/59	0.91	50	69	76	1001	1/08	0.77	0	0	69	77	85	92	99	105	111	
1	76	1287	76	4948	3662	47	-0/58	-0.93	50	71	76	4030	-1/04	-0.79	0	0	71	80	88	95	102	108	114	
1	77	822	77	4587	3766	49	0/58	1.04	50	70	77	1084	1/07	0.83	0	0	70	78	86	93	99	106	111	
1	78	3081	79	958	2789	47	-0/56	-1.29	50	76	78	3643	-1/02	-1.22	0	0	76	84	92	99	106	112	118	
1	79	2520	79	3055	536	49	0/40	0.79	50	79	79	2737	0/55	1.01	0	0	79	88	97	104	112	118	125	
1	80	4204	80	4514	311	47	-0/28	-0.79	50	107	80	4513	-0/28	-0.79	0	0	107	121	134	145	155	165	174	
1	80	4514	81	1639	2882	47	-0/57	-1.04	50	74	81	679	-1/04	-1.07	0	0	74	82	90	97	104	110	116	
1	82	4461	83	842	2025	48	0/56	1.1	50	73	82	4699	1/05	1.08	0	0	73	81	89	96	102	109	114	
1	85	950	85	1932	983	39	0/27	1.22	50	108	85	1667	0/31	1.16	0	0	108	120	131	141	151	160	168	
1	87	1081	87	2601	1521	40	0/55	1.52	50	76	87	1310	1/02	1.22	0	0	76	84	92	99	106	112	118	
1	87	4017	87	4207	191	40	-0/41	-0.47	50	85	87	4189	-0/40	-0.4	0	0	85	97	108	117	126	134	142	
1	87	4207	88	447	2034	42	-0/55	-0.64	50	69	87	5198	-1/02	-0.44	0	0	69	78	86	94	101	108	114	
1	93	2193	93	4477	2285	48	-0/28	-0.86	50	101	93	4017	-0/31	-0.72	0	0	101	115	126	137	147	156	165	
1	98	257	98	4554	4298	46	-0/56	-0.89	50	68	98	1480	-1/01	-0.31	0	0	68	77	86	94	101	107	114	
1	99	591	99	3036	2446	41	1/57	0.81	50	49	99	2335	2/03	0.4	152	1	49	55	61	66	71	76	80	
1	99	3814	100	1818	2679	35	-1/05	-1.1	50	66	100	1442	-1/13	-0.74	0	0	66	74	82	89	95	101	107	
1	100	1934	100	4740	2807	28	0/55	1.35	50	74	100	2125	1/01	0.85	0	0	74	82	90	98	105	111	118	
1	101	5596	101	10290	4695	22	0/27	2.21	50	103	101	7108	0/39	1.9	0	0	103	113	123	131	139	147	154	
1	101	10290	103	48	202	11	0/18	1.52	50	145	101	10434	0/19	1.52	0	0	145	159	173	186	198	209	220	
2	103	2644	103	2936	293	19	-1/46	0.02	40	48	103	2790	-1/46	0.1	0	0	48	56	63	69	74	80	84	
2	103	2936	103	3189	254	22	1/34	-0.23	50	46	103	3063	1/41	-0.51	0	0	46	54	61	68	74	79	84	
2	103	3253	103	3587	335	23	-0/20	-0.34	50	117	103	3586	-0/21	-0.41	0	0	117	134	148	161	173	185	196	
2	103	3587	103	4657	1071	25	-1/02	-0.94	40	70	103	4500	-1/08	-0.93	0	0	70	78	86	93	100	106	112	
2	103	5151	104	2307	2344	25	1/58	0.56	40	49	104	1247	2/00	0.36	0	0	49	55	61	67	72	77	81	
2	104	2307	104	4844	2538	28	-3/02	-0.95	40	40	104	4468	-3/28	-0.89	0	0	40	44	49	53	57	60	63	
2	104	4966	105	3795	4178	29	0/49	1.03	40	55	105	20	1/50	0.86	0	0	55	61	67	72	78	82	87	
2	105	3795	105	4219	425	28	-2/17	-1.24	40	51	105	4032	-2/17	-1.26	0	0	51	57	62	67	71	76	80	
2	106	336	106	1011	676	29	-1/22	-0.88	40	60	106	647	-1/27	-0.73	0	0	60	68	75	81	87	92	97	
2	106	5458	107	2019	2092	29	-1/56	-1.41	40	54	107	1315	-2/06	-1.25	0	0	54	59	65	70	74	79	83	
2	107	2289	107	4097	1809	27	0/56	1.08	40	68	107	3254	1/16	1.14	0	0	68	76	83	89	96	101	107	
2	108	314	108	3902	3589	28	0/58	1.28	40	68	108	1779	1/21	1.33	0	0	68	75	81	88	93	99	104	

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							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
2	108	4382	108	4646	265	28	0/23	1.2	40	109	108	4501	0/29	1.09	0	0	109	121	133	143	153	162	171	
2	108	9295	110	454	1800	27	-0/59	-1.05	40	73	108	9591	-1/04	-0.98	0	0	73	81	89	96	103	110	115	
2	111	1253	111	1617	365	16	0/35	0.24	40	82	111	1490	0/43	0.38	0	0	82	93	103	112	120	128	136	
2	111	1617	111	1982	366	16	-0/22	-1.61	30	129	111	1873	-0/24	-1.72	0	0	129	142	154	166	176	186	195	
2	111	3062	111	5190	2129	21	1/56	1.04	25	51	111	4527	2/07	0.8	0	0	51	57	62	67	72	77	81	
2	111	5190	111	5750	561	21	2/53	1.08	25	44	111	5310	2/56	1	0	0	44	49	53	58	62	66	69	
2	111	5993	111	6261	269	22	-4/19	-0.94	25	36	111	6129	-4/20	-0.92	0	0	36	40	44	47	51	54	57	
2	111	6635	111	7558	924	21	2/32	0.85	25	25	111	6881	8/23	0.81	0	0	25	28	31	34	36	38	40	
2	111	7827	111	8382	556	22	2/50	1.04	25	45	111	8067	2/53	1.04	0	0	45	50	54	59	63	66	70	
2	111	8382	111	9020	639	23	-2/39	-1.21	25	42	111	8677	-3/07	-0.89	0	0	42	47	51	56	60	63	67	
2	105	967	105	1243	277	19	-0/30	-0.81	35	92	105	1079	-0/41	-1.13	0	0	92	103	113	122	130	138	145	
2	105	2185	105	2812	628	18	-4/45	-1.89	30	38	105	2475	-4/45	-1.86	0	0	38	41	45	48	51	54	57	
2	105	2812	105	3425	614	19	4/23	0.9	30	35	105	3073	4/27	0.86	0	0	35	39	43	46	50	53	56	
2	105	3622	105	4459	838	19	0/58	3.21	60	92	105	3937	1/02	3.04	0	0	92	98	105	111	117	123	129	
2	105	4459	105	5182	724	20	1/55	2.81	60	65	105	4785	1/58	2.84	0	0	65	70	75	80	84	88	92	
2	106	242	106	570	329	18	-0/23	-1.23	60	125	106	569	-0/23	-1.25	0	0	125	140	153	165	176	186	196	
2	106	570	106	1080	511	15	-1/34	-2.36	60	66	106	689	-1/43	-2.26	0	0	66	72	77	83	87	92	97	
2	107	1571	107	1950	380	12	0/22	1.09	79	121	107	1949	0/24	1.1	0	0	121	134	147	159	170	180	189	
2	107	1950	107	2421	472	13	1/01	1.01	30	53	107	2103	1/53	0.75	53	0	53	60	66	71	76	81	86	
2	107	2421	107	3279	859	17	0/51	1	30	64	107	2503	1/25	1.04	0	0	64	71	78	84	90	95	100	
2	108	4080	108	4801	722	10	2/00	3	55	65	108	4380	2/01	2.96	0	0	65	70	75	79	84	88	92	
2	108	4801	109	306	809	11	-1/14	-2.63	55	63	108	5000	-2/06	-2.83	0	0	63	68	72	77	81	85	89	
2	109	306	109	1943	1638	15	-3/03	-4.11	55	56	109	949	-3/09	-4.01	0	0	56	60	63	67	70	73	76	
2	109	4338	109	5901	1564	15	-5/54	-2.43	35	35	109	4724	-6/09	-2.27	3	-1	35	38	41	43	46	48	51	
7	109	8593	109	8831	239	9	-1/17	0.3	10	55	109	8725	-1/17	0.3	0	0	55	64	72	79	86	92	98	
7	109	8831	109	9015	185	9	0/45	0.03	10	74	109	8879	0/46	-0.1	0	0	74	85	95	105	113	121	129	
7	109	9015	109	10309	1295	8	-10/55	-1.43	20	23	109	9247	-10/39	-1.04	0	0	23	25	28	30	32	34	36	
7	109	10309	109	10580	272	9	1/17	0.43	20	61	109	10434	1/19	0.43	0	0	61	69	76	83	89	95	101	
7	109	11479	109	12648	1170	10	5/27	0.91	20	30	109	12240	5/14	0.2	0	0	30	33	37	41	44	47	50	
7	109	13495	109	14771	1193	9	1/29	1.09	20	54	109	13857	2/01	1.05	0	0	54	59	65	70	75	80	84	
7	109	16211	109	16494	284	6	-6/28	-0.95	10	29	109	16383	-6/30	-0.95	0	0	29	32	36	39	41	44	46	
7	109	16494	109	16948	455	7	0/49	0.45	10	28	109	16636	5/17	-0.01	0	0	28	32	36	40	43	46	49	
7	109	16948	109	16990	43	6	0/15	0.36	10	136	109	16968	0/16	0.37	0	0	136	154	171	187	201	214	226	
7	109	16990	109	17080	91	7	0/16	0.16	10	129	109	17027	0/16	0.15	0	0	129	148	165	180	194	207	220	
7	109	17627	109	18495	869	9	-1/27	-0.41	10	50	109	17788	-1/50	-0.17	0	0	50	57	63	69	74	79	84	
7	109	19562	109	19973	412	8	-1/39	-0.14	10	30	109	19688	-4/35	0.06	0	0	30	34	39	42	46	49	52	
7	109	20047	109	20370	324	9	-0/43	-0.16	10	80	109	20297	-0/42	-0.16	0	0	80	92	102	112	120	129	136	
7	109	20370	109	20630	261	8	2/08	-0.45	10	25	109	20450	4/34	-1.03	0	0	25	30	35	39	43	46	49	
7	109	20630	109	20889	260	9	-4/25	-0.52	10	34	109	20764	-4/24	-0.52	0	0	34	38	42	46	49	52	55	
7	109	21616	109	21924	309	10	1/01	1.1	10	68	109	21735	1/05	0.51	0	0	68	77	85	92	99	106	112	
7	109	22925	109	23138	214	7	-0/16	0.34	10	113	109	23033	-0/16	0.6	0	0	113	136	155	172	187	201	214	
7	109	23175	109	23377	181	4	-4/16	-0.21	10	30	109	23289	-4/16	0.22	0	0	30	35	40	44	47	51	54	
7	109	23377	109	23536	147	8	4/22	0.49	10	34	109	23466	4/23	0.47	0	0	34	38	42	45	49	52	55	
7	109	23536	109	23733	198	9	-5/32	-0.45	10	29	109	23628	-5/38	-0.33	0	0	29	33	36	40	43	45	48	
7	999	1078	999	2404	1327	7	-4/13	-0.36	10	32	999	1524	-4/29	-0.13	0	0	32	36	40	44	47	50	53	
7	999	2404	999	2544	141	8	-0/20	-0.14	10	111	999	2497	-0/21	-0.13	0	0	111	129	144	158	170	182	193	

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Curve Analysis Section
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Philadelphia, PA to Enola, PA

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

						Average				Limiting Point													
Track	Starting	Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0
7	999	2544	999	2985	442	8	4/58	-0.3	10	26	999	2750	5/32	-0.31	0	0	26	30	34	38	41	44	47
7	999	2985	999	3051	67	9	-0/14	-0.02	10	132	999	2991	-0/14	-0.05	0	0	132	155	173	189	204	218	232
7	999	3207	70	33	267	11	4/52	0.4	10	31	999	3331	4/55	0.39	0	0	31	35	39	43	46	49	52
7	70	92	70	359	268	8	-0/29	0.06	10	81	70	207	-0/38	0.04	0	0	81	94	106	116	125	134	142
7	70	388	70	817	430	7	-8/29	0.25	10	21	70	578	-8/31	0.27	0	0	21	25	28	31	33	36	38

Notes:

+ Maximum curve speed is limited at qualified cant deficiency.
However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

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Exception Summary Section
Milepost 5 to Milepost 999
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		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Lim	Pst	
MP	FT	Exc	FT	Drop	Exc	FT	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	Cls	Cls	Trk
8	5781	-	-	-	-	-	1	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	1	
33	1346	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	4	1	
52	5586	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	3	4	1	
99	5201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	4	1	
109	15275	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	61	-	-	-	-	-	0	1	7
		-	-	-	-	-	1	8	-	-	-	-	-	-	-	-	-	-	-	-	-	1	61	-	1	3	-	2			

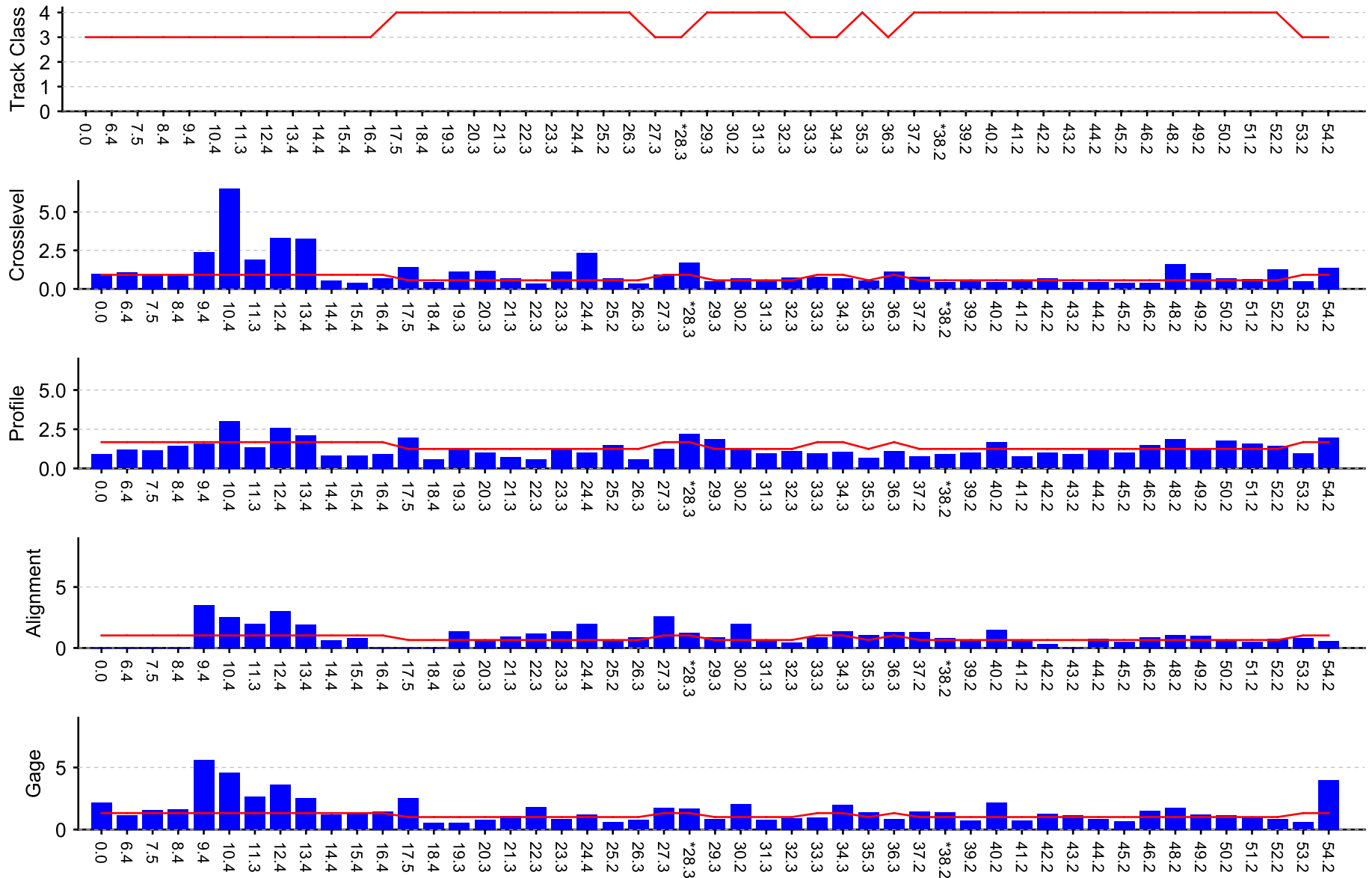
Total Miles: 117.70
Exceptions per 100 Miles: 4.25
CY18 National Average Exceptions per 100 miles: 5.0

