



***Federal Railroad Administration
Office of Safety
Headquarters Assigned
Accident Investigation Report
HQ-2008-40***

***Union Pacific (UP)
Soda Springs, ID
April 8, 2008***

Note that 49 U.S.C. §20903 provides that no part of an accident or incident report made by the Secretary of Transportation/Federal Railroad Administration under 49 U.S.C. §20902 may be used in a civil action for damages resulting from a matter mentioned in the report.

1. Name of Railroad Operating Train #1 Union Pacific RR Co. [UP]			1a. Alphabetic Code UP			1b. Railroad Accident/Incident No. 0408PC002							
2. Name of Railroad Operating Train #2 Union Pacific RR Co. [UP]			2a. Alphabetic Code UP			2b. Railroad Accident/Incident No. 0408PC002							
3. Name of Railroad Operating Train #3 N/A			3a. Alphabetic Code N/A			3b. Railroad Accident/Incident No. N/A							
4. Name of Railroad Responsible for Track Maintenance: Union Pacific RR Co. [UP]			4a. Alphabetic Code UP			4b. Railroad Accident/Incident No. 0408PC002							
5. U.S. DOT_AAR Grade Crossing Identification Number			6. Date of Accident/Incident Month 04 Day 08 Year 2008			7. Time of Accident/Incident 04:58: <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM							
8. Type of Accident/Incident (single entry in code box)			1. Derailment 2. Head on collision 3. Rear end collision			4. Side collision 5. Raking collision 6. Broken Train collision							
			7. Hwy-rail crossing 8. RR grade crossing 9. Obstruction			10. Explosion-detonation 11. Fire/violent rupture 12. Other impacts							
			13. Other (describe in narrative)			Code 05							
9. Cars Carrying HAZMAT 3		10. HAZMAT Cars Damaged/Derailed 0		11. Cars Releasing HAZMAT 0		12. People Evacuated 0		13. Division Pocatello					
14. Nearest City/Town Soda Springs			15. Milepost (to nearest tenth) 145.5		16. State Abbr Code N/A ID		17. County CARIBOU						
18. Temperature (F) (specify if minus) 20 F		19. Visibility (single entry) 1. Dawn 3. Dusk 2. Day 4. Dark		Code 4		20. Weather (single entry) 1. Clear 3. Rain 5. Sleet 2. Cloudy 4. Fog 6. Snow		Code 1					
21. Type of Track 1. Main 3. Siding 2. Yard 4. Industry			Code 1										
22. Track Name/Number Single Main Track			23. FRA Track Code Class (1-9, X) 4		24. Annual Track Density (gross tons in millions) 50.9		25. Time Table Direction 1. North 3. East 2. South 4. West						
			Code 4										
OPERATING TRAIN #1													
26. Type of Equipment Consist (single entry)			1. Freight train 4. Work train 7. Yard/switching 2. Passenger train 5. Single car 8. Light loco(s). 3. Commuter train 6. Cut of cars 9. Maint./inspect.car			27. Was Equipment Attended? Code		28. Train Number/Symbol					
						1. Yes 2. No 1 1		IDUSE-05					
29. Speed (recorded speed, if available) R - Recorded E - Estimated 11 MPH R			Code R			31. Method(s) of Operation (enter code(s) that apply)							
30. Trailing Tons (gross tonnage, excluding power units) 3405			Code 3405			31a. Remotely Controlled Locomotive? 0 = Not a remotely controlled 1 = Remote control portable 2 = Remote control tower 3 = Remote control transmitter - more than one remote control transmitter							
						Code(s) e N/A N/A N/A N/A							
32. Principal Car/Unit			a. Initial and Number		b. Position in Train		c. Loaded (yes/no)						
(1) First involved (derailed, struck, etc)			UP 7700		1		N/A						
(2) Causing (if mechanical cause reported)			0		0		N/A						
			33. If railroad employee(s) tested for drug/alcohol use, enter the number that were positive in the appropriate box.			Alcohol 0		Drugs 0					
			34. Was this consist transporting passengers? (Y/N)			N							
35. Locomotive Units		a. Head End		Mid Train		Rear End		36. Cars					
		b. Manual		c. Remote		d. Manual		c. Remote		Loaded Empty			
(1) Total in Train		3		0		0		0		a. Freight b. Pass. c. Freight d. Pass. e. Caboose			
(2) Total Derailed		0		0		0		0		(1) Total in Equipment Consist (2) Total Derailed			
		0		0		0		0		0 0 0 0 0			
37. Equipment Damage This Consist \$7,000.00			38. Track, Signal, Way, & Structure Damage \$17,200.00			39. Primary Cause Code H221			40. Contributing Cause Code H605				
Number of Crew Members						Length of Time on Duty							
41. Engineer/Operators 1		42. Firemen 0		43. Conductors 1		44. Brakemen 0		45. Engineer/Operator Hrs 5 Mi 13			46. Conductor Hrs 5 Mi 13		
Casualties to:		47. Railroad Employees		48. Train Passengers		49. Other		50. EOT Device? 1. Yes 2. No 1			51. Was EOT Device Properly Armed? 1. Yes 2. No 1		
Fatal		0		0		0							
Nonfatal		0		0		0		52. Caboose Occupied by Crew? 1. Yes 2. No			2		
OPERATING TRAIN #2													
53. Type of Equipment Consist (single entry)			1. Freight train 4. Work train 7. Yard/switching 2. Passenger train 5. Single car 8. Light loco(s). 3. Commuter train 6. Cut of cars 9. Maint./inspect.car			A. Spec. MoW Equip. Code 1		54. Was Equipment Attended? Code 1. Yes 2. No 1		55. Train Number/Symbol QPDRV-06			
56. Speed (recorded speed, if available) R - Recorded E - Estimated 8 MPH R			Code R			58. Method(s) of Operation (enter code(s) that apply)			58a. Remotely Controlled Locomotive? 0 = Not a remotely controlled 1 = Remote control portable				
			a. ATCS g. Automatic block m. Special instructions b. Auto train control h. Current of traffic n. Other than main track										