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Milepost 5 to Milepost 999

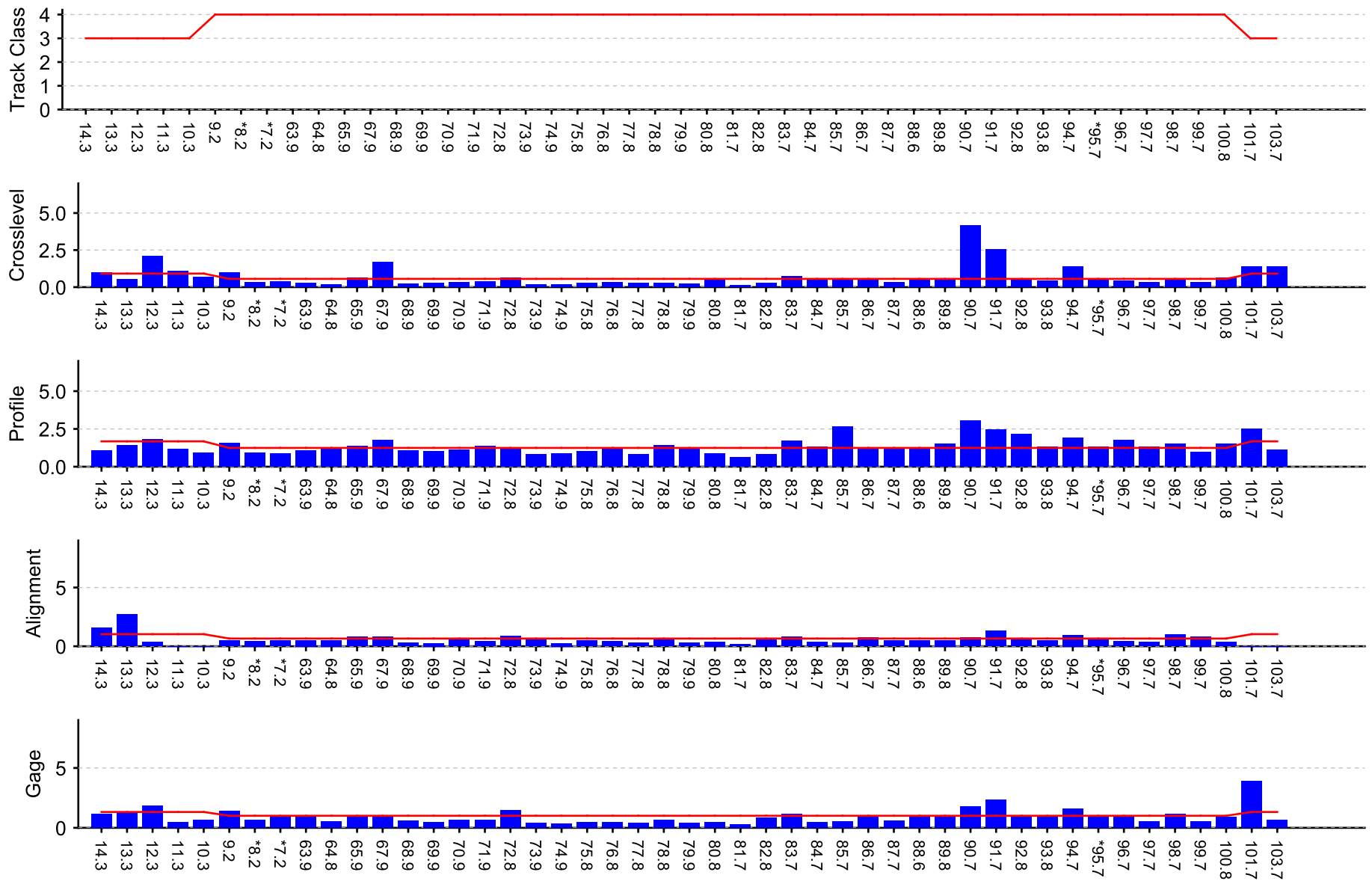
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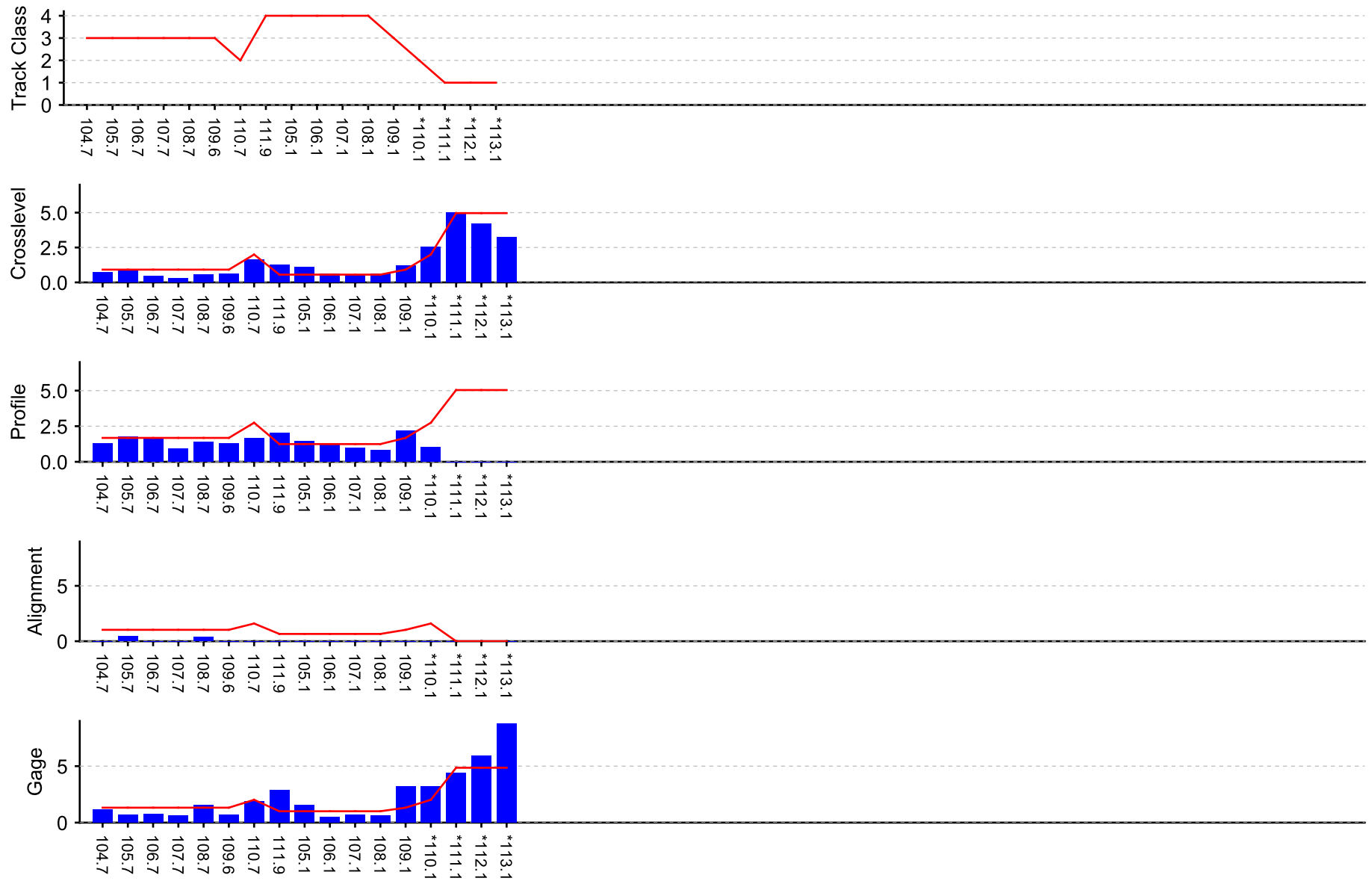
Run Date: 2019-11-08

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Milepost 5 to Milepost 999

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Exception Report
Class Plus 1 Exception List Section
Milepost 5 to Milepost 999
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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	144		Track Change	0.00	0	8	C	0	0	5	40.006302	-75.193964
0	144		Posted Speed	50.00	0	8	C	0	0	5	40.006302	-75.193964
0	144		State Line	PA	0	8	C	0	0	5	40.006302	-75.193964
0	145		Railroad	NS -	0	8	C	0	0	5	40.006305	-75.193966
0	146		Subdivision	HARRIS	0	8	E	0	0	5	40.006305	-75.193970
0	179		Class Change	3.00	0	9	E	0	0	5	40.006312	-75.194089
0	179		Posted Speed	30.00	0	9	E	0	0	5	40.006312	-75.194089
0	181		Track Change	0.00	0	9	E	0	0	1	40.006313	-75.194097
5	294		Up Milepost	5.00	0	12	E	0	0	1	40.006366	-75.194509
6	5128		Up Milepost	6.00	0	27	T	0	0	1	40.009674	-75.204242
7	4765		Up Milepost	7.00	0	27	T	0	0	1	40.018045	-75.216905
8	5781		Up Milepost	8.00	0	27	T	0	0	1	40.027438	-75.232779
8	3235	5	R Align 62	-1.84	20	28	E	2	4	1	40.033217	-75.241426
8	3238	6	L Align 62	-1.93	15	28	E	2	4	1	40.033223	-75.241434
8	3421		Track Change	0.00	0	29	C	0	0	5	40.033586	-75.241884
8	5091		Posted Speed	40.00	0	26	C	0	0	5	40.036985	-75.245924
9	5334		Up Milepost	9.00	0	27	C	0	0	5	40.037499	-75.246475
9	1992		Track Change	0.00	0	27	E	0	0	1	40.041623	-75.250970
10	5267		Up Milepost	10.00	0	36	B	0	0	1	40.047691	-75.259497
11	5442		Up Milepost	11.00	0	35	E	0	0	1	40.059380	-75.271450
12	5047		Up Milepost	12.00	0	34	C	0	0	1	40.071062	-75.280926
13	5126		Up Milepost	13.00	0	36	T	0	0	1	40.069128	-75.297962
14	5296		Up Milepost	14.00	0	35	T	0	0	1	40.072632	-75.314882
15	5423		Up Milepost	15.00	0	33	T	0	0	1	40.085834	-75.322094
16	5400		Up Milepost	16.00	0	27	T	0	0	1	40.100408	-75.325003
17	4684		Up Milepost	17.00	0	20	T	0	0	1	40.105904	-75.338274
18	5902		Up Milepost	18.00	0	18	T	0	0	1	40.110844	-75.357861
18	303		Class Change	4.00	0	19	T	0	0	1	40.111134	-75.358872
18	303		Posted Speed	50.00	0	19	T	0	0	1	40.111134	-75.358872
19	5354		Up Milepost	19.00	0	14	C	0	0	1	40.114861	-75.376172
20	5388		Up Milepost	20.00	0	17	C	0	0	1	40.115621	-75.395293
21	5367		Up Milepost	21.00	0	42	T	0	0	1	40.108864	-75.412014
22	5380		Up Milepost	22.00	0	47	T	0	0	1	40.107205	-75.430602
22	163	70	R Align 62	-1.05	7	47	T	4	5	1	40.107258	-75.431179
23	5322		Up Milepost	23.00	0	47	C	0	0	1	40.106660	-75.449359
23	3797	77	R Align 62	-0.82	11	46	C	4	5	1	40.102407	-75.461576
23	3798	78	L Align 62	-0.87	18	46	C	4	5	1	40.102407	-75.461579
24	4433		Up Milepost	24.00	0	45	C	0	0	1	40.102642	-75.463806
24	3820	83	L Align 62	-0.75	15	47	B	4	5	1	40.110573	-75.472046

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
24	3866	84	L Align 62	0.75	6	47	B	4	5	1	40.110689	-75.472109
24	5033	85	L Align 62	0.96	20	46	C	4	5	1	40.113806	-75.472723
24	5078	86	L Align 62	-0.76	10	46	C	4	5	1	40.113929	-75.472700
24	5996	88	L Align 62	0.76	4	46	B	4	5	1	40.116293	-75.471654
24	5999	89	R Align 62	0.75	3	46	B	4	5	1	40.116300	-75.471650
24	6031	90	R Align 62	-0.97	8	46	B	4	5	1	40.116380	-75.471604
24	6032	91	L Align 62	-0.92	11	46	B	4	5	1	40.116383	-75.471603
24	8167	92	R Align 62	0.79	7	45	C	4	5	1	40.121929	-75.472124
26	5001		Up Milepost	26.00	0	42	E	0	0	1	40.124390	-75.482368
27	5345		Up Milepost	27.00	0	30	C	0	0	1	40.127778	-75.500013
27	2382		Class Change	3.00	0	29	T	0	0	1	40.132032	-75.506399
27	2382		Posted Speed	30.00	0	29	T	0	0	1	40.132032	-75.506399
27	3689		Track Change	0.00	0	29	T	0	0	5	40.134578	-75.509663
27	10475		Posted Speed	35.00	0	28	C	0	0	5	40.149160	-75.521461
29	10536		Up Milepost	29.00	0	28	C	0	0	5	40.149205	-75.521674
29	3428		Class Change	4.00	0	34	T	0	0	5	40.155912	-75.525122
29	3428		Posted Speed	50.00	0	34	T	0	0	5	40.155912	-75.525122
29	3916	99	R Align 62	0.77	7	33	B	4	5	5	40.157060	-75.524271
30	5758		Up Milepost	30.00	0	38	C	0	0	5	40.161949	-75.522843
30	3898	100	R Align 62	-0.75	7	46	C	4	5	5	40.171407	-75.528702
31	4812		Up Milepost	31.00	0	45	T	0	0	5	40.173037	-75.531177
32	5325		Up Milepost	32.00	0	43	T	0	0	5	40.183844	-75.543490
33	5304		Up Milepost	33.00	0	40	T	0	0	5	40.197269	-75.550624
33	1346		Track Change	0.00	0	38	T	0	0	1	40.200672	-75.552438
34	5309		Up Milepost	34.00	0	36	E	0	0	1	40.209885	-75.559326
34	156		Class Change	3.00	0	36	E	0	0	1	40.210049	-75.559841
34	156		Posted Speed	40.00	0	36	E	0	0	1	40.210049	-75.559841
35	5284		Up Milepost	35.00	0	37	C	0	0	1	40.206351	-75.576672
35	2839		Class Change	4.00	0	39	T	0	0	1	40.212088	-75.582155
35	2839		Posted Speed	50.00	0	39	T	0	0	1	40.212088	-75.582155
35	4557	114	L Align 62	0.95	11	41	T	4	5	1	40.216455	-75.584315
35	4598	115	L Align 62	-0.87	7	41	T	4	5	1	40.216554	-75.584382
36	5304		Up Milepost	36.00	0	41	C	0	0	1	40.218273	-75.585543
36	3068		Posted Speed	45.00	0	42	C	0	0	1	40.225233	-75.591600
36	3969		Posted Speed	50.00	0	42	B	0	0	1	40.227633	-75.592292
37	5299		Up Milepost	37.00	0	41	B	0	0	1	40.231087	-75.593745
37	1250		Class Change	3.00	0	39	B	0	0	1	40.234435	-75.594513
37	1250		Posted Speed	40.00	0	39	B	0	0	1	40.234435	-75.594513
37	4423		Class Change	4.00	0	39	E	0	0	1	40.238519	-75.603166

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
37	4423		Posted Speed	50.00	0	39	E	0	0	1	40.238519	-75.603166
39	10630		Up Milepost	39.00	0	47	C	0	0	1	40.237434	-75.625208
40	5252		Up Milepost	40.00	0	46	C	0	0	1	40.243359	-75.642254
41	5318		Up Milepost	41.00	0	47	T	0	0	1	40.247201	-75.660464
42	5310		Up Milepost	42.00	0	40	T	0	0	1	40.246626	-75.678184
43	5300		Up Milepost	43.00	0	21	T	0	0	1	40.247108	-75.696079
44	5280		Up Milepost	44.00	0	22	T	0	0	1	40.251745	-75.713908
45	5326		Up Milepost	45.00	0	31	C	0	0	1	40.257648	-75.731026
45	1894		Posted Speed	45.00	0	30	C	0	0	1	40.261543	-75.735455
45	4350		Posted Speed	50.00	0	32	E	0	0	1	40.262887	-75.743839
46	5279		Up Milepost	46.00	0	35	T	0	0	1	40.262625	-75.747137
47	5301		Up Milepost	47.00	0	47	T	0	0	1	40.261122	-75.765942
48	5182		Up Milepost	48.00	0	47	T	0	0	1	40.267682	-75.781383
49	5425		Up Milepost	49.00	0	46	T	0	0	1	40.271782	-75.799001
50	5227		Up Milepost	50.00	0	46	T	0	0	1	40.271871	-75.817165
51	5215		Up Milepost	51.00	0	40	T	0	0	1	40.278172	-75.833844
52	5586		Up Milepost	52.00	0	34	T	0	0	1	40.285733	-75.851160
52	1930	153	Twist 31ft*	1.09	16	34	B	3	5	1	40.288345	-75.857141
52	1961	154	Rev Elevation	1.15	15	34	B	4	5	1	40.288387	-75.857237
52	3093	156	Twist 31ft*	-1.14	13	34	E	3	5	1	40.289500	-75.860986
53	4905		Up Milepost	53.00	0	33	B	0	0	1	40.290577	-75.867299
53	1618	157	R Align 62	-0.75	2	31	C	4	5	1	40.291199	-75.873007
53	4766	158	Twist 31ft*	-0.88	7	30	E	4	5	1	40.297114	-75.880826
54	5236		Up Milepost	54.00	0	30	T	0	0	1	40.298247	-75.881627
54	1208		Class Change	3.00	0	28	T	0	0	1	40.300920	-75.884130
54	1208		Posted Speed	30.00	0	28	T	0	0	1	40.300920	-75.884130
54	1772		Class Change	4.00	0	27	E	0	0	1	40.302035	-75.885521
54	1772		Posted Speed	50.00	0	27	E	0	0	1	40.302035	-75.885521
54	1810		Track Change	0.00	0	27	T	0	0	2	40.302111	-75.885613
54	3333		Class Change	3.00	0	30	T	0	0	2	40.305185	-75.889276
54	3333		Posted Speed	30.00	0	30	T	0	0	2	40.305185	-75.889276
14	4813		Down Milepost	14.00	0	29	T	0	0	2	40.308179	-75.892841
14	1626	175	Twist 31ft*	-1.23	519	29	E	3	4	2	40.311632	-75.896445
13	5421		Down Milepost	13.00	0	27	C	0	0	2	40.317209	-75.906196
12	5471		Down Milepost	12.00	0	26	C	0	0	2	40.306440	-75.914163
11	5298		Down Milepost	11.00	0	29	T	0	0	2	40.314145	-75.929814
10	5243		Down Milepost	10.00	0	25	B	0	0	2	40.323324	-75.938744
9	5604		Down Milepost	9.00	0	14	C	0	0	2	40.337539	-75.942872
9	1751		Class Change	2.00	0	21	T	0	0	2	40.340108	-75.948130

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
9	1751		Posted Speed	25.00	0	21	T	0	0	2	40.340108	-75.948130
9	5396		Up Milepost	9.00	0	25	C	0	0	2	40.337874	-75.960331
9	1803		Track Change	0.00	0	23	E	0	0	1	40.334788	-75.965290
9	2456		Class Change	4.00	0	25	B	0	0	1	40.333516	-75.966932
9	2456		Posted Speed	50.00	0	25	B	0	0	1	40.333516	-75.966932
63	11996		Up Milepost	63.00	0	47	T	0	0	1	40.325798	-75.998967
64	5710		Up Milepost	64.00	0	47	T	0	0	1	40.323210	-76.019068
65	5009		Up Milepost	65.00	0	48	B	0	0	1	40.320918	-76.036702
65	3430	192	Crosslevel	1.20	21	46	T	4	5	1	40.322124	-76.048713
67	5460		Up Milepost	67.00	0	46	C	0	0	1	40.327019	-76.073421
67	3584	193	Twist 31ft*	0.93	3	48	E	4	5	1	40.329362	-76.085755
67	3615	194	Twist 31ft*	-0.89	4	48	E	4	5	1	40.329360	-76.085866
68	5293		Up Milepost	68.00	0	47	C	0	0	1	40.329391	-76.091854
69	5338		Up Milepost	69.00	0	47	T	0	0	1	40.335792	-76.108757
70	5255		Up Milepost	70.00	0	48	T	0	0	1	40.343578	-76.124523
71	5309		Up Milepost	71.00	0	48	T	0	0	1	40.351447	-76.140452
72	5322		Up Milepost	72.00	0	45	C	0	0	1	40.356240	-76.158032
73	5220		Up Milepost	73.00	0	47	T	0	0	1	40.354779	-76.176572
74	4814		Up Milepost	74.00	0	45	B	0	0	1	40.353373	-76.193679
75	5859		Up Milepost	75.00	0	49	T	0	0	1	40.356776	-76.213939
76	5509		Up Milepost	76.00	0	45	B	0	0	1	40.359236	-76.233356
77	5226		Up Milepost	77.00	0	48	T	0	0	1	40.360250	-76.251615
78	5282		Up Milepost	78.00	0	49	T	0	0	1	40.361010	-76.269949
79	4910		Up Milepost	79.00	0	46	C	0	0	1	40.365274	-76.286519
80	5563		Up Milepost	80.00	0	47	T	0	0	1	40.364861	-76.306399
81	5755		Up Milepost	81.00	0	46	C	0	0	1	40.364254	-76.326911
82	5058		Up Milepost	82.00	0	48	T	0	0	1	40.358026	-76.343000
83	5642		Up Milepost	83.00	0	46	C	0	0	1	40.350832	-76.360802
83	2144	206	R Align 62	0.92	3	44	T	4	5	1	40.349661	-76.368307
83	3634	207	L Align 62	1.06	1	44	T	4	5	1	40.348938	-76.373546
83	4026	209	L Align 62	1.41	1	44	T	4	5	1	40.348747	-76.374925
84	5011		Up Milepost	84.00	0	43	T	0	0	1	40.348267	-76.378391
84	1988	212	R Prof 62	1.40	2	40	T	4	5	1	40.347304	-76.385379
84	2022	213	R Prof 62	-1.52	6	40	T	4	5	1	40.347288	-76.385499
85	5292		Up Milepost	85.00	0	39	T	0	0	1	40.345701	-76.396998
86	5284		Up Milepost	86.00	0	38	T	0	0	1	40.344008	-76.415725
86	2643	215	L Prof 62	1.60	8	39	T	4	5	1	40.343325	-76.425118
86	2643	214	R Prof 62	1.55	7	39	T	4	5	1	40.343325	-76.425118
86	2672	217	R Prof 62	-1.89	12	39	T	4	5	1	40.343317	-76.425221