57. Trailing Tons (gross tonnage, excluding power units)	8469	c. Auto train stop d. Cab e. Traffic f. Interlocking	i. Time table/train orders j. Track warrant control k. Direct traffic control l. Yard limits	o. Positive train control p. Other (Specify in narrative) Code(s)	2 = Remote control tower 3 = Remote control transmitter - more than one remote control transmitter
				e N/A N/A N/A N/A	0

59. Principal Car/Unit	a. Initial and Number	b. Position in Train	c. Loaded(yes/no)	60. If railroad employee(s) tested for drug/alcohol use, enter the number that were positive in the appropriate box.	Alcohol	Drugs
(1) First involved (derailed, struck, etc)	CNWX396903	77	yes		0	0
(2) Causing (if mechanical cause reported)	0	0	N/A	61. Was this consist transporting passengers? (Y/N)		N

62. Locomotive Units	a. Head End	Mid Train b. Manual c. Remote	Rear End d. Manual c. Remote	63. Cars	Loaded a. Freight b. Pass.	Empty c. Freight d. Pass.	e. Caboose
(1) Total in Train	4	0 0	0 0	(1) Total in Equipment Consist	71 0	12 0	0
(2) Total Derailed	0	0 0	0 0	(2) Total Derailed	3 0	0 0	0

64. Equipment Damage This Consist	\$51,108.00	65. Track, Signal, Way, & Structure Damage	\$0.00	66. Primary Cause Code	H221	67. Contributing Cause Code	H605
Number of Crew Members				Length of Time on Duty			

68. Engineer/Operators	69. Firemen	70. Conductors	71. Brakemen	72. Engineer/Operator	73. Conductor
1	0	1	0	Hrs 4 Mi 18	Hrs 4 Mi 18
Casualties to:	74. Railroad Employees	75. Train Passengers	76. Other	77. EOT Device?	78. Was EOT Device Properly Armed?
Fatal	0	0	0	1. Yes 2. No 1	1. Yes 2. No 1
Nonfatal	0	0	0	79. Caboose Occupied by Crew?	
				1. Yes 2. No	2

OPERATING TRAIN #3

80. Type of Equipment Consist (single entry)	1. Freight train	4. Work train	7. Yard/switching	A. Spec. MoW Equip.	Code	81. Was Equipment Attended?	Code	82. Train Number/Symbol
	2. Passenger train	5. Single car	8. Light loco(s).		N/A	1. Yes 2. No	N/A	N/A
	3. Commuter train	6. Cut of cars	9. Maint./inspect.car					

83. Speed (recorded speed, if available)	Code	85. Method(s) of Operation (enter code(s) that apply)	85a. Remotely Controlled Locomotive?
R - Recorded		a. ATCS g. Automatic block m.Special instructions	0 = Not a remotely controlled
E - Estimated	N/A MPH 0	b. Auto train control h. Current of traffic n. Other than main track	1 = Remote control portable
84. Trailing Tons (gross tonnage, excluding power units)	N/A	c. Auto train stop i. Time table/train orders o. Positive train control	2 = Remote control tower
		d. Cab j. Track warrant control p. Other (Specify in narrative)	3 = Remote control transmitter - more than one remote control transmitter
		e. Traffic k. Direct traffic control	
		f. Interlocking l. Yard limits	N/A

86. Principal Car/Unit	a. Initial and Number	b. Position in Train	c. Loaded(yes/no)	87. If railroad employee(s) tested for drug/alcohol use, enter the number that were positive in the appropriate box.	Alcohol	Drugs
(1) First involved (derailed, struck, etc)	0	0	N/A		N/A	N/A
(2) Causing (if mechanical cause reported)	0	0	N/A	88. Was this consist transporting passengers? (Y/N)		N/A

89. Locomotive Units	a. Head End	Mid Train b. Manual c. Remote	Rear End d. Manual c. Remote	90. Cars	Loaded a. Freight b. Pass.	Empty c. Freight d. Pass.	e. Caboose
(1) Total in Train	0	0 0	0 0	(1) Total in Equipment Consist	0 0	0 0	0
(2) Total Derailed	0	0 0	0 0	(2) Total Derailed	0 0	0 0	0

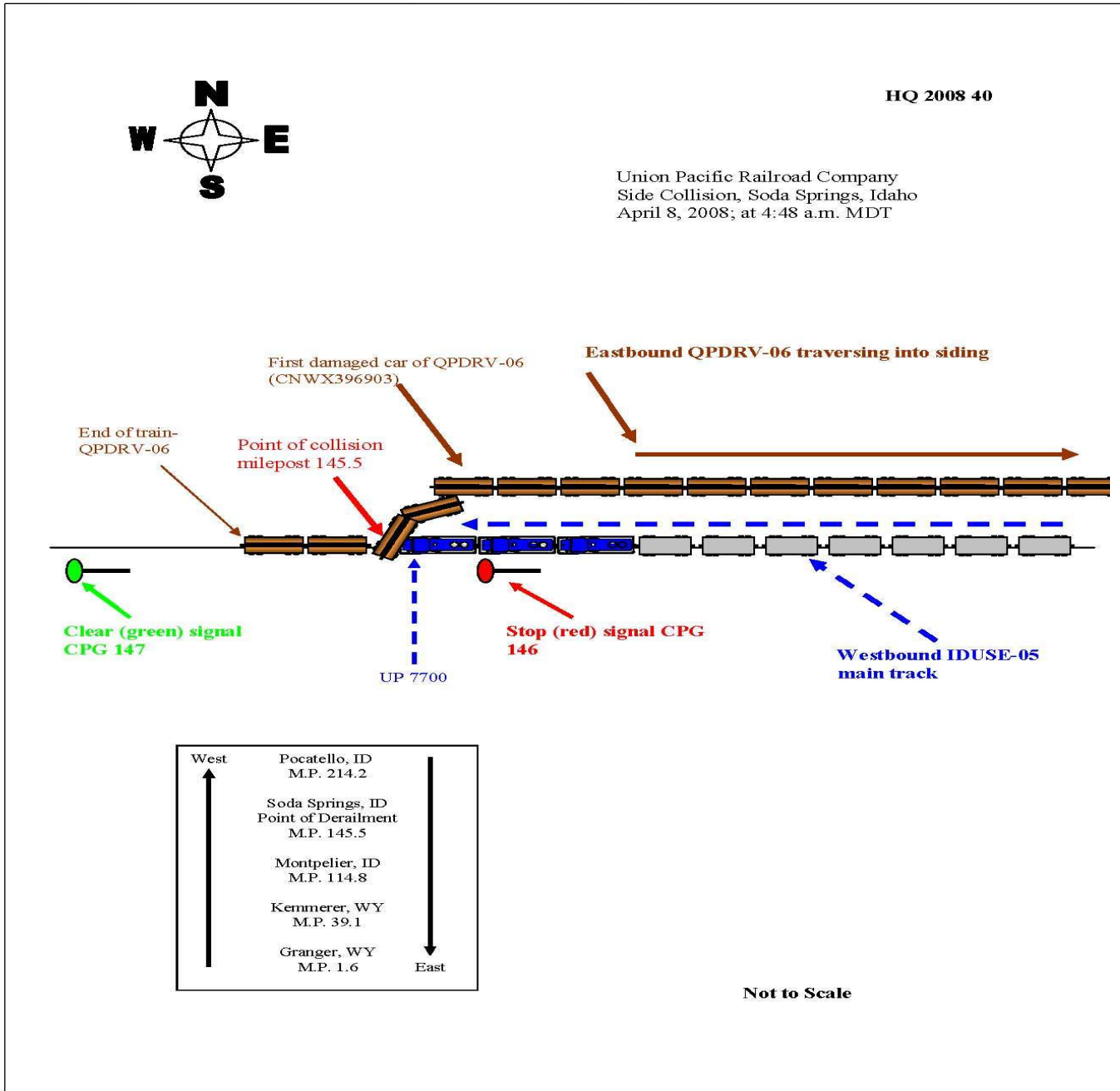
91. Equipment Damage This Consist	\$0.00	92. Track, Signal, Way, & Structure Damage	\$0.00	93. Primary Cause Code	N/A	94. Contributing Cause Code	N/A
Number of Crew Members				Length of Time on Duty			