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
86	2674	216	L Prof 62	-1.64	10	39	T	4	5	1	40.343317	-76.425228
86	4421	218	R Prof 62	-1.39	2	38	T	4	5	1	40.342860	-76.431434
86	4431	219	R Prof 62	-1.38	2	38	T	4	5	1	40.342857	-76.431470
86	4458	220	R Prof 62	1.63	17	38	T	4	5	1	40.342851	-76.431566
87	5599		Up Milepost	87.00	0	39	T	0	0	1	40.342559	-76.435629
88	5792		Up Milepost	88.00	0	41	C	0	0	1	40.342927	-76.456215
89	4170		Up Milepost	89.00	0	48	T	0	0	1	40.340584	-76.470792
90	6008		Up Milepost	90.00	0	47	T	0	0	1	40.337164	-76.491772
91	5298		Up Milepost	91.00	0	46	T	0	0	1	40.334141	-76.510275
92	4503		Up Milepost	92.00	0	47	T	0	0	1	40.331566	-76.525993
93	5321		Up Milepost	93.00	0	47	T	0	0	1	40.328524	-76.544578
93	3960	250	L Prof 62	-1.43	4	45	C	4	5	1	40.325926	-76.558289
93	3960	249	R Prof 62	-1.36	1	45	C	4	5	1	40.325926	-76.558289
94	5654		Up Milepost	94.00	0	47	T	0	0	1	40.324139	-76.563872
94	6797	259	L Align 62	0.93	2	47	T	4	5	1	40.316857	-76.586195
94	10178	263	R Align 62	0.86	1	45	T	4	5	1	40.313237	-76.597299
94	10182	264	R Align 62	0.87	1	45	T	4	5	1	40.313233	-76.597312
96	10673		Up Milepost	96.00	0	45	T	0	0	1	40.312704	-76.598929
96	238	265	R Prof 62	-1.47	3	45	T	4	5	1	40.312450	-76.599711
97	5339		Up Milepost	97.00	0	46	T	0	0	1	40.306967	-76.616448
98	5342		Up Milepost	98.00	0	47	T	0	0	1	40.301227	-76.633977
98	1452	266	R Prof 62	-1.49	8	46	C	4	5	1	40.299415	-76.638579
99	5201		Up Milepost	99.00	0	43	T	0	0	1	40.291476	-76.646748
99	199	267	R Prof 62	-1.65	2	43	T	4	5	1	40.290989	-76.647065
99	202	268	R Prof 62	-1.53	1	43	T	4	5	1	40.290981	-76.647070
100	4673		Up Milepost	100.00	0	34	C	0	0	1	40.283977	-76.659386
101	5809		Up Milepost	101.00	0	29	T	0	0	1	40.275150	-76.676333
103	5315		Up Milepost	103.00	0	11	E	0	0	1	40.267020	-76.711700
103	248	270	L Prof 62	-1.46	6	11	T	4	5	1	40.267042	-76.712584
103	2525	271	L Align 62	1.25	1	16	T	4	5	1	40.267262	-76.720697
103	2693		Class Change	3.00	0	18	B	0	0	1	40.267279	-76.721297
103	2693		Posted Speed	40.00	0	18	B	0	0	1	40.267279	-76.721297
103	2823		Track Change	0.00	0	19	E	0	0	2	40.267285	-76.721760
103	3185		Class Change	4.00	0	22	E	0	0	2	40.267290	-76.723056
103	3185		Posted Speed	50.00	0	22	E	0	0	2	40.267290	-76.723056
103	3587		Class Change	3.00	0	23	S	0	0	2	40.267321	-76.724487
103	3587		Posted Speed	40.00	0	23	S	0	0	2	40.267321	-76.724487
104	5186		Up Milepost	104.00	0	23	B	0	0	2	40.266845	-76.730153
105	5347		Up Milepost	105.00	0	28	B	0	0	2	40.266917	-76.747962

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
106	5422		Up Milepost	106.00	0	26	T	0	0	2	40.264680	-76.766831
107	5529		Up Milepost	107.00	0	28	B	0	0	2	40.262909	-76.786414
108	5035		Up Milepost	108.00	0	28	T	0	0	2	40.256420	-76.802009
110	5006		Up Milepost	110.00	0	23	C	0	0	2	40.258471	-76.839119
111	4139		Up Milepost	111.00	0	18	T	0	0	2	40.257525	-76.853829
111	1754		Posted Speed	30.00	0	16	C	0	0	2	40.257120	-76.860057
111	3034		Class Change	2.00	0	17	T	0	0	2	40.256817	-76.864611
111	3034		Posted Speed	25.00	0	17	T	0	0	2	40.256817	-76.864611
111	6118	283	L Align 62	-1.88	14	22	B	2	3	2	40.259842	-76.874363
111	6133	284	R Align 62	-1.89	9	22	C	2	3	2	40.259869	-76.874403
111	9186		Subdivision	PITTSBU	0	23	T	0	0	2	40.267082	-76.879301
105	9479		Up Milepost	105.00	0	23	T	0	0	2	40.267811	-76.879728
105	203		Class Change	4.00	0	23	T	0	0	2	40.268316	-76.880020
105	203		Posted Speed	50.00	0	23	T	0	0	2	40.268316	-76.880020
105	218		Posted Speed	79.00	0	23	T	0	0	2	40.268354	-76.880042
105	630		Class Change	3.00	0	21	T	0	0	2	40.269380	-76.880643
105	630		Posted Speed	35.00	0	21	T	0	0	2	40.269380	-76.880643
105	2298		Posted Speed	30.00	0	18	B	0	0	2	40.273496	-76.883175
105	3865		Class Change	4.00	0	19	B	0	0	2	40.277179	-76.885985
105	3865		Posted Speed	60.00	0	19	B	0	0	2	40.277179	-76.885985
106	5259		Up Milepost	106.00	0	20	T	0	0	2	40.280836	-76.887285
106	132	288	R Prof 62	-1.42	6	19	T	4	5	2	40.281192	-76.887346
106	1229		Posted Speed	79.00	0	18	T	0	0	2	40.284143	-76.888064
107	5302		Up Milepost	107.00	0	16	T	0	0	2	40.294918	-76.891700
107	2331		Class Change	3.00	0	12	C	0	0	2	40.301105	-76.893659
107	2331		Posted Speed	30.00	0	12	C	0	0	2	40.301105	-76.893659
107	3330		Class Change	4.00	0	18	T	0	0	2	40.303827	-76.893859
107	3330		Posted Speed	79.00	0	18	T	0	0	2	40.303827	-76.893859
108	5308		Up Milepost	108.00	0	18	T	0	0	2	40.309234	-76.893826
108	3944		Posted Speed	55.00	0	10	T	0	0	2	40.320011	-76.893760
109	5302		Up Milepost	109.00	0	11	E	0	0	2	40.323701	-76.893309
109	2291		Posted Speed	79.00	0	14	T	0	0	2	40.329315	-76.896195
109	4083	294	R Align 62	-0.99	1	15	T	4	5	2	40.333059	-76.900317
109	4400		Class Change	3.00	0	15	B	0	0	2	40.333720	-76.901046
109	4400		Posted Speed	35.00	0	15	B	0	0	2	40.333720	-76.901046
109	6262		Class Change	4.00	0	15	T	0	0	2	40.334420	-76.906968
109	6262		Posted Speed	45.00	0	15	T	0	0	2	40.334420	-76.906968
109	6575	296	R Prof 62	-1.54	5	14	T	4	5	2	40.334115	-76.908012
109	8079		Class Change	3.00	0	11	T	0	0	2	40.332647	-76.913027

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
109	8079		Posted Speed	35.00	0	11	T	0	0	2	40.332647	-76.913027
109	8758		Track Change	0.00	0	8	E	0	0	7	40.331980	-76.915291
109	8785		Class Change	1.00	0	8	E	0	0	7	40.331952	-76.915380
109	8785		Posted Speed	10.00	0	8	E	0	0	7	40.331952	-76.915380
109	10229		Class Change	2.00	0	11	E	0	0	7	40.329099	-76.916949
109	10229		Posted Speed	20.00	0	11	E	0	0	7	40.329099	-76.916949
109	10507		Subdivision	PORT	0	9	E	0	0	7	40.328509	-76.916323
109	11396	299	Warp 62	2.14	32	4	T	2	3	7	40.326574	-76.914394
109	15275		Class Change	1.00	0	4	T	0	0	7	40.316730	-76.916635
109	15275		Posted Speed	10.00	0	4	T	0	0	7	40.316730	-76.916635
109	15865	308	Warp 62	2.63	52	7	T	1	2	7	40.315339	-76.917700
109	15985	309	Warp 62	3.23	61	7	T	0	2	7	40.315055	-76.917914
109	19782	317	L Prof 62	-3.07	1	6	E	0	2	7	40.305652	-76.923548
109	20313	324	Warp 62	2.64	59	8	E	1	2	7	40.304240	-76.923992
109	23458		Subdivision	PORT	0	8	C	0	0	7	40.295761	-76.925818
999	26190		Down Milepost	999.00	0	9	T	0	0	7	40.288295	-76.926352
999	2844	346	L Prof 62	-2.98	2	8	C	1	2	7	40.281215	-76.923870
999	3413	349	R Prof 62	-3.10	6	9	E	0	2	7	40.279906	-76.922784
70	3439		Down Milepost	70.00	0	9	E	0	0	7	40.279841	-76.922740

Notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Rail Impact Values are unitless; indicating a location with a large vertical axle acceleration

Rail Cant Exceptions values indicate degrees.

(RSA) indicates possible Rail Seat Abrasion. The following fields are irrelevant for Cant Exceptions: LC, PC

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		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl		Lim	Pst	
MP	FT	EXC	FT	Drop	EXC	FT	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	Cls	Cls	Trk
8	5781	-	-	-	-	-	2	35	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	1	
22	5380	-	-	-	-	-	1	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
23	5322	-	-	-	-	-	2	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
24	4433	-	-	-	-	-	9	84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
29	3428	-	-	-	-	-	1	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
30	5758	-	-	-	-	-	1	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	5	
35	2839	-	-	-	-	-	2	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
52	5586	-	-	-	-	-	-	-	-	1	15	-	-	-	-	-	-	-	-	-	-	-	-	-	2	29	2	-	3	5	1
53	4905	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	-	-	4	5	1	
14	4813	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	519	-	-	3	4	2	
65	5009	-	-	-	-	-	-	-	-	1	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
67	5460	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	7	-	-	4	5	1	
83	5642	-	-	-	-	-	3	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
84	5011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	-	-	-	-	-	-	-	-	-	-	4	5	1	
86	5284	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	58	-	-	-	-	-	-	-	-	-	-	4	5	1	
93	5321	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	5	-	-	-	-	-	-	-	-	-	-	4	5	1	
94	5654	-	-	-	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	
96	10673	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	-	-	-	-	-	-	-	-	4	5	1	
98	5342	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	8	-	-	-	-	-	-	-	-	-	-	4	5	1	
99	5201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	-	-	-	-	-	-	-	-	-	-	4	5	1	
103	5315	-	-	-	-	-	1	1	-	-	-	-	-	-	-	1	6	-	-	-	-	-	-	-	-	-	-	4	5	1	
111	3034	-	-	-	-	-	2	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	2	
106	5259	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	6	-	-	-	-	-	-	-	-	-	-	4	5	2	
109	5302	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	2	
109	6262	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5	-	-	-	-	-	-	-	-	-	-	4	5	2	
109	10229	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	32	-	-	-	-	-	2	3	7	
109	15275	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	3	172	1	-	-	-	0	2	7	
999	26190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	1	-	-	-	-	-	-	-	-	-	0	2	7	

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Run ID: 2019110801

		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Lim	Pst	
MP	FT	EXC	FT	Drop	EXC	FT	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	Cls	Cls	Trk
		-	-	-	-	-	29	223	2	2	36	-	-	-	-	21	111	2	-	-	-	4	204	1	6	562	2	-			

Total Miles: 117.70
Exceptions per 100 Miles: 52.68
CY18 National Average Exceptions per 100 miles: 5.0

Exception Report
Alignment 62 MCO Stations
Milepost 5 to Milepost 999
Philadelphia, PA to Enola, PA

Page 1 of 1
Run Date: 11/08/2019
Run ID: 2019110801

	MP	FT	Parameter		Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
	8	3238	L Align 62		-1.93	8	28	E	2	3	1	40.033223	-75.241434
	MP	FT	LAlign62	LAlignMCO	RAlign62	RAlignMCO	Curve		Xlevel		Gage		
1	8	3176	0.39	-1.29			-1.7		0.34		57.07		
2	8	3192	0.21	-1.68			-1.92		0.29		57.0		
3	8	3207	-0.66	-2.46			-2.02		0.2		56.75		
4	8	3223	-1.45	-3.09			-1.92		0.55		56.98		
5	8	3238	-1.93	-3.35			-1.64		0.4		56.77		
6	8	3253	-1.08	-2.12			-1.21		0.51		56.73		
7	8	3269	0.71	0.02			-0.72		-0.3		57.04		
8	8	3284	0.58	0.17			-0.22		-0.17		56.58		
9	8	3300	0.81	0.83			0.29		-0.54		56.29		
AVG				-1.44									

DOTX 221 Geometry Car

United States Department of Transportation

AUTOMATED TRACK INSPECTION PROGRAM

TRACK GEOMETRY INSPECTION REPORT

Jim Thorpe, PA to Mehoopany, PA

Railroad: READING BLUE MOUNTAIN & NORTHERN RR (RBMN)

Survey Number: 1702

Mile Post 125 to Mile Post 31



Prepared for:

United States Department of Transportation
Federal Railroad Administration
Office of Safety
Washington, D.C.

Prepared by:

ENSCO, Inc.
5400 Port Royal Rd
Springfield, VA 22151



Testing Cert. 2411.01

Approved By:

Survey Director:

CLAYTON SHANK

Signature

Date

Under the U.S. Department of Transportation, Federal Railroad Administration (FRA), Office of Safety Assurance and Compliance, Automated Track Inspection Program and in accordance with 49 CFR 213 Federal Track Safety Standards, this Track Geometry Inspection Report provides a list of exceptions that relate only to the time and date the track was inspected and the required remedial action taken. This compliance report is offered only to the track owner and is not to be reproduced to others in whole or part without the expressed written consent of the FRA and the track owner. FRA requests any reprinting be labeled as a copy of the original.

NOTES

An Automated Track Inspection Program (ATIP) Track Geometry Inspection Report (TGIR) is generated for each ATIP survey. The TGIR summarizes the data collected and can be used in conjunction with the strip chart. The TGIR is generated electronically onboard the car and hard copies are distributed as follows:

1. One (1) copy is provided to onboard railroad representative, as requested
2. One (1) copy is provided to onboard FRA Inspector, as requested
3. One (1) copy is archived for FRA management

Following ATIP Compliance survey operations, electronic copies of TGIRs are distributed via email, to a list of recipients designated by FRA and railroad management.

The TGIR may consist of ten (10) parts;

1. Cover,
2. Notes,
3. Exception List,
4. Curve List,
5. Exception Summary,
6. Track Quality Index (TQI),
7. GRMS Exception List (if equipped),
8. Class+1 (C+1) Exception List,
9. C+1 Exception Summary,
10. Alignment MCO worksheet.

Track measurement sample frequency is once per foot.

Exceptions may not be reported for Alignment and Profile parameters when ATIP car speed is less than fifteen (15) and five (5) miles per hour, respectively.

Exception List symbols/notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49CFR 213.57(b).

Rail Impact Values are unit-less; indicating a location with a large vertical axle acceleration.

Rail Cant Exception denoted with (RSA) indicates possible Rail Seat Abrasion.

The following fields are not applicable for Limited Speed, Ride Quality [in classes 1-5], and Rail Cant:

Limited Class (LC); Posted Class (PC).

All Exception Parameter values are reported in inches, except for the following:

- Limiting Speed (Vmax) expressed in: MPH
- Ride Quality; Carbody Lateral, Carbody Vertical, Truck Lateral expressed in: g (gravitational acceleration)
- Rail Cant; Left (L) and Right (R), NEG[ative] and POS[itive] expressed in: angular degrees (°)

For Alignment exceptions: Negative (-) values indicate rail shifting to the right and Positive (+) values indicate rail shifting to the left, referencing direction of ATIP car travel during testing.

For Rail Cant exceptions: Negative (-) values indicate an outward shift in the rail angle, and Positive (+) values indicate an inward shift in the rail angle. Rail Cant exceptions have a minimum length of 15 feet.

A complete description of the information provided in the TGIR is available at

<https://www.fra.dot.gov/eLib/Details/L04545>

ATIP survey exceptions are available for review the next business day, and ATIP track measurement foot by foot data is available the following week at: https://tdms.ensco.com/tdms_lite

Exception Report

Exception List Section

Milepost 125 to Milepost 31

Jim Thorpe, PA to Mehoopany, PA

Page 1 of 5

Run Date: 06/07/2017

Run ID: 2017060701

MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	0		Track Change	0.00	0	1	T	0	0	7		
0	0		Class Change	4.00	0	1	T	0	0	7		
0	0		Posted Speed	79.00	0	1	T	0	0	7		
0	121		State Line	PA	0	4	B	0	0	7		
0	122		Railroad	RBMN -	0	4	B	0	0	7		
0	123		Subdivision	MAIN	0	4	B	0	0	7		
0	300		Track Change	0.00	0	5	E	0	0	5	40.860780	-75.738112
0	381		Class Change	2.00	0	4	E	0	0	5	40.860913	-75.738004
0	381		Posted Speed	25.00	0	4	E	0	0	5	40.860913	-75.738004
0	6615		Posted Speed	20.00	0	12	T	0	0	5	40.872891	-75.746883
0	13043		Class Change	3.00	0	23	B	0	0	5	40.881804	-75.763040
0	13043		Posted Speed	30.00	0	23	B	0	0	5	40.881804	-75.763040
125	14119		Up Milepost	125.00	0	30	T	0	0	5	40.883769	-75.760337
126	5128		Up Milepost	126.00	0	29	E	0	0	5	40.895619	-75.753083
127	5651		Up Milepost	127.00	0	31	C	0	0	5	40.903067	-75.744692
127	4979	36	Warp 62	2.27	52	28	B	1	3	5	40.907128	-75.739571
128	5123		Up Milepost	128.00	0	27	B	0	0	5	40.907167	-75.739052
128	389	39	Lmt Speed 3+	29.00	1144	31	C		3	5	40.907715	-75.737883
129	5325		Up Milepost	129.00	0	31	E	0	0	5	40.920542	-75.741567
130	5255		Up Milepost	130.00	0	27	C	0	0	5	40.933530	-75.741375
130	2878	47	Gage Narrow	55.89	2	31	T	0	3	5	40.940800	-75.743888
130	4753	49	R Align 62	2.38	24	30	E	2	3	5	40.945381	-75.746661
130	4760	51	L Align 62	2.61	24	30	E	2	3	5	40.945400	-75.746656
130	4805	54	L Align 62	-2.10	11	30	E	2	3	5	40.945521	-75.746626
131	5274		Up Milepost	131.00	0	31	T	0	0	5	40.946772	-75.746276
133	10728		Up Milepost	133.00	0	29	E	0	0	5	40.955465	-75.711504
134	5314		Up Milepost	134.00	0	31	E	0	0	5	40.956863	-75.703186
135	5171		Up Milepost	135.00	0	31	T	0	0	5	40.969319	-75.710568
137	11437		Up Milepost	137.00	0	28	C	0	0	5	40.974741	-75.742649
138	4647		Up Milepost	138.00	0	31	E	0	0	5	40.980199	-75.727497
139	5301		Up Milepost	139.00	0	27	C	0	0	5	40.988073	-75.712371
140	5313		Up Milepost	140.00	0	30	T	0	0	5	40.997616	-75.725667
140	2897	69	Gage Wide	57.89	1	31	C	1	3	5	41.005007	-75.729172
141	5348		Up Milepost	141.00	0	26	B	0	0	5	41.010971	-75.733107
141	3304		Up Milepost	141.00	0	32	B	0	0	5	41.010963	-75.733100
142	5308		Up Milepost	142.00	0	30	C	0	0	5	41.024556	-75.737463
143	5044		Up Milepost	143.00	0	30	T	0	0	5	41.033644	-75.748122
144	5399		Up Milepost	144.00	0	29	T	0	0	5	41.040675	-75.760478
144	4640		Class Change	2.00	0	24	B	0	0	5	41.051062	-75.769314