95. Engineer/Operators	96. Firemen	97. Conductors	98. Brakemen	99. Engineer/Operator	100. Conductor
0	0	0	0	Hrs 0 Mi 0	Hrs 0 Mi 0
Casualties to:	101. Railroad Employees	102. Train	103. Other	104. EOT	105. Was EOT Device Properly
Fatal	0	0	0	1. Yes 2. No N/A	1. Yes 2. No N/A
Nonfatal	0	0	0	106. Caboose Occupied by Crew?	
				1. Yes 2. No	N/A

Highway User Involved				Rail Equipment Involved			
107. C. Truck-Trailer. F. Bus J. Other Motor Vehicle Code	A. Auto D. Pick-Up Truck G. School Bus K. Pedestrian	B. Truck E. Van H. Motorcycle M. Other (spec. in narrative)	N/A	111. Equipment	3. Train (standing)	6. Light Loco(s) (moving)	Code
				1. Train(units pulling)	4. Car(s) (moving)	7. Light(s) (standing)	N/A
				2. Train(units pushing)	5. Car(s) (standing)	8. Other (specify in narrative)	
108. Vehicle Speed (est. MPH at impact)	N/A	109. geographical Code	N/A	112. Position of Car Unit in	0		
		1. North 2. South 3. East 4. West					

110. Position 1. Stalled on Crossing 2. Stopped on Crossing 3. Moving Over Crossing 4. Trapped				Code N/A	113. Circumstance 1. Rail Equipment Struck Highway User 2. Rail Equipment Struck by Highway User				Code N/A		
114a. Was the highway user and/or rail equipment involved in the impact transporting hazardous materials? 1. Highway User 2. Rail Equipment 3. Both 4. Neither				Code N/A	114b. Was there a hazardous materials release 1. Highway User 2. Rail Equipment 3. Both 4. Neither				Code N/A		
114c. State here the name and quantity of the hazardous materials released, if any. N/A											
115. Type Crossing 1. Gates 2. Cantilever FLS 3. Standard FLS 4. Wig Wags 5. Hwy. traffic signals 6. Audible Warning 7. Crossbucks 8. Stop signs 9. Watchman 10. Flagged by crew 11. Other (spec. in narr.) 12. None				Code N/A	116. Signaled Crossing (See instructions for codes)				Code N/A	117. Whistle Ban 1. Yes 2. No 3. Unknown	
Code(s)				N/A	N/A	N/A	N/A	N/A	N/A	N/A	
118. Location of Warning 1. Both Sides 2. Side of Vehicle Approach 3. Opposite Side of Vehicle Approach				Code N/A	119. Crossing Warning with Highway Signals 1. Yes 2. No 3. Unknown				Code N/A	120. Crossing Illuminated by Street Lights or Special Lights 1. Yes 2. No 3. Unknown	
121. Age 0		122. Driver's Gender 1. Male 2. Female		Code N/A	123. Driver Drove Behind or in Front of and Struck or was Struck by Second Train 1. Yes 2. No 3. Unknown				Code N/A	124. Driver 1. Drove around or thru the Gate 2. Stopped and then Proceeded 3. Did not Stop	
125. Driver Passed Highway Vehicle 1. Yes 2. No 3. Unknown				Code N/A	126. View of Track Obscured by (primary obstruction) 1. Permanent Structure 2. Standing Railroad Equipment 3. Passing Train 4. Topography 5. Vegetation 6. Highway Vehicle 7. Other (specify in narrative) 8. Not obstructed				Code N/A		
Casualties to:			Killed	Injured	127. Driver 1. Killed 2. Injured 3. Uninjured				Code N/A	128. Was Driver in the Vehicle? 1. Yes 2. No	
129. Highway-Rail Crossing Users			0	0	130. Highway Vehicle Property Damage (est. dollar damage)				0	131. Total Number of Highway-Rail Crossing Users (include driver)	
132. Locomotive Auxiliary Lights? 1. Yes 2. No				Code N/A	133. Locomotive Auxiliary Lights Operational? 1. Yes 2. No				Code N/A		
134. Locomotive Headlight Illuminated? 1. Yes 2. No				Code N/A	135. Locomotive Audible Warning Sounded? 1. Yes 2. No				Code N/A		