Exception Report
Exception List Section
Milepost 125 to Milepost 31
Jim Thorpe, PA to Mehoopany, PA

Page 2 of 5
Run Date: 06/07/2017
Run ID: 2017060701

MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
144	4640		Posted Speed	25.00	0	24	B	0	0	5	41.051062	-75.769314
145	5425		Up Milepost	145.00	0	23	B	0	0	5	41.052595	-75.771273
145	1776		Class Change	3.00	0	28	C	0	0	5	41.057345	-75.771859
145	1776		Posted Speed	30.00	0	28	C	0	0	5	41.057345	-75.771859
145	2738	94	Twist 31ft*	-1.53	4	29	E	2	3	5	41.059733	-75.773281
146	5214		Up Milepost	146.00	0	28	E	0	0	5	41.066234	-75.772403
147	5264		Up Milepost	147.00	0	30	B	0	0	5	41.080579	-75.773152
146	12136		Up Milepost	146.00	0	30	T	0	0	5	41.105404	-75.794256
147	5294		Up Milepost	147.00	0	29	C	0	0	5	41.115114	-75.804751
148	5312		Up Milepost	148.00	0	32	T	0	0	5	41.122984	-75.819966
149	5275		Up Milepost	149.00	0	31	B	0	0	5	41.120938	-75.838270
150	5284		Up Milepost	150.00	0	30	C	0	0	5	41.116996	-75.856419
151	5263		Up Milepost	151.00	0	30	C	0	0	5	41.110791	-75.873275
151	6074		Track Change	0.00	0	33	C	0	0	1	41.124492	-75.879627
153	10630		Up Milepost	153.00	0	31	T	0	0	1	41.135740	-75.873482
154	5284		Up Milepost	154.00	0	31	B	0	0	1	41.148847	-75.867867
155	5300		Up Milepost	155.00	0	30	C	0	0	1	41.162295	-75.868259
156	5332		Up Milepost	156.00	0	31	E	0	0	1	41.170862	-75.871992
156	2758		Track Change	0.00	0	29	E	0	0	5	41.174572	-75.879517
157	5292		Up Milepost	157.00	0	28	C	0	0	5	41.180677	-75.883747
158	5263		Up Milepost	158.00	0	29	B	0	0	5	41.189969	-75.882213
159	5311		Up Milepost	159.00	0	29	T	0	0	5	41.196470	-75.865214
160	5266		Up Milepost	160.00	0	31	E	0	0	5	41.205635	-75.863573
161	5341		Up Milepost	161.00	0	28	B	0	0	5	41.214497	-75.848408
161	884		Track Change	0.00	0	27	C	0	0	1	41.215993	-75.845899
167	16174		Up Milepost	167.00	0	30	E	0	0	1	41.238999	-75.804670
168	5127		Up Milepost	168.00	0	27	C	0	0	1	41.247194	-75.797185
169	5399		Up Milepost	169.00	0	27	T	0	0	1	41.259542	-75.789561
170	5034		Up Milepost	170.00	0	29	E	0	0	1	41.269548	-75.779072
171	5417		Up Milepost	171.00	0	30	C	0	0	1	41.281159	-75.771138
171	980		Posted Speed	40.00	0	32	B	0	0	1	41.282599	-75.774078
171	3889	143	Lmt Speed 3	35.00	934	30	C		3	1	41.288902	-75.779390
171	4631	146	Lmt Speed 3	34.00	712	30	C		3	1	41.290790	-75.778403
172	5481		Up Milepost	172.00	0	30	B	0	0	1	41.293094	-75.778361
173	1705	147	Lmt Speed 3+	36.00	806	30	C		3	1	41.297583	-75.776893
173	3591	148	Lmt Speed 3	33.00	1374	30	C		3	1	41.301743	-75.773229
174	4935	151	Lmt Speed 3	35.00	1204	30	C		3	1	41.305516	-75.773102
173	5142		Up Milepost	173.00	0	30	E	0	0	1	41.305958	-75.772628
173	2055		Subdivision	SUSQUE	0	30	C	0	0	1	41.310426	-75.772899

Exception Report
Exception List Section
Milepost 125 to Milepost 31
Jim Thorpe, PA to Mehoopany, PA

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Run Date: 06/07/2017
Run ID: 2017060701

MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
173	2063	152	Lmt Speed 3	33.00	2008	31	C		3	1	41.310432	-75.772927
173	5453	159	Lmt Speed 3	35.00	1068	27	C		3	1	41.316207	-75.773914
173	6818	160	Lmt Speed 3+	39.00	1151	28	C		3	1	41.316895	-75.769077
175	10713		Up Milepost	175.00	0	26	C	0	0	1	41.320732	-75.756076
175	3775	170	Lmt Speed 3	34.00	837	28	C		3	1	41.327611	-75.746102
175	4037	161	L Align 62	-2.17	14	28	E	2	3	1	41.328325	-75.746132
175	4053	163	Twist 31ft*	1.39	3	28	E	2	3	1	41.328368	-75.746145
175	4078	164	Twist 31ft*	1.81	32	28	E	1	3	1	41.328434	-75.746166
175	4095	168	Warp 62	3.06	61	28	E	0	3	1	41.328479	-75.746181
175	4102	166	R Align 62	2.08	11	28	E	2	3	1	41.328498	-75.746188
175	5843	172	Gage Narrow	55.80	8	29	T	0	3	1	41.333173	-75.746620
175	5887	174	Gage Narrow	55.83	11	29	B	0	3	1	41.333291	-75.746589
175	5998	176	Gage Narrow	55.79	7	28	B	0	3	1	41.333589	-75.746510
175	6419	178	Warp 62	2.37	61	23	C	1	3	1	41.334738	-75.746346
1	7341		Up Milepost	1.00	0	9	C	0	0	1	41.337019	-75.747605
1	462		Track Change	0.00	0	19	C	0	0	5	41.336594	-75.747150
1	638	185	Warp 62	2.15	60	23	C	2	3	5	41.336966	-75.747540
1	769		Posted Speed	38.00	0	25	C	0	0	5	41.337220	-75.747875
1	2094	187	Lmt Speed 3+	36.00	1457	29	C		3	5	41.338589	-75.752275
2	5953		Up Milepost	2.00	0	24	C	0	0	5	41.346942	-75.759836
2	529		Posted Speed	30.00	0	25	C	0	0	5	41.347375	-75.761666
2	946	193	Warp 62	2.36	61	25	C	1	3	5	41.347500	-75.763172
2	2779	196	Crosslevel	1.98	1	23	T	2	3	5	41.347094	-75.769752
2	2779	198	Warp 62	2.17	16	23	T	2	3	5	41.347094	-75.769752
2	4465		Class Change	1.00	0	11	B	0	0	5	41.347093	-75.775803
2	4465		Posted Speed	10.00	0	11	B	0	0	5	41.347093	-75.775803
2	4777	203	Gage Wide	58.19	2	10	C	0	1	5	41.347029	-75.776934
2	4967		Class Change	3.00	0	11	C	0	0	5	41.346897	-75.777608
2	4967		Posted Speed	30.00	0	11	C	0	0	5	41.346897	-75.777608
3	5262		Up Milepost	3.00	0	12	E	0	0	5	41.346582	-75.778597
3	453		Class Change	1.00	0	12	T	0	0	5	41.345949	-75.780010
3	453		Posted Speed	15.00	0	12	T	0	0	5	41.345949	-75.780010
4	5278		Up Milepost	4.00	0	9	C	0	0	5	41.349804	-75.792099
5	5314		Up Milepost	5.00	0	8	C	0	0	5	41.359834	-75.803953
5	4726		Class Change	3.00	0	10	B	0	0	5	41.371287	-75.796708
5	4726		Posted Speed	30.00	0	10	B	0	0	5	41.371287	-75.796708
6	5269		Up Milepost	6.00	0	20	C	0	0	5	41.372511	-75.795592
7	5283		Up Milepost	7.00	0	31	C	0	0	5	41.385219	-75.798343
8	5301		Up Milepost	8.00	0	31	T	0	0	5	41.389841	-75.816447

Exception Report
Exception List Section
Milepost 125 to Milepost 31

Jim Thorpe, PA to Mehoopany, PA

Page 4 of 5
Run Date: 06/07/2017
Run ID: 2017060701

MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
8	5091		Posted Speed	38.00	0	31	E	0	0	5	41.398161	-75.830045
9	5288		Up Milepost	9.00	0	32	C	0	0	5	41.398698	-75.830155
10	5319		Up Milepost	10.00	0	30	T	0	0	5	41.413184	-75.829531
10	7221	216	L Prof 62	-2.52	3	31	T	2	3	5	41.430797	-75.834232
10	10074	218	R Prof 62	-2.55	2	31	T	2	3	5	41.434863	-75.843071
12	10633		Up Milepost	12.00	0	31	T	0	0	5	41.435658	-75.844800
12	6859	224	Twist 31ft*	1.40	1	32	B	2	3	5	41.452057	-75.850737
14	10597		Up Milepost	14.00	0	30	C	0	0	5	41.461816	-75.851747
14	4037	227	Warp 62	2.33	58	31	E	1	3	5	41.464946	-75.864717
15	5280		Up Milepost	15.00	0	31	C	0	0	5	41.463230	-75.868604
16	5278		Up Milepost	16.00	0	30	C	0	0	5	41.453393	-75.882134
17	5278		Up Milepost	17.00	0	31	C	0	0	5	41.463907	-75.891245
18	5273		Up Milepost	18.00	0	31	B	0	0	5	41.476366	-75.900597
19	5276		Up Milepost	19.00	0	31	C	0	0	5	41.490163	-75.905010
21	10816		Up Milepost	21.00	0	29	C	0	0	5	41.511968	-75.910626
21	932	240	R Prof 62	-2.68	3	30	C	2	3	5	41.511577	-75.913966
21	988	242	Warp 62	2.33	54	30	C	1	3	5	41.511534	-75.914161
22	5004		Up Milepost	22.00	0	32	C	0	0	5	41.507036	-75.927447
23	5285		Up Milepost	23.00	0	33	C	0	0	5	41.514039	-75.941336
23	5307		Posted Speed	30.00	0	29	C	0	0	5	41.527636	-75.935679
24	5337		Up Milepost	24.00	0	29	C	0	0	5	41.527721	-75.935689
25	5263		Up Milepost	25.00	0	18	C	0	0	5	41.536484	-75.948929
25	5255		Posted Speed	38.00	0	32	C	0	0	5	41.538433	-75.967051
26	5293		Up Milepost	26.00	0	32	C	0	0	5	41.538504	-75.967156
27	5292		Up Milepost	27.00	0	31	C	0	0	5	41.551191	-75.975757
28	5288		Up Milepost	28.00	0	29	C	0	0	5	41.564112	-75.983330
29	5259		Up Milepost	29.00	0	23	C	0	0	5	41.564115	-76.000505
29	2266		Class Change	1.00	0	13	T	0	0	5	41.562102	-76.007356
29	2266		Posted Speed	10.00	0	13	T	0	0	5	41.562102	-76.007356
30	5223		Up Milepost	30.00	0	10	T	0	0	5	41.563703	-76.017949
30	991		Class Change	3.00	0	12	B	0	0	5	41.564260	-76.021492
30	991		Posted Speed	38.00	0	12	B	0	0	5	41.564260	-76.021492
30	1328	266	Lmt Speed 3+	36.00	481	12	C		3	5	41.564796	-76.022487
31	5149		Up Milepost	31.00	0	11	T	0	0	5	41.569158	-76.034506

Exception Report
Exception List Section
Milepost 125 to Milepost 31
Jim Thorpe, PA to Mehoopany, PA

Page 5 of 5
Run Date: 06/07/2017
Run ID: 2017060701

MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude

Notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Rail Impact Values are unitless; indicating a location with a large vertical axle acceleration

Rail Cant Exceptions values indicate degrees.

(RSA) indicates possible Rail Seat Abrasion. The following fields are irrelevant for Cant Exceptions: LC, PC

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Milepost 125 to Milepost 31

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Run Date: 06/07/2017
Run ID: 2017060701

Jim Thorpe, PA to Mehoopany, PA

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	0	92	0	505	414	5	2/32	1.79	25	34	0	248	4/52	0.99	20	0	34	38	41	45	48	51	54	
5	0	505	0	1174	670	10	6/49	1.98	25	32	0	909	6/49	1.98	0	0	32	35	38	40	43	45	47	
5	0	1291	0	1625	335	11	4/02	0.64	25	36	0	1480	4/02	0.64	0	0	36	40	44	48	51	55	58	
5	0	1692	0	2845	1154	12	-7/20	-1.47	25	26	0	1882	-11/03	-2.04	0	0	26	27	30	32	34	36	37	
5	0	4464	0	5453	990	12	-2/40	-1.19	25	39	0	4661	-3/17	-0.45	0	0	39	43	48	52	56	60	64	
5	0	5453	0	6221	769	13	-4/29	-0.92	25	35	0	5763	-4/31	-0.89	0	0	35	39	43	46	49	53	55	
5	0	7739	0	8083	345	11	-0/56	-0.32	20	69	0	7892	-1/01	-0.39	0	0	69	78	86	94	101	108	114	
5	0	8083	0	8323	241	11	0/53	0.41	20	71	0	8193	0/56	0.29	0	0	71	80	89	97	105	112	118	
5	0	8577	0	9167	591	13	4/11	0.46	20	20	0	8887	14/13	1.02	0	0	20	22	24	26	28	30	31	
5	0	9167	0	9863	697	17	5/56	0.28	20	28	0	9536	5/56	0.26	0	0	28	32	35	38	41	44	47	
5	0	10055	0	10852	798	18	-5/17	-2.32	20	38	0	10480	-5/16	-2.32	0	0	38	41	44	47	50	52	55	
5	0	10852	0	11656	805	19	1/47	0.67	20	49	0	10993	2/10	0.59	0	0	49	54	60	65	70	75	79	
5	0	11656	0	12724	1069	21	5/06	1.88	20	34	0	12093	7/05	2.57	0	0	34	36	39	41	43	46	48	
5	0	12724	0	12918	195	22	3/46	2.06	20	44	0	12909	3/46	2.05	0	0	44	47	51	55	58	61	64	
5	0	12918	0	13285	368	24	6/33	3.26	30	37	0	13284	6/33	3.26	0	0	37	39	42	44	47	49	51	
5	0	13285	0	13855	571	26	8/31	4.25	30	34	0	13486	8/38	4.13	0	0	34	36	38	40	42	44	46	
5	125	162	125	1043	882	31	-8/35	-4.14	30	34	125	602	-8/41	-4.07	0	0	34	36	38	40	42	44	46	
5	125	1508	125	2151	644	31	-3/19	-0.82	30	40	125	1832	-3/22	-0.81	0	0	40	45	49	53	57	61	64	
5	125	3656	125	4441	786	29	4/28	2.55	30	42	125	4440	4/30	2.53	0	0	42	45	48	52	54	57	60	
5	125	4441	126	204	893	29	8/38	4.27	30	35	125	4930	8/40	4.23	0	0	35	36	39	41	43	44	46	
5	126	767	126	1142	376	30	-1/10	-0.11	30	61	126	1141	-1/10	-0.11	0	0	61	70	78	86	93	99	105	
5	126	1142	126	2690	1549	29	-1/46	-0.36	30	34	126	1546	-4/42	-0.83	0	0	34	38	42	45	48	51	54	
5	126	2690	126	3425	736	30	-3/13	-1.03	30	39	126	2952	-3/49	-1.15	0	0	39	43	48	51	55	58	61	
5	126	3425	127	162	2390	31	-3/25	-1.37	30	35	126	3993	-6/53	-2.84	0	0	35	37	40	42	45	47	49	
5	127	762	127	1520	759	30	3/37	1.68	30	42	127	1273	3/41	1.64	0	0	42	46	50	54	57	61	64	
5	127	1520	127	3762	2243	31	7/05	2.94	30	32	127	1833	10/04	4.02	0	0	32	33	35	37	39	41	43	
5	127	3917	127	4797	881	31	-1/16	-0.32	30	40	127	4109	-2/34	0.07	0	0	40	46	52	57	62	66	70	
5	127	4797	128	278	606	27	-10/03	-4.2	30	32	128	202	-10/02	-4.16	0	0	32	34	36	38	39	41	43	
5	128	278	128	1422	1145	31	-3/13	-0.63	30	29	128	389	-10/49	-3.21	43	1	29	30	32	34	36	38	40	
5	128	1422	128	1942	521	31	-4/50	-0.84	30	33	128	1617	-4/52	-0.82	0	0	33	37	41	44	47	50	53	
5	128	2054	128	2901	848	27	3/35	1.61	30	42	128	2465	3/39	1.42	0	0	42	46	50	53	57	60	63	
5	128	2901	128	3343	443	26	-1/52	-0.51	30	52	128	3186	-1/52	-0.52	0	0	52	58	65	70	75	80	85	
5	128	3571	128	4162	592	31	-1/55	-0.2	30	47	128	3891	-1/59	-0.12	0	0	47	54	60	66	71	76	81	
5	128	4714	129	148	761	31	-3/37	-0.76	30	38	128	5223	-3/38	-0.73	0	0	38	43	47	51	55	58	61	
5	129	376	129	917	542	31	2/53	1.7	30	48	129	653	2/56	1.75	0	0	48	52	57	61	65	68	72	
5	129	1397	129	2051	655	30	3/23	2.25	30	45	129	1690	3/49	2.38	0	0	45	48	52	55	59	62	65	
5	129	2051	129	2820	770	31	4/26	2.61	30	42	129	2550	4/28	2.4	0	0	42	45	48	51	54	57	60	
5	129	2912	129	3536	625	30	1/36	1.02	30	58	129	3097	1/43	1.1	0	0	58	65	71	77	82	87	91	
5	129	4103	129	4510	408	27	0/28	0.03	30	83	129	4262	0/41	0.31	0	0	83	94	104	114	123	131	138	
5	129	4914	130	66	409	27	-1/07	-1.02	30	71	129	5165	-1/03	-0.72	0	0	71	80	88	95	102	108	115	
5	130	66	130	1185	1120	25	-4/55	-1.75	30	36	130	455	-4/57	-1.6	0	0	36	40	43	46	49	52	55	
5	130	1339	130	1984	646	23	-3/55	-0.79	30	36	130	1671	-4/00	-0.66	0	0	36	40	44	48	52	55	58	
5	130	3530	130	3777	248	31	-1/02	-0.24	30	63	130	3660	-1/11	-0.29	0	0	63	72	80	87	93	100	106	
5	130	4057	130	4684	628	30	7/22	2.34	30	32	130	4431	9/32	3.65	0	0	32	33	35	38	39	41	43	
5	130	4684	130	4869	186	30	6/20	1.28	30	31	130	4706	6/23	1.28	0	0	31	34	37	40	43	45	47	
5	131	287	131	2081	1795	31	5/03	1.5	30	35	131	1134	5/08	1.32	0	0	35	38	41	45	48	50	53	

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Jim Thorpe, PA to Mehoopany, PA

Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	131	2771	131	3275	505	29	-1/56	-0.43	30	48	131	3011	-2/01	-0.29	0	0	48	55	61	66	71	76	81	
5	131	4877	131	5506	630	30	-1/00	-0.5	30	68	131	5161	-1/04	-0.46	0	0	68	77	85	93	100	106	112	
5	131	6682	131	7401	720	30	1/35	0.46	30	55	131	6957	1/41	0.52	0	0	55	61	68	74	79	84	89	
5	131	7782	131	9132	1351	29	-1/37	-0.8	30	56	131	8217	-1/37	-0.63	0	0	56	63	70	76	82	87	92	
5	131	9132	131	9760	629	30	-4/20	-1.42	30	38	131	9475	-4/22	-1.43	0	0	38	42	45	49	52	55	58	
5	131	9760	133	301	1271	30	5/53	2.18	30	32	131	10070	8/19	2.94	0	0	32	34	36	39	41	43	45	
5	133	301	133	1413	1113	30	1/46	0.56	30	53	133	803	1/48	0.48	0	0	53	59	65	71	77	82	86	
5	133	1887	133	2679	793	29	-5/29	-1.58	30	34	133	2301	-5/31	-1.56	0	0	34	37	41	44	47	49	52	
5	133	2679	133	4654	1976	30	-7/16	-3.3	30	31	133	3547	-10/40	-4.37	0	0	31	33	35	37	39	40	42	
5	133	4707	134	142	751	31	3/23	0.16	30	36	133	5082	3/26	0.18	0	0	36	41	46	50	54	58	61	
5	134	1683	134	2959	1277	30	-0/23	-0.84	30	112	134	2343	-0/25	-0.76	0	0	112	127	139	151	162	172	182	
5	134	2959	134	4746	1788	31	-2/20	-0.79	30	46	134	3912	-2/30	-0.71	0	0	46	51	57	61	66	70	74	
5	135	11	135	722	712	30	6/26	2.67	30	34	135	347	6/34	2.39	0	0	34	37	40	42	45	47	49	
5	135	722	135	2786	2065	30	-3/17	-1.39	30	32	135	1088	-8/11	-2.85	0	0	32	34	37	39	41	43	45	
5	135	2786	135	3660	875	30	-4/47	-0.79	30	33	135	3169	-4/48	-0.73	0	0	33	37	41	44	47	50	53	
5	135	3660	135	5242	1583	32	3/23	1.11	30	41	135	4371	3/25	0.98	0	0	41	45	49	54	57	61	64	
5	135	6292	135	7026	735	31	-3/56	-1.1	30	38	135	6703	-3/59	-1.11	0	0	38	42	46	50	53	57	60	
5	135	7231	135	8357	1127	31	3/31	0.75	30	39	135	7494	3/31	0.65	0	0	39	43	47	52	55	59	62	
5	135	9031	135	10864	1834	30	5/20	1.63	30	34	135	9697	5/41	1.52	0	0	34	37	40	43	46	48	51	
5	135	10864	137	514	1089	29	5/16	1.6	30	34	135	11012	5/49	1.73	0	0	34	37	40	43	46	48	51	
5	137	984	137	1745	762	31	2/53	0.25	30	40	137	1486	2/53	0.19	0	0	40	45	50	55	59	63	67	
5	137	1914	137	3465	1552	31	-0/43	-0.73	30	80	137	3098	-0/49	-0.69	0	0	80	90	100	108	116	123	130	
5	137	3952	138	148	845	31	2/55	0.13	30	39	137	4451	2/56	0.1	0	0	39	44	49	54	58	62	66	
5	138	313	138	1180	868	30	-1/29	-0.57	30	39	138	649	-3/14	-0.43	0	0	39	44	48	53	57	60	64	
5	138	1180	138	2425	1246	29	-3/13	-0.45	30	38	138	1533	-3/12	-0.24	0	0	38	43	48	52	56	60	64	
5	138	2425	138	3488	1064	31	6/30	3.42	30	37	138	3132	6/32	3.3	0	0	37	39	42	45	47	49	51	
5	138	3488	138	4884	1397	32	-2/26	-1.51	30	43	138	3730	-3/08	-1.06	0	0	43	48	52	56	60	64	67	
5	138	4884	139	1527	1946	27	-6/22	-2.58	30	32	138	5211	-10/08	-4.35	0	0	32	34	36	38	39	41	43	
5	139	1835	139	2768	934	29	2/30	0.55	30	45	139	2329	2/32	0.52	0	0	45	50	55	60	65	69	73	
5	139	3359	139	4438	1080	31	2/34	0.86	30	46	139	3926	2/36	0.8	0	0	46	51	56	61	65	69	73	
5	140	162	140	666	505	29	3/16	0.6	30	39	140	395	3/16	0.55	0	0	39	44	49	53	57	61	64	
5	140	1732	140	2351	620	30	4/30	1.02	30	35	140	2014	4/37	0.92	0	0	35	38	42	46	49	52	55	
5	140	2530	140	3376	847	31	-4/00	-0.71	30	36	140	3038	-4/01	-0.69	0	0	36	40	45	48	52	55	58	
5	140	4269	140	5086	818	31	3/02	0.61	30	41	140	4683	3/06	0.6	0	0	41	46	50	55	59	62	66	
5	140	5329	141	698	719	24	-3/22	-1.55	30	44	141	247	-3/25	-1.54	0	0	44	48	52	56	59	63	66	
5	141	960	141	1343	384	7	-3/51	-0.52	30	35	141	1117	-3/53	-0.27	0	0	35	39	43	47	51	55	58	
5	141	2233	141	3050	818	31	3/02	0.6	30	41	141	2645	3/06	0.6	0	0	41	46	50	55	59	62	66	
5	141	3289	141	699	716	31	-3/23	-1.56	30	44	141	256	-3/25	-1.56	0	0	44	48	52	56	59	63	66	
5	141	2052	141	2779	728	28	4/01	0.8	30	37	141	2477	4/05	0.84	0	0	37	41	45	48	52	55	58	
5	141	3458	141	4407	950	28	5/31	1.28	30	32	141	3852	5/35	1.07	0	0	32	36	39	42	45	48	50	
5	141	4407	142	346	1249	30	-3/01	-0.33	30	39	141	4998	-3/03	-0.18	0	0	39	44	49	53	58	61	65	
5	142	1336	142	2295	960	28	-4/20	-1.96	30	40	142	1736	-4/18	-1.76	0	0	40	43	47	50	53	56	59	
5	142	3246	142	4894	1649	30	-4/49	-1.32	30	35	142	3662	-4/52	-1.28	0	0	35	39	42	46	49	52	54	
5	143	1268	143	3387	2120	30	5/02	2.35	30	38	143	2924	5/08	2.26	0	0	38	41	44	47	50	53	55	
5	143	3387	143	3937	551	32	-1/23	-0.35	30	56	143	3672	-1/25	-0.14	0	0	56	64	71	78	84	90	95	
5	144	234	144	1159	926	29	-5/47	-1.78	30	34	144	556	-5/47	-1.6	0	0	34	37	40	43	46	48	51	

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							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
5	144	1544	144	2687	1144	28	2/13	0.7	30	44	144	1736	2/41	0.57	0	0	44	49	54	59	63	67	71	
5	144	2687	144	3326	640	27	1/39	0.59	30	54	144	2952	1/44	0.47	0	0	54	60	67	73	78	83	88	
5	144	4467	144	5076	610	24	-10/16	-4.03	25	31	144	4798	-10/16	-4.03	0	0	31	33	35	37	39	40	42	
5	144	5229	145	188	386	23	8/40	3.58	25	30	145	23	8/56	2.71	0	0	30	32	35	37	39	41	43	
5	145	188	145	640	453	23	9/04	3.13	25	29	145	296	9/12	2.37	0	0	29	31	33	36	38	40	42	
5	145	1365	145	2280	916	29	-4/57	-1.2	30	34	145	1706	-4/57	-1.07	0	0	34	38	41	45	48	51	53	
5	145	2370	145	2866	497	29	6/52	3.08	30	36	145	2617	6/55	3.11	0	0	36	38	40	43	45	47	50	
5	145	2979	145	4053	1075	29	2/58	0.58	30	39	145	3338	3/09	0.34	0	0	39	44	49	53	57	61	65	
5	145	4053	145	4491	439	27	7/22	3.28	30	35	145	4262	7/22	3.28	0	0	35	37	40	42	44	46	48	
5	145	4491	146	146	871	28	-8/06	-2.59	30	31	145	4796	-8/06	-2.51	0	0	31	33	36	38	40	43	45	
5	146	146	146	643	498	30	4/17	1.16	30	37	146	352	4/18	1.09	0	0	37	41	44	48	51	54	57	
5	146	1790	146	2255	466	32	0/59	0.58	30	71	146	2078	1/01	0.65	0	0	71	80	88	96	103	110	116	
5	146	5199	147	662	729	29	-3/20	-0.44	30	38	147	202	-3/22	-0.43	0	0	38	43	48	52	56	59	63	
5	147	662	147	922	261	32	0/56	0.71	30	69	147	809	1/01	0.41	0	0	69	78	87	94	101	108	114	
5	147	922	147	1822	901	33	-4/58	-1.2	30	35	147	1449	-4/59	-1.2	0	0	35	38	42	45	48	51	54	
5	147	2411	147	3635	1225	26	-4/41	-0.69	30	33	147	2764	-4/41	-0.58	0	0	33	37	41	44	48	51	54	
5	147	3635	147	5532	1898	31	6/11	2.64	30	35	147	3886	6/20	2.35	0	0	35	37	40	43	45	48	50	
5	147	5754	147	6750	997	29	-1/22	-0.49	30	59	147	6179	-1/23	-0.41	0	0	59	67	74	81	87	93	98	
5	147	6750	147	8362	1613	28	-5/26	-1.17	30	32	147	7590	-6/11	-1.39	0	0	32	35	38	41	43	46	48	
5	147	8784	147	10122	1339	31	0/32	0.49	30	72	147	8998	0/58	0.5	0	0	72	81	90	97	105	111	118	
5	147	11069	147	12023	955	30	4/54	1.39	30	35	147	11457	4/48	1.18	0	0	35	39	42	46	49	52	55	
5	146	2971	146	4793	1823	30	-6/08	-1.82	30	33	146	4256	-6/17	-1.83	0	0	33	36	39	42	44	47	49	
5	146	4793	147	750	1253	30	6/23	2.73	30	34	146	5114	6/25	2.31	0	0	34	37	40	43	45	47	50	
5	147	2692	147	3162	471	28	-1/56	-0.96	30	52	147	2931	-1/55	-0.63	0	0	52	58	64	70	75	80	84	
5	147	3162	147	4643	1482	31	-2/20	-1.61	30	47	147	3406	-3/47	-2.78	0	0	47	50	54	57	60	63	66	
5	148	1336	148	2251	916	32	-3/26	-0.41	30	37	148	1787	-3/26	-0.3	0	0	37	42	46	51	55	58	62	
5	148	3520	148	4286	767	32	-3/09	-0.77	30	40	148	3820	-3/10	-0.62	0	0	40	45	50	54	58	62	65	
5	148	5263	149	738	752	31	3/07	0.38	30	39	149	693	3/07	0.33	0	0	39	44	49	53	57	61	65	
5	149	738	149	1224	487	31	3/28	0.33	30	37	149	867	3/31	0.31	0	0	37	41	46	50	54	58	61	
5	149	1224	149	2098	875	32	-3/37	-0.61	30	37	149	1592	-3/40	-0.56	0	0	37	42	46	50	54	57	61	
5	149	3751	149	4586	836	30	4/53	1.13	30	33	149	4132	4/57	0.83	0	0	33	37	41	44	47	50	53	
5	149	4586	150	722	1422	30	-3/37	-0.15	30	34	150	445	-3/38	-0.03	0	0	34	39	44	48	52	56	59	
5	150	722	150	1354	633	30	6/52	2.63	30	34	150	1024	6/56	2.6	0	0	34	36	39	42	44	46	48	
5	150	1975	150	2808	834	31	-1/58	-0.35	30	48	150	2323	-2/00	-0.28	0	0	48	55	61	66	72	76	81	
5	150	4010	150	4384	375	31	3/14	0.28	30	38	150	4379	3/15	0.28	0	0	38	43	48	52	56	60	63	
5	150	4384	151	1873	2754	31	3/07	0.33	30	36	151	834	3/22	0.1	0	0	36	41	46	50	54	58	62	
5	151	1873	151	2597	725	31	3/20	0.38	30	37	151	2193	3/19	0.26	0	0	37	42	47	51	55	59	63	
5	151	4425	151	5697	1273	32	3/51	1	30	37	151	5240	3/59	0.81	0	0	37	41	45	49	52	56	59	
5	151	5697	151	5959	263	33	1/47	0.12	30	49	151	5795	1/49	0	0	0	49	56	62	68	74	79	84	
1	151	5959	151	6264	306	33	-1/20	-0.36	30	59	151	6086	-1/22	-0.37	0	0	59	67	74	81	87	93	98	
1	151	6381	151	7915	1535	33	-1/29	-0.42	30	55	151	6888	-1/33	-0.27	0	0	55	62	69	76	81	87	92	
1	151	8652	151	9881	1230	30	3/47	0.52	30	36	151	9166	3/50	0.42	0	0	36	40	44	48	52	56	59	
1	153	1518	153	2667	1150	31	-5/04	-1.25	30	34	153	1951	-5/10	-1.16	0	0	34	37	41	44	47	50	53	
1	153	5232	154	243	297	31	-1/12	-0.24	30	61	154	173	-1/11	-0.14	0	0	61	70	78	85	92	98	104	
1	154	243	154	1946	1704	31	-1/58	-0.32	30	43	154	819	-2/29	-0.18	0	0	43	48	54	59	64	68	72	
1	154	2058	154	3501	1444	30	3/27	0.49	30	37	154	2409	3/35	0.44	0	0	37	42	46	50	54	57	61	

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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point													
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at							
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0	
1	154	3861	154	4892	1032	30	2/55	0.56	30	41	154	4317	2/57	0.47	0	0	41	46	51	55	60	64	67	
1	154	4892	155	481	891	30	4/55	1.53	30	36	155	61	4/57	1.5	0	0	36	39	43	46	49	52	55	
1	155	481	155	2209	1729	30	-5/24	-2.38	30	37	155	799	-5/55	-2.71	0	0	37	40	43	45	48	50	53	
1	155	2735	156	1	2600	30	-4/19	-0.61	30	33	155	3986	-4/27	-0.41	0	0	33	37	41	45	48	51	54	
1	156	1	156	1571	1571	31	4/23	2.35	30	37	156	484	5/57	2.83	0	0	37	40	43	46	48	50	53	
1	156	1571	156	2286	716	30	3/58	1.15	30	37	156	1797	4/00	0.91	0	0	37	41	45	49	53	56	59	
5	156	2499	156	2792	294	29	1/52	0.17	30	46	156	2653	1/55	-0.22	0	0	46	53	59	65	71	76	81	
5	156	4638	157	438	1094	29	-4/36	-1.7	30	38	157	56	-4/34	-1.58	0	0	38	41	45	48	51	54	57	
5	157	670	157	1349	680	31	3/42	0.81	30	34	157	943	4/56	0.9	0	0	34	37	41	44	47	50	53	
5	157	1349	157	1803	455	32	2/44	0.87	30	38	157	1542	4/25	1.36	0	0	38	41	45	48	51	54	57	
5	157	1803	157	2576	774	33	1/07	0.12	30	35	157	2051	5/01	1.41	0	0	35	39	42	45	48	51	54	
5	157	2576	157	2887	312	33	9/12	3.78	30	32	157	2885	9/12	3.78	0	0	32	34	36	38	40	42	44	
5	157	2887	157	3766	880	32	9/30	3.77	30	31	157	3035	9/37	3.63	0	0	31	33	35	37	39	41	43	
5	157	3766	157	5137	1372	31	-0/47	-0.49	30	69	157	5136	-1/02	-0.44	0	0	69	78	86	94	101	108	114	
5	157	5137	158	517	645	29	-1/49	-0.52	30	51	158	85	-1/48	-0.27	0	0	51	58	64	70	75	81	85	
5	158	517	158	932	416	28	4/08	1	30	36	158	741	4/08	0.73	0	0	36	40	44	48	51	54	58	
5	158	932	158	1343	412	28	4/28	0.93	30	35	158	1104	4/29	0.94	0	0	35	39	43	46	50	53	56	
5	158	1343	158	1890	548	29	-3/23	-0.47	30	38	158	1685	-3/25	-0.46	0	0	38	43	47	52	55	59	62	
5	158	1948	158	2572	625	29	1/47	0.36	30	51	158	2272	1/47	0.32	0	0	51	58	65	71	76	81	86	
5	158	2777	158	3543	767	29	-4/50	-1.48	30	36	158	3115	-4/52	-1.43	0	0	36	39	43	46	49	52	55	
5	158	3543	158	4126	584	29	4/55	1.61	30	36	158	3859	4/58	1.61	0	0	36	40	43	46	49	52	55	
5	159	199	159	694	496	29	1/31	0.44	30	55	159	446	1/39	0.47	0	0	55	62	68	74	80	85	90	
5	159	1163	159	3023	1861	29	-9/40	-4.01	30	31	159	1492	-9/42	-3.73	0	0	31	33	35	37	39	41	43	
5	159	3023	159	4386	1364	28	9/38	4.29	30	32	159	3738	9/53	4.11	0	0	32	34	36	38	40	41	43	
5	159	4648	160	1721	2341	32	1/50	0.73	30	35	159	5018	5/41	1.76	0	0	35	38	41	44	46	49	51	
5	160	2231	160	3169	939	29	-2/54	-0.28	30	40	160	2777	-2/56	-0.23	0	0	40	45	50	55	59	63	67	
5	160	3169	160	3774	606	28	3/45	0.83	30	38	160	3415	3/47	0.83	0	0	38	42	46	50	54	57	60	
5	160	3774	160	4453	680	28	-3/48	-0.38	30	35	160	4022	-3/50	-0.24	0	0	35	39	44	48	51	55	58	
5	160	4453	160	5127	675	28	5/49	2.3	30	36	160	4785	5/50	2.28	0	0	36	39	42	45	47	50	52	
5	160	5195	161	576	724	28	-4/03	-0.6	30	35	161	256	-4/11	-0.65	0	0	35	39	43	47	51	54	57	
1	161	576	161	1015	440	27	2/28	1.83	30	49	161	880	2/55	1.91	0	0	49	53	58	62	66	69	73	
1	161	1015	161	1298	284	27	4/17	1.55	30	39	161	1139	4/18	1.55	0	0	39	42	46	50	53	56	59	
1	161	2745	161	3356	612	29	4/05	0.7	30	34	161	3072	4/15	0.54	0	0	34	39	43	46	50	53	56	
1	161	3491	161	4082	592	28	-3/55	-0.31	30	34	161	3767	-3/59	-0.32	0	0	34	39	43	47	51	54	57	
1	161	6047	161	7060	1014	29	-4/06	-0.38	30	34	161	6657	-4/08	-0.36	0	0	34	38	43	46	50	53	56	
1	161	7060	161	8223	1164	29	4/03	0.5	30	34	161	7599	4/06	0.4	0	0	34	39	43	47	50	54	57	
1	161	8355	161	9647	1293	29	-4/32	-0.83	30	34	161	9026	-4/35	-0.68	0	0	34	38	42	45	48	52	54	
1	161	9810	161	10934	1125	31	4/32	1.06	30	34	161	10168	4/34	0.63	0	0	34	38	41	45	48	51	54	
1	161	11166	161	12175	1010	30	-4/08	-0.95	30	36	161	11527	-4/08	-0.85	0	0	36	40	44	48	52	55	58	
1	161	12423	161	12961	539	32	4/58	1.82	30	37	161	12699	5/04	1.9	0	0	37	40	44	47	50	52	55	
1	161	14648	167	226	1754	30	-8/35	-4.92	30	36	161	15226	-8/39	-4.87	0	0	36	38	40	42	44	46	47	
1	167	226	167	2004	1779	30	8/00	4.74	30	36	167	621	8/11	4.39	0	0	36	38	40	42	44	46	48	
1	167	2921	167	3737	817	28	5/19	2.12	30	37	167	3284	5/19	2.01	0	0	37	40	43	46	49	51	54	
1	167	4490	168	336	975	28	-3/05	-1.47	30	45	167	4909	-3/07	-1.47	0	0	45	50	54	58	62	65	69	
1	168	1301	168	2671	1371	27	-6/01	-2.05	30	34	168	1654	-6/04	-1.94	0	0	34	37	40	43	45	48	50	
1	168	3161	168	4171	1011	29	6/08	2.29	30	35	168	3501	6/15	2.24	0	0	35	37	40	43	45	48	50	