136. DRAW A SKETCH OF ACCIDENT AREA INCLUDING ALL TRACKS, SIGNALS, SWITCHES, STRUCTURES, OBJECTS, ETC., INVOLVED.



137. SYNOPSIS OF THE ACCIDENT

Westbound Union Pacific Railroad (UP) freight train operating on single main track collided into the side of an eastbound UP freight train which was entering a siding from single main track on April 8, 2008, at 4:58 a.m., MDT. The side collision occurred in Soda Springs, Idaho, at UP Milepost 145.5, on the Pocatello Service Area, Pocatello Subdivision.

There were no injuries to either train crew members, and no release of hazardous materials. The leading locomotive of the westbound train sustained damages of \$7,000, and four cars from the eastbound train, three of which were derailed, sustained damages of \$51,108. The track and structure damage on the siding was \$17,200. There was no main track or signal equipment damage.

At the time of the collision it was dark and clear. The temperature was 20° F.

The probable cause of the collision was failure of the westbound train crew to comply with an automatic block signal displaying a stop indication (H221). The contributing cause was failure of the westbound train crew to comply with restricted speed in connection with a block signal(H605).

138. NARRATIVE

CIRCUMSTANCES PRIOR TO THE ACCIDENT

UP TRAIN IDUSE-05

The crew of westbound train, UP IDUSE-05 included a locomotive engineer and a conductor. They first went on duty at 11:45 p.m., MDT, April 7, 2008, at UP Green River Yard, Green River, Wyoming. They were scheduled to operate the train from Green River, Wyoming to Pocatello, Idaho. Green River is the away from home terminal for each crew member, and each received more than the required statutory off-duty rest period prior to reporting for duty.

The assigned freight train consisted of three locomotives and 57 loaded articulated platforms. It was 3944 feet long, and weighed 3405 tons. The train was scheduled to travel to Seattle, Washington, and received a Class I, initial terminal train air brake test in Dupo, Illinois, on April 5, 2008, and a Class IA, 1000 mile train air brake test in North Platte, Nebraska, on April 6, 2008.

The crew departed Green River on April 8, 2008, at about 1:45 a.m., and proceeded west toward to Soda Springs, Idaho, without incident. Prior to arriving at Soda Springs, the crew received instructions from the UP train dispatcher to stop on the main track for a meet with eastbound UP Train QPDRV-06, which was to proceed into the siding at Soda Springs at Milepost 146. UP IDUSE-05 stopped at Milepost 145.13, 1,720 feet east of the signal at CPG-146, at 4:47 a.m. The engineer went to the second locomotive in his consist to check the dynamic brakes which had quit working. The conductor climbed off the front locomotive to roll-by inspect UP QPDRV-06 as it passed through the siding.

In this area of the railroad, from east to west, there is a 3-degree curve to the left of about 2,800 feet, followed by tangent 3,500 feet to the point of the collision, and 5,000 feet and more beyond. There is a 1-percent average descending grade. Trains operate under the authority of a Traffic Control System (TCS) controlled by a train dispatcher in Omaha, Nebraska. The railroad timetable direction and geographical direction are east and west. Timetable directions will be used throughout this report. The current Portland Area Timetable

3, Effective 0001, Sunday, June 26, 2005, lists the maximum authorized speed for freight trains at 45 mph in the accident area.