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Elevation plus(+) = L Rail High, minus(-) = R Rail High Curvature plus(+) = Curve to Right, minus(-) = Curve to Left

							Average				Limiting Point														
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at								
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0		
1	169	1498	169	2666	1169	29	6/10	2.48	30	35	169	1947	6/11	2.43	0	0	35	38	41	44	46	49	51		
1	169	2727	169	4131	1405	31	-8/02	-2.93	30	32	169	3315	-8/08	-2.93	0	0	32	34	37	39	41	43	45		
1	169	4131	170	764	1669	30	2/08	1.06	30	36	169	4554	6/20	2.77	0	0	36	39	41	44	46	49	51		
1	170	764	170	1479	716	28	3/05	1.37	30	45	170	1024	3/08	1.36	0	0	45	49	53	57	61	65	68		
1	170	1934	170	3274	1341	29	-7/01	-3.02	30	35	170	2772	-7/04	-2.94	0	0	35	37	40	42	44	47	49		
1	170	3438	170	4439	1002	29	4/00	0.76	30	36	170	4152	4/03	0.74	0	0	36	40	44	48	52	55	58		
1	170	4517	171	646	1548	30	-6/57	-2.96	30	34	170	5219	-7/01	-2.82	0	0	34	37	39	42	44	46	49		
1	171	769	171	3216	2448	31	1/56	0.36	40	48	171	1110	1/55	0.12	0	0	48	55	61	67	72	77	82		
1	171	3216	171	4150	935	30	6/01	2.24	40	35	171	3889	6/02	2.13	372	1	35	38	41	43	46	48	51		
1	171	4283	171	4995	713	30	-6/04	-1.89	40	34	171	4631	-6/08	-1.9	120	1	34	37	40	42	45	47	50		
1	171	5272	174	1306	1592	30	1/26	0.76	40	59	174	1305	1/30	0.67	0	0	59	66	73	79	85	90	95		
1	174	1306	174	2112	807	30	4/11	0.78	40	36	174	1632	4/13	0.76	310	1	36	40	44	47	51	54	57		
1	173	2510	173	3884	1375	29	-5/11	-1.21	40	33	173	3591	-5/16	-1.14	728	1	33	37	40	43	46	49	52		
1	174	4080	173	141	1205	30	6/05	2.21	40	35	174	4935	6/05	2.1	602	1	35	37	40	43	46	48	51		
1	173	268	173	2276	2009	30	-6/59	-2.59	40	33	173	2063	-7/00	-2.33	1514	1	33	35	38	41	43	45	48		
1	173	2495	173	4713	2219	32	5/52	4.07	40	40	173	4712	4/05	1.57	0	0	40	44	47	51	54	57	60		
1	173	4713	173	5781	1069	29	4/51	1.4	40	35	173	5453	4/59	1.34	622	1	35	39	42	45	48	51	54		
1	173	6022	173	7173	1152	27	-2/56	-0.26	40	39	173	6818	-3/05	-0.28	250	1	39	44	49	53	58	61	65		
1	173	8092	173	9182	1091	30	2/31	0.25	40	42	173	8892	2/28	0.11	0	0	42	48	54	59	64	68	72		
1	173	9671	175	640	1684	28	-1/58	-0.23	40	47	175	387	-2/01	-0.12	0	0	47	53	60	65	70	75	80		
1	175	2139	175	2445	307	27	-0/44	0.16	40	73	175	2279	-0/44	0.18	0	0	73	85	96	105	114	122	130		
1	175	2445	175	2698	254	27	0/34	-0.05	40	76	175	2536	0/41	-0.22	0	0	76	89	100	110	119	127	135		
1	175	2698	175	3349	652	26	-2/10	-1.5	40	53	175	3348	-2/09	-1.26	0	0	53	59	64	69	74	78	82		
1	175	3349	175	4186	838	27	-8/32	-3.94	40	34	175	3775	-8/31	-3.77	316	1	34	36	38	40	42	44	46		
1	175	4186	175	4621	436	29	0/39	0.41	40	78	175	4287	0/38	-0.26	0	0	78	91	102	113	122	131	139		
1	175	4621	175	5773	1153	30	2/55	0.42	40	40	175	5129	2/55	0.23	9	-1	40	45	50	55	59	63	67		
5	175	5862	1	1608	3089	28	-4/26	-0.92	38	33	175	7238	-4/23	-0.43	2332	0	33	38	42	45	49	52	55		
5	1	1608	1	3065	1458	29	2/24	1.41	38	36	1	2094	4/40	1.26	249	2	36	40	43	47	50	53	56		
5	1	3065	1	3697	633	29	2/26	1.11	38	48	1	3696	2/32	1.12	0	0	48	53	58	63	67	71	75		
5	1	3697	1	4284	588	28	3/19	1.07	38	41	1	3886	3/20	0.87	0	0	41	45	50	54	58	61	64		
5	1	4624	2	1087	2418	25	-3/18	-1.26	30	36	1	4903	-5/40	-2.03	534	0	36	39	42	45	47	50	52		
5	2	1949	2	2655	707	26	-4/02	-0.25	30	33	2	2298	-4/05	-0.21	0	0	33	38	42	46	50	53	56		
5	2	2812	2	3578	767	20	4/28	1.54	30	38	2	3298	4/30	1.52	0	0	38	41	45	48	52	54	57		
5	2	4269	3	188	1183	12	-4/01	-1.21	30	36	2	4561	-4/05	-0.8	0	0	36	40	45	48	52	55	58		
5	3	619	3	1546	928	11	-0/53	-0.51	15	71	3	1072	-0/57	-0.44	0	0	71	81	90	98	105	112	119		
5	3	1601	3	3028	1428	11	10/06	3.46	15	30	3	2384	10/07	3.36	0	0	30	32	34	36	38	40	41		
5	3	3141	3	3466	326	11	-1/20	-0.12	15	57	3	3349	-1/21	-0.1	0	0	57	65	73	80	86	92	98		
5	3	3466	3	3746	281	10	1/04	0.35	15	64	3	3563	1/11	0.43	0	0	64	72	80	87	94	100	106		
5	3	4576	4	723	1427	10	-2/59	-1.29	15	44	3	4869	-2/58	-0.95	0	0	44	48	53	57	61	65	69		
5	4	2023	5	1242	4535	11	1/52	0.86	15	41	4	2407	3/24	0.92	0	0	41	45	49	53	57	61	64		
5	5	1560	5	3779	2220	11	0/54	1.04	15	71	5	1862	1/10	1.15	0	0	71	79	86	93	99	105	111		
5	5	4695	6	508	1084	23	-1/38	-0.51	30	54	5	4992	-1/40	-0.46	0	0	54	61	68	74	80	85	90		
5	6	639	6	1408	770	32	-1/49	-0.48	30	51	6	1407	-1/55	-0.48	0	0	51	57	63	69	74	79	84		
5	6	1408	6	3067	1660	32	-1/26	-0.58	30	43	6	1547	-2/54	-0.69	0	0	43	48	52	57	61	65	69		
5	6	3067	7	1098	3316	31	-1/40	-0.54	30	47	6	3935	-2/28	-0.79	0	0	47	52	57	62	67	71	75		
5	7	1951	7	2914	964	31	-1/33	-0.3	30	51	7	2193	-1/37	0.01	0	0	51	59	66	72	78	84	89		

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							Average				Limiting Point														
Track	Starting		Ending				Curve	Elev	Speed				Curve	Elev	Total		Limiting Speed at								
	MP	FT	MP	FT	Len	Spd	Deg/Mi	Inches	Post	Lmt	MP	FT	Deg/Mi	Inches	FT	Grp	3.0	4.0	5.0	6.0	7.0	8.0	9.0		
5	7	3833	7	4753	921	31	1/33	1.4	30	63	7	4512	1/34	1.33	0	0	63	69	75	81	87	92	96		
5	8	1428	8	3479	2052	30	1/14	0.73	30	59	8	3330	1/23	0.36	0	0	59	66	74	80	86	92	98		
5	8	3479	9	2254	4065	32	1/07	0.96	38	51	8	3586	2/07	0.92	0	0	51	57	63	68	73	77	81		
5	9	3729	9	4857	1129	30	0/57	0.35	38	69	9	4349	0/59	0.31	0	0	69	78	87	95	102	109	115		
5	10	1272	10	3126	1855	31	-1/06	-0.5	38	64	10	2481	-1/11	-0.41	0	0	64	72	80	87	94	100	106		
5	10	4497	10	6740	2244	30	-2/46	-1.13	38	44	10	5833	-2/59	-1.01	0	0	44	49	53	57	61	65	69		
5	12	595	12	3850	3256	32	1/32	1.23	38	53	12	950	2/16	1.42	0	0	53	58	63	68	72	77	81		
5	12	3850	12	5092	1243	32	2/00	1.52	38	55	12	4085	2/01	1.26	0	0	55	61	66	71	76	80	85		
5	12	6829	12	7084	256	32	-0/17	-0.27	38	127	12	6995	-0/17	-0.28	0	0	127	147	164	178	192	205	217		
5	12	7383	12	9193	1811	32	-0/52	-1.14	38	77	12	8449	-0/57	-0.95	0	0	77	86	94	102	109	115	122		
5	12	9193	14	2118	3524	31	-1/44	-1.53	38	52	12	10128	-3/02	-2.83	0	0	52	56	60	64	68	71	74		
5	14	2118	15	569	3733	32	-1/32	-1.57	38	55	14	3222	-2/35	-2.45	0	0	55	59	64	68	72	75	79		
5	15	569	15	1455	887	31	-1/49	-0.88	38	54	15	1112	-1/50	-0.72	0	0	54	60	66	72	77	82	87		
5	15	3825	16	3555	5010	32	2/52	2.36	38	49	15	4170	3/20	2.69	0	0	49	53	57	60	64	67	70		
5	16	4638	17	2037	2679	31	-1/07	-0.44	38	64	17	360	-1/09	-0.36	0	0	64	73	81	88	95	101	107		
5	17	5213	18	2167	2229	31	1/03	0.57	38	68	18	1724	1/05	0.44	0	0	68	76	84	92	99	105	111		
5	18	3830	19	1464	2912	31	1/47	1.09	38	55	19	881	1/47	0.82	0	0	55	62	68	73	79	83	88		
5	19	2196	19	5034	2839	30	-1/01	-1.46	38	69	19	5033	-1/32	-2.12	0	0	69	75	81	86	91	96	101		
5	19	5034	19	8369	3336	30	-1/49	-1.6	38	54	19	6340	-2/20	-1.86	0	0	54	59	64	69	73	77	81		
5	19	8369	19	9366	998	30	-2/17	-2.52	38	58	19	8534	-2/15	-2.23	0	0	58	62	67	72	76	80	84		
5	19	9906	21	1808	2720	31	-1/40	-1.11	38	51	19	10345	-2/41	-1.89	0	0	51	55	60	64	68	72	76		
5	21	3976	22	1512	2542	32	1/32	0.46	38	49	21	4290	1/34	-0.35	0	0	49	57	65	71	77	83	88		
5	22	1512	22	2520	1009	32	1/17	0.51	38	48	22	1634	2/05	0.38	0	0	48	54	60	66	71	75	80		
5	22	2520	22	2674	155	31	1/06	0.64	38	69	22	2673	1/06	0.64	0	0	69	77	85	92	99	105	111		
5	22	2674	23	2303	4916	34	1/50	0.91	38	50	22	3428	3/13	2.52	0	0	50	53	57	61	65	68	71		
5	23	3929	24	1495	2905	30	-2/37	-2.09	30	50	23	4320	-2/37	-1.54	0	0	50	54	59	64	68	72	75		
5	24	3027	24	4392	1366	15	-5/29	-2.48	30	37	24	3813	-5/35	-2.45	0	0	37	40	43	46	49	51	54		
5	24	5024	25	344	585	25	-0/26	-0.57	30	101	25	219	-0/30	-0.65	0	0	101	115	127	137	147	157	166		
5	25	344	25	493	150	27	-1/11	-0.61	30	66	25	492	-1/11	-0.61	0	0	66	74	82	89	96	102	107		
5	25	493	25	1296	804	31	-1/12	-0.57	30	62	25	522	-1/15	-0.42	0	0	62	71	78	85	92	98	103		
5	25	2346	25	4434	2089	32	2/04	1.46	30	52	25	3556	2/19	1.37	0	0	52	57	62	67	71	76	80		
5	25	4434	25	4574	141	31	1/13	1.96	30	75	25	4557	1/13	1.81	0	0	75	82	89	95	101	107	112		
5	25	4574	27	352	6366	32	0/44	0.74	38	68	26	572	1/22	1.41	0	0	68	75	81	87	93	99	104		
5	27	781	28	2960	7469	31	-1/04	-0.54	38	56	28	777	-1/26	-0.2	0	0	56	64	72	78	84	90	95		
5	28	2960	29	384	2685	27	-2/17	-2.19	38	55	28	3179	-2/22	-2.01	0	0	55	60	65	69	73	77	81		
+	5	29	384	29	1861	1478	18	5/34	2.49	38	36	29	662	5/37	2.08	949	-1	36	39	42	45	48	50	53	
5	30	728	30	1221	494	12	5/23	2.74	38	39	30	1074	5/18	2.5	0	0	39	41	44	47	50	53	55		
+	5	30	1221	30	1702	482	11	6/05	2.69	38	36	30	1328	6/10	2.65	129	1	36	39	42	44	47	49	51	
5	30	1798	30	4254	2457	12	-1/53	-0.41	38	42	30	2219	-2/45	-0.38	0	0	42	47	52	57	61	65	69		

Notes:

+ Maximum curve speed is limited at qualified cant deficiency.
However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Exception Report
Exception Summary Section
Milepost 125 to Milepost 31

Jim Thorpe, PA to Mehoopany, PA

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Run Date: 06/07/2017
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		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl		Lim	Pst	
MP	FT	Exc	FT	Drop	Exc	FT	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	FT	Drop	Exc	Cls	Cls	Trk
127	5651	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	52	1	-	-	-	-	1	3	5
128	5123	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	3	5	
130	5255	-	-	-	1	2	3	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	3	5	
140	5313	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	5	
145	1776	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	-	-	2	3	5
171	5417	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	0	3	1	
172	5481	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	0	3	1	
173	5142	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	0	3	1	
175	10713	-	-	-	3	26	2	25	-	-	-	-	-	-	-	-	-	-	-	-	-	2	122	2	2	35	1	1	0	3	1
1	462	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	60	-	-	-	-	1	0	3	5
2	5953	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	2	77	1	-	-	-	-	1	3	5
2	4465	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	1	5	
10	5319	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	5	-	-	-	-	-	-	-	-	-	-	2	3	5	
12	10633	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	2	3	5
14	10597	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	58	1	-	-	-	-	1	3	5
21	10816	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	-	-	1	54	1	-	-	-	-	1	3	5
30	991	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	3	5	
		2	3	1	4	28	5	84	-	1	1	-	-	-	-	3	8	-	-	-	-	8	423	6	4	40	1	12			

Total Miles: 86.20
Exceptions per 100 Miles: 45.24
CY15 National Average Exceptions per 100 miles: 9.9

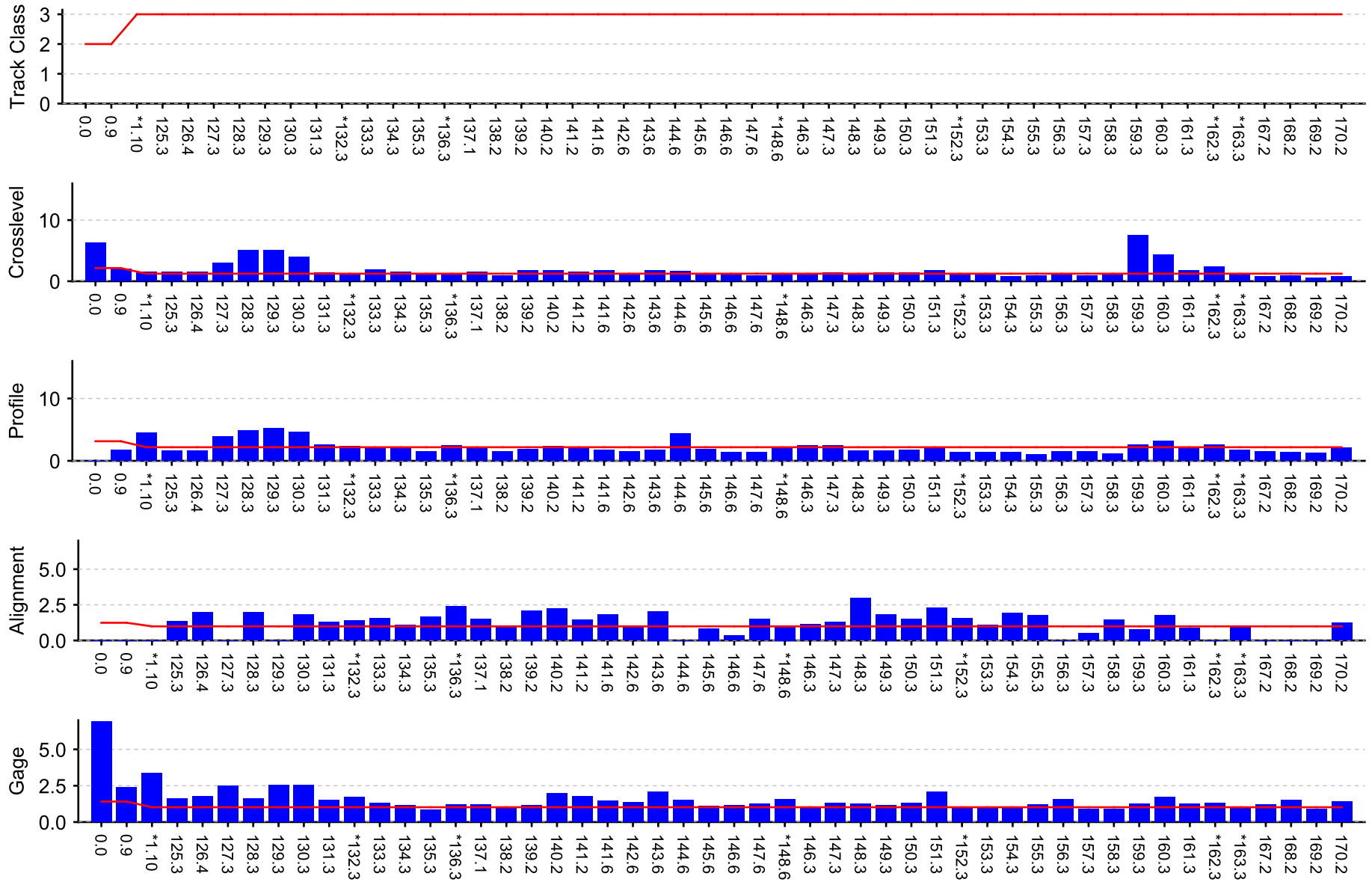
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Milepost 125 to Milepost 31

Jim Thorpe, PA

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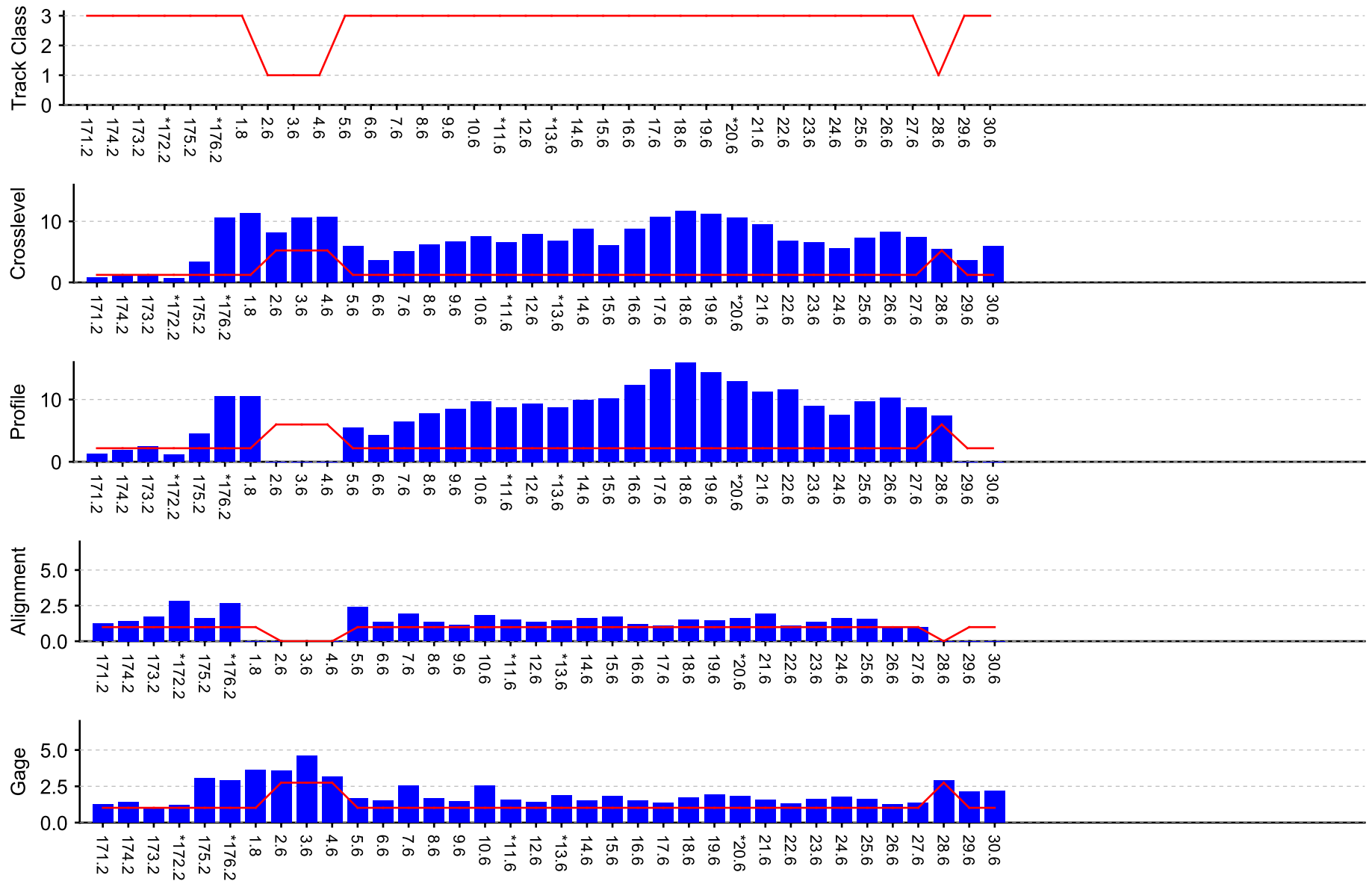


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Milepost 125 to Milepost 31

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Class Plus 1 Exception List Section
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Jim Thorpe, PA to Mehoopany, PA

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
0	0		Track Change	0.00	0	1	T	0	0	7		
0	0		Class Change	4.00	0	1	T	0	0	7		
0	0		Posted Speed	79.00	0	1	T	0	0	7		
0	121		State Line	PA	0	4	B	0	0	7		
0	122		Railroad	RBMN -	0	4	B	0	0	7		
0	123		Subdivision	MAIN	0	4	B	0	0	7		
0	300		Track Change	0.00	0	5	E	0	0	5	40.860780	-75.738112
0	381		Class Change	2.00	0	4	E	0	0	5	40.860913	-75.738004
0	381		Posted Speed	25.00	0	4	E	0	0	5	40.860913	-75.738004
0	6615		Posted Speed	20.00	0	12	T	0	0	5	40.872891	-75.746883
0	12901	18	R Align 62	2.03	8	22	C	2	3	5	40.881422	-75.763143
0	13043		Class Change	3.00	0	23	B	0	0	5	40.881804	-75.763040
0	13043		Posted Speed	30.00	0	23	B	0	0	5	40.881804	-75.763040
125	14119		Up Milepost	125.00	0	30	T	0	0	5	40.883769	-75.760337
126	5128		Up Milepost	126.00	0	29	E	0	0	5	40.895619	-75.753083
127	5651		Up Milepost	127.00	0	31	C	0	0	5	40.903067	-75.744692
127	4356	35	Twist 31ft*	-1.17	2	30	E	3	4	5	40.907433	-75.741775
127	4979	37	Warp 62	2.27	52	28	B	1	4	5	40.907128	-75.739571
127	5019	38	Warp 62	1.89	53	27	B	3	4	5	40.907129	-75.739427
128	5123		Up Milepost	128.00	0	27	B	0	0	5	40.907167	-75.739052
128	3375	40	Crosslevel	1.68	13	27	T	3	4	5	40.915570	-75.739109
128	3453	41	Crosslevel	1.46	4	28	T	3	4	5	40.915778	-75.739173
128	4629	42	Crosslevel	1.71	8	32	T	3	4	5	40.918838	-75.740444
129	5325		Up Milepost	129.00	0	31	E	0	0	5	40.920542	-75.741567
129	839	43	Warp 62	1.96	59	31	E	3	4	5	40.922401	-75.743353
130	5255		Up Milepost	130.00	0	27	C	0	0	5	40.933530	-75.741375
130	2878	48	Gage Narrow	55.89	2	31	T	0	4	5	40.940800	-75.743888
130	4753	50	R Align 62	2.38	32	30	E	2	4	5	40.945381	-75.746661
130	4760	52	L Align 62	2.61	28	30	E	2	4	5	40.945400	-75.746656
130	4805	55	L Align 62	-2.10	26	30	E	2	4	5	40.945521	-75.746626
130	4805	53	R Align 62	-1.77	9	30	E	2	4	5	40.945521	-75.746626
130	4819	56	R Align 62	-1.63	3	30	E	3	4	5	40.945559	-75.746617
131	5274		Up Milepost	131.00	0	31	T	0	0	5	40.946772	-75.746276
133	10728		Up Milepost	133.00	0	29	E	0	0	5	40.955465	-75.711504
134	5314		Up Milepost	134.00	0	31	E	0	0	5	40.956863	-75.703186
134	1228	62	Crosslevel	-1.70	5	30	T	3	4	5	40.960147	-75.704087
135	5171		Up Milepost	135.00	0	31	T	0	0	5	40.969319	-75.710568
135	1023	63	Gage Wide	57.63	5	30	B	3	4	5	40.971538	-75.712684
135	1188	64	Gage Wide	57.70	9	29	C	3	4	5	40.971839	-75.713126

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Jim Thorpe, PA to Mehoopany, PA

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
137	11437		Up Milepost	137.00	0	28	C	0	0	5	40.974741	-75.742649
138	4647		Up Milepost	138.00	0	31	E	0	0	5	40.980199	-75.727497
139	5301		Up Milepost	139.00	0	27	C	0	0	5	40.988073	-75.712371
139	159	65	Gage Wide	57.60	1	26	C	3	4	5	40.988498	-75.712302
139	2685	66	Twist 31ft*	-1.24	2	30	E	3	4	5	40.992300	-75.719466
140	5313		Up Milepost	140.00	0	30	T	0	0	5	40.997616	-75.725667
140	50	67	Crosslevel	-1.54	4	30	T	3	4	5	40.997732	-75.725762
140	286	68	Twist 31ft*	1.18	3	29	B	3	4	5	40.998281	-75.726209
140	2897	70	Gage Wide	57.89	15	31	C	1	4	5	41.005007	-75.729172
140	4468	71	Twist 31ft*	1.33	5	32	B	2	4	5	41.008719	-75.731998
140	4662	72	Gage Wide	57.62	7	31	C	3	4	5	41.009190	-75.732313
141	5348		Up Milepost	141.00	0	26	B	0	0	5	41.010971	-75.733107
141	2429	73	Twist 31ft*	1.28	5	31	B	2	4	5	41.008725	-75.731999
141	2626	74	Gage Wide	57.63	9	31	C	3	4	5	41.009206	-75.732318
141	3304		Up Milepost	141.00	0	32	B	0	0	5	41.010963	-75.733100
142	5308		Up Milepost	142.00	0	30	C	0	0	5	41.024556	-75.737463
142	2023	75	Twist 31ft*	1.39	7	29	E	2	4	5	41.029827	-75.739573
143	5044		Up Milepost	143.00	0	30	T	0	0	5	41.033644	-75.748122
144	5399		Up Milepost	144.00	0	29	T	0	0	5	41.040675	-75.760478
144	4640		Class Change	2.00	0	24	B	0	0	5	41.051062	-75.769314
144	4640		Posted Speed	25.00	0	24	B	0	0	5	41.051062	-75.769314
145	5425		Up Milepost	145.00	0	23	B	0	0	5	41.052595	-75.771273
145	1776		Class Change	3.00	0	28	C	0	0	5	41.057345	-75.771859
145	1776		Posted Speed	30.00	0	28	C	0	0	5	41.057345	-75.771859
145	2695	93	Twist 31ft*	-1.15	7	29	E	3	4	5	41.059620	-75.773244
145	2738	96	Warp 62	2.00	62	29	E	3	4	5	41.059733	-75.773281
145	2738	95	Twist 31ft*	-1.53	7	29	E	2	4	5	41.059733	-75.773281
145	2752	97	Warp 62	1.99	62	29	E	3	4	5	41.059770	-75.773292
145	3929	98	Twist 31ft*	1.15	1	28	E	3	4	5	41.062940	-75.773633
145	3980	99	Warp 62	2.02	62	28	E	2	4	5	41.063078	-75.773596
146	5214		Up Milepost	146.00	0	28	E	0	0	5	41.066234	-75.772403
147	5264		Up Milepost	147.00	0	30	B	0	0	5	41.080579	-75.773152
147	7603	100	Gage Wide	57.63	3	27	C	3	4	5	41.097310	-75.782210
146	12136		Up Milepost	146.00	0	30	T	0	0	5	41.105404	-75.794256
146	4226	101	Gage Wide	57.61	4	28	C	3	4	5	41.115322	-75.800909
147	5294		Up Milepost	147.00	0	29	C	0	0	5	41.115114	-75.804751
148	5312		Up Milepost	148.00	0	32	T	0	0	5	41.122984	-75.819966
148	3190	102	Crosslevel	-1.55	10	32	T	3	4	5	41.123071	-75.831336
148	3190	103	Warp 62	1.95	22	32	T	3	4	5	41.123071	-75.831336

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Jim Thorpe, PA to Mehoopany, PA

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
149	5275		Up Milepost	149.00	0	31	B	0	0	5	41.120938	-75.838270
150	5284		Up Milepost	150.00	0	30	C	0	0	5	41.116996	-75.856419
151	5263		Up Milepost	151.00	0	30	C	0	0	5	41.110791	-75.873275
151	6074		Track Change	0.00	0	33	C	0	0	1	41.124492	-75.879627
153	10630		Up Milepost	153.00	0	31	T	0	0	1	41.135740	-75.873482
154	5284		Up Milepost	154.00	0	31	B	0	0	1	41.148847	-75.867867
155	5300		Up Milepost	155.00	0	30	C	0	0	1	41.162295	-75.868259
156	5332		Up Milepost	156.00	0	31	E	0	0	1	41.170862	-75.871992
156	2758		Track Change	0.00	0	29	E	0	0	5	41.174572	-75.879517
157	5292		Up Milepost	157.00	0	28	C	0	0	5	41.180677	-75.883747
158	5263		Up Milepost	158.00	0	29	B	0	0	5	41.189969	-75.882213
159	5311		Up Milepost	159.00	0	29	T	0	0	5	41.196470	-75.865214
160	5266		Up Milepost	160.00	0	31	E	0	0	5	41.205635	-75.863573
161	5341		Up Milepost	161.00	0	28	B	0	0	5	41.214497	-75.848408
161	884		Track Change	0.00	0	27	C	0	0	1	41.215993	-75.845899
161	15563	123	Gage Wide	57.64	5	30	C	3	4	1	41.237768	-75.803274
161	15701	124	Gage Wide	57.63	2	30	C	3	4	1	41.238123	-75.803445
161	15743	125	Gage Wide	57.66	24	30	C	3	4	1	41.238225	-75.803516
161	15782	126	Gage Wide	57.61	3	30	C	3	4	1	41.238317	-75.803590
161	15795	127	Gage Wide	57.62	10	30	C	3	4	1	41.238346	-75.803616
167	16174		Up Milepost	167.00	0	30	E	0	0	1	41.238999	-75.804670
167	110	128	Warp 62	1.97	62	30	E	3	4	1	41.239098	-75.805047
167	1843	129	Twist 31ft*	-1.14	4	28	E	3	4	1	41.242538	-75.807069
167	1858	130	Warp 62	2.02	62	28	E	2	4	1	41.242569	-75.807032
167	1884	131	Warp 62	1.95	62	28	E	3	4	1	41.242621	-75.806967
168	5127		Up Milepost	168.00	0	27	C	0	0	1	41.247194	-75.797185
169	5399		Up Milepost	169.00	0	27	T	0	0	1	41.259542	-75.789561
170	5034		Up Milepost	170.00	0	29	E	0	0	1	41.269548	-75.779072
170	2334	132	Gage Wide	57.69	6	29	C	3	4	1	41.273093	-75.772127
170	2454	133	Gage Wide	57.61	1	28	C	3	4	1	41.273338	-75.771838
170	2536	134	Gage Wide	57.62	5	27	C	3	4	1	41.273522	-75.771669
171	5417		Up Milepost	171.00	0	30	C	0	0	1	41.281159	-75.771138
171	980		Posted Speed	40.00	0	32	B	0	0	1	41.282599	-75.774078
171	4749	144	Gage Wide	57.61	1	30	C	3	4	1	41.291102	-75.778340
171	4764	145	Gage Wide	57.67	14	30	E	3	4	1	41.291142	-75.778335
172	5481		Up Milepost	172.00	0	30	B	0	0	1	41.293094	-75.778361
173	5142		Up Milepost	173.00	0	30	E	0	0	1	41.305958	-75.772628
173	2055		Subdivision	SUSQUE	0	30	C	0	0	1	41.310426	-75.772899
173	2596	153	Twist 31ft*	1.15	2	31	B	3	4	1	41.310700	-75.774831

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
173	2636	154	Warp 62	1.94	62	32	B	3	4	1	41.310720	-75.774974
173	2656	155	Twist 31ft*	1.14	4	32	B	3	4	1	41.310732	-75.775045
173	2668	156	Warp 62	2.03	62	32	B	2	4	1	41.310739	-75.775087
173	2685	157	Warp 62	1.87	62	32	B	3	4	1	41.310749	-75.775148
173	2709	158	Warp 62	1.96	62	32	B	3	4	1	41.310765	-75.775232
175	10713		Up Milepost	175.00	0	26	C	0	0	1	41.320732	-75.756076
175	4037	162	L Align 62	-2.17	22	28	E	2	4	1	41.328325	-75.746132
175	4078	165	Twist 31ft*	1.81	46	28	E	1	4	1	41.328434	-75.746166
175	4095	169	Warp 62	3.06	61	28	E	0	4	1	41.328479	-75.746181
175	4102	167	R Align 62	2.08	20	28	E	2	4	1	41.328498	-75.746188
175	5843	173	Gage Narrow	55.80	8	29	T	0	4	1	41.333173	-75.746620
175	5887	175	Gage Narrow	55.83	11	29	B	0	4	1	41.333291	-75.746589
175	5998	177	Gage Narrow	55.79	7	28	B	0	4	1	41.333589	-75.746510
175	6419	179	Warp 62	2.37	61	23	C	1	4	1	41.334738	-75.746346
1	7341		Up Milepost	1.00	0	9	C	0	0	1	41.337019	-75.747605
1	462		Track Change	0.00	0	19	C	0	0	5	41.336594	-75.747150
1	486	184	Gage Wide	57.66	4	20	C	3	4	5	41.336643	-75.747198
1	638	186	Warp 62	2.15	60	23	C	2	4	5	41.336966	-75.747540
1	769		Posted Speed	38.00	0	25	C	0	0	5	41.337220	-75.747875
1	4770	188	Twist 31ft*	-1.17	1	25	B	3	4	5	41.344677	-75.756978
1	4809	189	Warp 62	2.06	55	25	B	2	4	5	41.344780	-75.757013
1	5741	190	Twist 31ft*	1.27	1	23	E	2	4	5	41.346682	-75.759140
1	5784	191	Warp 62	1.87	59	23	E	3	4	5	41.346738	-75.759278
1	5827	192	Twist 31ft*	-1.12	1	23	E	3	4	5	41.346793	-75.759417
2	5953		Up Milepost	2.00	0	24	C	0	0	5	41.346942	-75.759836
2	529		Posted Speed	30.00	0	25	C	0	0	5	41.347375	-75.761666
2	946	194	Warp 62	2.36	61	25	C	1	4	5	41.347500	-75.763172
2	986	195	Warp 62	1.95	40	25	E	3	4	5	41.347502	-75.763317
2	2779	197	Crosslevel	1.98	7	23	T	2	4	5	41.347094	-75.769752
2	2779	199	Warp 62	2.17	16	23	T	2	4	5	41.347094	-75.769752
2	3801	200	Crosslevel	1.44	2	14	T	3	4	5	41.346932	-75.773407
2	3919	201	Crosslevel	1.51	1	13	T	3	4	5	41.346964	-75.773836
2	4133	202	Warp 62	2.04	57	11	T	2	4	5	41.347020	-75.774604
2	4465		Class Change	1.00	0	11	B	0	0	5	41.347093	-75.775803
2	4465		Posted Speed	10.00	0	11	B	0	0	5	41.347093	-75.775803
2	4777	204	Gage Wide	58.19	13	10	C	0	2	5	41.347029	-75.776934
2	4967		Class Change	3.00	0	11	C	0	0	5	41.346897	-75.777608
2	4967		Posted Speed	30.00	0	11	C	0	0	5	41.346897	-75.777608
3	5262		Up Milepost	3.00	0	12	E	0	0	5	41.346582	-75.778597

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
3	453		Class Change	1.00	0	12	T	0	0	5	41.345949	-75.780010
3	453		Posted Speed	15.00	0	12	T	0	0	5	41.345949	-75.780010
4	5278		Up Milepost	4.00	0	9	C	0	0	5	41.349804	-75.792099
5	5314		Up Milepost	5.00	0	8	C	0	0	5	41.359834	-75.803953
5	4726		Class Change	3.00	0	10	B	0	0	5	41.371287	-75.796708
5	4726		Posted Speed	30.00	0	10	B	0	0	5	41.371287	-75.796708
6	5269		Up Milepost	6.00	0	20	C	0	0	5	41.372511	-75.795592
6	2772	213	Warp 62	1.88	61	31	C	3	4	5	41.379731	-75.793422
7	5283		Up Milepost	7.00	0	31	C	0	0	5	41.385219	-75.798343
8	5301		Up Milepost	8.00	0	31	T	0	0	5	41.389841	-75.816447
8	5053	214	Twist 31ft*	-1.17	1	32	E	3	4	5	41.398057	-75.830022
8	5091		Posted Speed	38.00	0	31	E	0	0	5	41.398161	-75.830045
8	5099	215	Twist 31ft*	1.27	2	32	E	2	4	5	41.398182	-75.830050
9	5288		Up Milepost	9.00	0	32	C	0	0	5	41.398698	-75.830155
10	5319		Up Milepost	10.00	0	30	T	0	0	5	41.413184	-75.829531
10	7221	217	L Prof 62	-2.52	5	31	T	2	4	5	41.430797	-75.834232
10	10072	220	Crosslevel	1.40	3	31	T	3	4	5	41.434860	-75.843064
10	10074	219	R Prof 62	-2.55	3	31	T	2	4	5	41.434863	-75.843071
10	10087	221	Warp 62	1.96	15	31	T	3	4	5	41.434881	-75.843110
12	10633		Up Milepost	12.00	0	31	T	0	0	5	41.435658	-75.844800
12	6559	222	Crosslevel	1.47	2	32	T	3	4	5	41.451250	-75.850959
12	6849	223	Warp 62	1.89	57	32	B	3	4	5	41.452030	-75.850745
12	6859	225	Twist 31ft*	1.40	9	32	B	2	4	5	41.452057	-75.850737
14	10597		Up Milepost	14.00	0	30	C	0	0	5	41.461816	-75.851747
14	3995	226	Twist 31ft*	1.33	2	31	E	2	4	5	41.464997	-75.864577
14	4037	228	Warp 62	2.33	58	31	E	1	4	5	41.464946	-75.864717
15	5280		Up Milepost	15.00	0	31	C	0	0	5	41.463230	-75.868604
16	5278		Up Milepost	16.00	0	30	C	0	0	5	41.453393	-75.882134
17	5278		Up Milepost	17.00	0	31	C	0	0	5	41.463907	-75.891245
18	5273		Up Milepost	18.00	0	31	B	0	0	5	41.476366	-75.900597
18	3942	231	Warp 62	1.88	59	31	B	3	4	5	41.486538	-75.904958
19	5276		Up Milepost	19.00	0	31	C	0	0	5	41.490163	-75.905010
19	1691	234	Warp 62	1.93	24	30	T	3	4	5	41.494270	-75.902321
19	2701	235	Warp 62	1.89	16	30	C	3	4	5	41.496515	-75.900186
19	3095	236	Warp 62	2.03	59	30	C	2	4	5	41.497432	-75.899427
19	3760	237	Warp 62	1.89	19	29	C	3	4	5	41.499035	-75.898294
19	5744	238	Warp 62	1.86	58	29	C	3	4	5	41.504287	-75.896963
19	9217	239	Twist 31ft*	1.24	1	30	E	3	4	5	41.511077	-75.904958
21	10816		Up Milepost	21.00	0	29	C	0	0	5	41.511968	-75.910626

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MP	FT	Seq#	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
21	932	241	R Prof 62	-2.68	4	30	C	2	4	5	41.511577	-75.913966
21	988	243	Warp 62	2.33	54	30	C	1	4	5	41.511534	-75.914161
21	4272	244	Twist 31ft*	-1.24	2	31	B	3	4	5	41.507662	-75.924918
21	4308	245	Warp 62	1.96	21	31	C	3	4	5	41.507623	-75.925038
22	5004		Up Milepost	22.00	0	32	C	0	0	5	41.507036	-75.927447
22	1487	246	R Prof 62	-2.35	2	31	C	2	4	5	41.506967	-75.932812
23	5285		Up Milepost	23.00	0	33	C	0	0	5	41.514039	-75.941336
23	4019	247	Twist 31ft*	-1.16	1	30	B	3	4	5	41.524257	-75.936691
23	5307		Posted Speed	30.00	0	29	C	0	0	5	41.527636	-75.935679
24	5337		Up Milepost	24.00	0	29	C	0	0	5	41.527721	-75.935689
25	5263		Up Milepost	25.00	0	18	C	0	0	5	41.536484	-75.948929
25	2469	248	Twist 31ft*	1.17	2	32	B	3	4	5	41.535918	-75.957848
25	5255		Posted Speed	38.00	0	32	C	0	0	5	41.538433	-75.967051
26	5293		Up Milepost	26.00	0	32	C	0	0	5	41.538504	-75.967156
27	5292		Up Milepost	27.00	0	31	C	0	0	5	41.551191	-75.975757
27	1562	249	Warp 62	1.93	59	31	C	3	4	5	41.555398	-75.976708
27	1620	250	Warp 62	2.00	58	30	C	3	4	5	41.555552	-75.976758
28	5288		Up Milepost	28.00	0	29	C	0	0	5	41.564112	-75.983330
28	573	251	Warp 62	1.91	61	29	C	3	4	5	41.565032	-75.985017
28	2926	252	Warp 62	1.93	57	27	C	3	4	5	41.566800	-75.993150
29	5259		Up Milepost	29.00	0	23	C	0	0	5	41.564115	-76.000505
29	2266		Class Change	1.00	0	13	T	0	0	5	41.562102	-76.007356
29	2266		Posted Speed	10.00	0	13	T	0	0	5	41.562102	-76.007356
30	5223		Up Milepost	30.00	0	10	T	0	0	5	41.563703	-76.017949
30	991		Class Change	3.00	0	12	B	0	0	5	41.564260	-76.021492
30	991		Posted Speed	38.00	0	12	B	0	0	5	41.564260	-76.021492
31	5149		Up Milepost	31.00	0	11	T	0	0	5	41.569158	-76.034506
31	825	268	Crosslevel	-1.71	4	10	T	3	4	5	41.569418	-76.037487
31	825	269	Warp 62	1.97	50	10	T	3	4	5	41.569418	-76.037487
31	854	270	Warp 62	1.94	29	10	T	3	4	5	41.569428	-76.037591

Notes:

* Federal Track Safety Standard Advisory

+ Maximum curve speed is limited at qualified cant deficiency. However, actual cant deficiency does not exceed 1-inch grace allowed under 49 CFR 213.57(b).

Rail Impact Values are unitless; indicating a location with a large vertical axle acceleration

Rail Cant Exceptions values indicate degrees.

(RSA) indicates possible Rail Seat Abrasion. The following fields are irrelevant for Cant Exceptions: LC, PC

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		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl		Tot	Lim	Pst
MP	FT	EXC	FT	Drop	EXC	FT	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	Cls	Cls	Trk
0	381	-	-	-	-	-	1	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	5	
127	5651	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	105	1	1	2	-	-	1	4	5
128	5123	-	-	-	-	-	-	-	-	3	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5	
129	5325	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	59	-	-	-	-	-	3	4	5
130	5255	-	-	-	1	2	5	98	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	4	5	
134	5314	-	-	-	-	-	-	-	-	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5
135	5171	2	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5	
139	5301	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	3	4	5
140	5313	2	22	1	-	-	-	-	-	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	1	-	1	4	5
141	5348	1	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5	1	-	2	4	5
142	5308	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	1	-	2	4	5
145	1776	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	186	1	3	15	1	-	2	4	5
147	5264	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5
146	12136	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5
148	5312	-	-	-	-	-	-	-	-	1	10	-	-	-	-	-	-	-	-	-	-	1	22	-	-	-	-	-	3	4	5
161	884	5	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	1
167	16174	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	186	1	1	4	-	-	2	4	1
170	5034	3	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	1
171	5417	2	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	1
173	5142	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	248	1	2	6	-	-	2	4	1
175	10713	-	-	-	3	26	2	42	2	-	-	-	-	-	-	-	-	-	-	-	-	2	122	2	1	46	1	-	0	4	1
1	462	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	174	2	3	3	1	-	2	4	5
2	5953	-	-	-	-	-	-	-	-	3	10	1	-	-	-	-	-	-	-	-	-	4	174	3	-	-	-	-	1	4	5
2	4465	1	13	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	2	5
6	5269	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	61	-	-	-	-	-	3	4	5
8	5301	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	1	-	2	4	5
10	5319	-	-	-	-	-	-	-	-	1	3	-	-	-	-	2	8	2	-	-	-	1	15	-	-	-	-	-	2	4	5
12	10633	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	1	57	-	1	9	1	-	2	4	5

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		Wide Gage			Tight Gage		Alignment			Crosslevel			Rockoff			Profile			Run Off			Warp			Twist-31			Lmt Spd			
		Tot	Exc	2 Cl	Tot	Exc	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl	Tot	Exc	2 Cl		Tot	Lim	Pst
MP	FT	EXC	FT	Drop	EXC	FT	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	FT	Drop	EXC	Cls	Cls	Trk
14	10597	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	58	1	1	2	1	-	1	4	5
18	5273	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	59	-	-	-	-	-	3	4	5
19	5276	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	176	1	1	1	-	-	2	4	5
21	10816	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	1	-	-	-	2	75	1	1	2	-	-	1	4	5
22	5004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	1	-	-	-	-	-	-	-	-	-	-	2	4	5
23	5285	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	3	4	5
25	5263	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	3	4	5
27	5292	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	117	-	-	-	-	-	3	4	5
28	5288	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	118	-	-	-	-	-	3	4	5
31	5149	-	-	-	-	-	-	-	-	1	4	-	-	-	-	-	-	-	-	-	-	2	79	-	-	-	-	-	3	4	5
		20	141	2	4	28	8	148	6	12	63	1	-	-	-	4	14	4	-	-	-	41	2091	14	24	118	9	-			

Total Miles: 86.20
Exceptions per 100 Miles: 131.09
CY15 National Average Exceptions per 100 miles: 9.9

Exception Report
Alignment 62 MCO Stations
Milepost 125 to Milepost 31
Jim Thorpe, PA to Mehoopany, PA

Page 1 of 2
Run Date: 06/07/2017
Run ID: 2017060701

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
130	4753	R Align 62	2.38	24	30	E	2	3	5	40.945381	-75.746661

	MP	FT	LAlign62	LAlignMCO	RAlign62	RAlignMCO	Curve	Xlevel	Gage
1	130	4691			-0.6	6.02	6.33	1.83	57.19
2	130	4707			0.41	7.03	6.38	1.29	57.39
3	130	4722			1.38	7.6	6.21	1.32	57.24
4	130	4738			1.74	7.32	5.93	1.16	57.03
5	130	4753			2.38	7.35	5.44	0.78	57.35
6	130	4768			1.46	5.76	4.68	0.58	57.35
7	130	4784			-1.08	2.38	3.82	0.2	57.07
8	130	4799			-1.62	1.03	2.95	0.15	56.61
9	130	4815			-1.42	0.38	1.98	0.17	56.64

AVG 4.99

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
130	4760	L Align 62	2.61	24	30	E	2	3	5	40.945400	-75.746656

	MP	FT	LAlign62	LAlignMCO	RAlign62	RAlignMCO	Curve	Xlevel	Gage
1	130	4698	-0.23	6.45			6.38	1.64	57.24
2	130	4714	1.0	7.57			6.32	1.31	57.47
3	130	4729	1.26	7.29			6.11	1.43	57.32
4	130	4745	1.93	7.23			5.74	0.82	57.35
5	130	4760	2.61	7.28			5.11	0.79	57.35
6	130	4775	0.89	4.84			4.3	0.57	57.35
7	130	4791	-1.63	1.42			3.43	0.12	56.7
8	130	4806	-2.09	0.18			2.52	0.03	56.64
9	130	4822	-1.47	-0.03			1.6	0.32	56.64

AVG 4.69

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
130	4805	L Align 62	-2.10	11	30	E	2	3	5	40.945521	-75.746626

	MP	FT	LAlign62	LAlignMCO	RAlign62	RAlignMCO	Curve	Xlevel	Gage
1	130	4743	1.77	7.15			5.8	0.9	57.26
2	130	4759	2.59	7.29			5.16	0.82	57.35
3	130	4774	1.03	5.04			4.36	0.52	57.35
4	130	4790	-1.53	1.59			3.49	0.14	56.71
5	130	4805	-2.1	0.22			2.58	0.03	56.66
6	130	4820	-1.51	0.03			1.71	0.28	56.64
7	130	4836	-0.82	-0.13			0.98	0.36	56.69
8	130	4851	-0.51	-0.37			0.46	0.32	56.35
9	130	4867	-0.06	-0.07			0.1	-0.16	56.73

AVG 2.30

Exception Report
Alignment 62 MCO Stations
Milepost 125 to Milepost 31
Jim Thorpe, PA to Mehoopany, PA

Page 2 of 2
Run Date: 06/07/2017
Run ID: 2017060701

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
175	4037	L Align 62	-2.17	14	28	E	2	3	1	41.328325	-75.746132

	MP	FT	LAlign62	LAlignMCO	RAlign62	RAlignMCO	Curve	Xlevel	Gage
1	175	3975	-0.32	-9.23			-8.48	-3.96	56.49
2	175	3991	-0.37	-9.01			-8.34	-3.97	56.73
3	175	4006	-0.6	-8.67			-8.08	-3.84	57.08
4	175	4022	-1.69	-8.97			-7.61	-3.49	56.69
5	175	4037	-2.17	-8.61			-6.95	-3.34	56.6
6	175	4052	-1.1	-6.59			-6.1	-2.66	56.87
7	175	4068	0.58	-3.86			-5.05	-1.95	57.41
8	175	4083	1.44	-2.05			-4.0	-0.98	56.88
9	175	4099	1.39	-1.07			-2.88	-0.37	56.34

AVG -6.45

MP	FT	Parameter	Value	Length	Speed	TSC	LC	PC	Track	Latitude	Longitude
175	4102	R Align 62	2.08	11	28	E	2	3	1	41.328498	-75.746188

	MP	FT	LAlign62	LAlignMCO	RAlign62	RAlignMCO	Curve	Xlevel	Gage
1	175	4040			-1.46	-7.7	-6.79	-3.13	56.63
2	175	4056			-0.95	-6.18	-5.85	-2.5	57.05
3	175	4071			-0.07	-4.33	-4.84	-1.78	57.2
4	175	4087			1.34	-1.86	-3.72	-0.82	56.83
5	175	4102			2.08	-0.12	-2.68	-0.25	56.25
6	175	4117			1.39	0.08	-1.77	-0.36	56.21
7	175	4133			0.33	-0.19	-0.96	-0.29	56.56
8	175	4148			0.07	0.09	-0.4	-0.01	56.36
9	175	4164			0.17	0.53	-0.01	0.01	56.31

AVG -2.19

Groups	RR	District	Point A
		via Binghamton - Enola	Calendar Year 2020
4	CRSH	Penns Grove/Vineland/Delair	Gibbstown, NJ
4	CSXT	Trenton Line	Philadelphia, PA (CP-Park)
1	NS	Harrisburg Line	Philadelphia, PA
1	NS	Pittsburgh Line (Harrisburg Div)	Harrisburg, PA
1	NS	Sunbury (Harrisburg Div)	Banks, PA (Near Northumberland)
4	NS	Sunbury (Harrisburg Div)	DuPont, PA (Near Scranton)
4	NS	Southern Tier Line	Binghamton, NY
4	LRWY	System	Waverly, NY
4	LRWY	System	Sayre, PA
		via Binghamton - Allentown	Calendar Year 2020
4	CRSH	Penns Grove/Vineland/Delair	Gibbstown, NJ
4	CSXT	Trenton Line	Philadelphia, PA (CP-Park)
2	NS	Harrisburg Line	Philadelphia, PA
2	NS	Reading Line	Burke, PA (Near Reading)
2	NS	Reading Line	Salisbury, PA
2	NS	Reading Line	Allentown, PA
2	RBMN	Main Line	Weatherly, PA
4	NS	Sunbury (Harrisburg Div)	DuPont, PA (Near Scranton)
4	NS	Southern Tier Line	Binghamton, NY
4	LRWY	System	Waverly, NY
4	LRWY	System	Sayre, PA

(*) Numbers in parenthesis are exceptions
Foot note (1) High number caused by 12 gage indicat
Foot note (2) Defect indications likely attributable to
Foot note (3) 12 Gage locations exceeded compliance

Note 1: Where Mileposts (MP) are included the complete survey is longer th

Note 2: Exceptions per 100 miles can be misleading, perticularly when testir

Note 3: Geometry car runs are snapshots in time, and as such are not neces

Point B	Last test date	last test car	RunID	Exceptions (*) per 100 mi.
Philadelphia, PA (CP-Park)	3/17/2020	220 & 218	2020031703	3.48 (10)
Philadelphia, PA	3/17/2020	220 & 218	2020031706	0 (33)
Harrisburg, PA	3/18/2020	220 & 218	2020031802	2.78 (4.25)
Banks, PA (Near Northumberland)	3/13/2020	220 & 218	2020031302	1.81 (6.91)
DuPont, PA (Near Scranton)	3/12/2020	220 & 218	2020031204	0 (6.91)
Binghamton, NY	3/10/2020	220 & 218	2020031006	1.52 (6.91)
Waverly, PA	3/10/2020	220 & 218	2020031104	28.99 (1.96)
Sayre, PA	3/11/2020	220 & 218	2020031105	0 (5.24)
Mehoopany, PA	3/12/2020	220 & 218	2020031201	1.8 (5.24)

Philadelphia, PA (CP-Park)	3/17/2020	220 & 218	2020031703	3.48 (10)
Philadelphia, PA	3/17/2020	220 & 218	2020031706	0 (33)
Burke, PA (Near Reading)	3/18/2020	220 & 218	2020031802	2.78 (4.25)
Salisbury, PA	3/9/2020	220 & 218	2020030906	7.61 (7.63)
Allentown, PA	3/9/2020	220 & 218	2020030907	111.11 (7.63)
Weatherly, PA	3/10/2020	220 & 218	2020031003	9.98 (7.63)
DuPont, PA (Near Scranton)	3/10/2020	220 & 218	2020031004	157.67 (45.24)
Binghamton, NY	3/10/2020	220 & 218	2020031006	1.52 (6.91)
Waverly, PA	3/10/2020	220 & 218	2020031104	28.99 (1.96)
Sayre, PA	3/11/2020	220 & 218	2020031105	0 (5.24)
Mehoopany, PA	3/12/2020	220 & 218	2020031201	1.8 (5.24)

for segment in previous surveys noted - the test noted in parenthesis may not have covered entire named segments between MP 248.7 & MP 250.0 - This item was caused by curve worn rail; the curves involved were regaged going through turnouts on switchback - 100 mi. average high is an anomaly caused by extremely short run.

≥ threshold for Class 1 track (Posted Class 3)

ran the segment discussed here.

ing smaller segments of track where averaging did not occur

sarily indicative of present conditions

Exceptions (*)	Miles Tested
2 class drop	

0 (3)	27.80
0 (0)	3.3
0 (0)	107.9
0 (1)	55.10
0 (1)	72.90
0 (1)	65.70
0 (0)	41.40
0 (0)	3.4
0 (0)	35

0 (3)	27.80
0 (0)	3.3
0 (0)	55
1 (0)	39.40
0 (0)	1.8
0 (0)	40.10
56 (8)	46.30
0 (1)	65.70
0 (0)	41.40
0 (0)	3.4
0 (0)	35

ent.
 (3000 plus ft.) and replacement rail €

Comment
This large number is caused by one defect in a 3 mile run approx. MP 6 to MP 112 See Foot note (1) Wyalusing is approx. MP 234 - Survey was 267 to 214 (55.70 miles)
This large number is caused by one defect in a 3 mile run approx. Reading is approx. MP 61 - Survey was 6 to 112 (107.9 miles) Foot note (2) Foot note (3) See Foot note (1) Wyalusing is approx. MP 234 - Survey was 267 to 214 (55.70 miles)

expected this (2020) summer.