UP TRAIN QPDRV-06

The crew of eastbound train, UP QPDRV-06 included a locomotive engineer and a conductor. They first went on duty at 12:40 a.m., MST, April 8, 2008, at Pocatello, Idaho. They were scheduled to operate the train from Pocatello, Idaho to Granger, Wyoming. Pocatello is the home terminal for each crew member, and each received more than the required statutory off-duty rest period prior to reporting for duty.

The assigned freight train consisted of four locomotives, 71 loaded mixed freight cars, and 12 empty mixed freight cars. It was 5,841 feet long, and weighed 8,469 tons. The train was scheduled to travel to Roseville, California, and received a Class I, initial terminal train air brake test in Portland, Oregon, on April 6, 2008, and a Class IA, 1,000 mile train air brake test in Pocatello, Idaho, on April 8, 2008.

The crew departed Pocatello with UP Train QDPRV-06 on April 8, 2008, at about 2:45 a.m., and proceeded east toward Soda Springs, Idaho without incident. Prior to reaching Soda Springs, the crew received instructions from the UP train dispatcher that they would proceed from the main track into the siding at Milepost 146 around UP Train IDUSE-05. At 4:55 a.m., with the engineer seated on the south side at the controls of the leading locomotive and the conductor seated of the north side, the train entered the siding and proceeded east.

THE ACCIDENT

As the conductor of UP Train IDUSE-05 was climbing off the lead locomotive, he mistook the green signal at CPG- 147 for a green signal at CPG- 146. He then climbed back into the locomotive cab at 4:56 a.m., and told the engineer to "high ball". The engineer had returned from the second locomotive and operated the train westward reaching a speed of 20 mph. At 4:57 a.m. the engineer observed the red signal at CPG-146, Milepost 145.4, placed the train into emergency. At 4:58:03 a.m. the train passed the red signal at CPG-146, and according to the locomotive event recorder slowed to 11 mph, and at 4:58:10 a.m., struck the 77th through the 80th cars of eastbound UP Train QPDRV-06, which had not completely cleared the main track.

UP Train IDUSE-05 stopped at milepost 145.5 at 4:58:18 a.m., 486 feet beyond where the train was placed into emergency. After operating into the siding at 8 mph, UP Train QPDRV-06 stopped at 4:58:19 a.m. at milepost 144.4, following an unintended train line induced emergency air brake application due to the collision.

As result of the collision, the lead locomotive of UP Train IDUSE-05 received substantial impact damage to the left front snow plow, stairwell, and left front truck side. None of the locomotives or freight cars was derailed.

The 77th car of UP Train QPDRV-06 received minor impact damage to the car body, but remained on the track. The 78th and 79th cars were derailed and on their sides, and received substantial impact damage to the freight car trucks and car body. The 80th head car had one truck derailed with substantial impact damage to the corner of the car body. The main track received no damage from the collision. The west end of the siding received damage to the switch and track structure.

ANALYSIS AND CONCLUSION

This accident did not meet Title 49 CFR, Part 219, Subpart C, Post Accident Toxicological Testing criteria.

ANALYSIS - FATIGUE

FRA obtained fatigue related information, for the 10-day period preceding this incident including the 10-day work history (on duty/off duty cycles) for all of the employees involved.

CONCLUSION:

Upon analysis of the data information FRA concluded that one or more of the employees may have been

working at a diminished level of safety (effectiveness) due to mental and/or physical attributes associated with fatigue, which may have contributed to the cause of the accident.

According to the crew interviews of UP Train IDUSE-05 crew members, they both thought they saw a green (clear) signal indication to proceed west at CPG-146. The engineer stated as they approached the west switch at 20 mph, he realized he still had a red (stop) signal indication at CPG-146 and could see that UP Train QPDRV-06 was not clear of the main track. The engineer then placed the train air brakes into emergency.

The signal system in the area of the side collision was inspected and tested. The signal system was found to be operating as intended.

The signal logs were examined and then compared to the leading locomotive event recorder that was downloaded for analysis. The examination of the event recoding and signal log aspect changes determined that the locomotive operator of UP Train IDUSE-05 failed to comply with an automatic block signal displaying a stop indication. The signal indication required the train to stop at the red signal displayed at CPG-146. As a result of UP Train IDUSE-05 not stopping at the red signal at CPG-146, it collided with eastbound UP Train QPDRV-06 traversing from the main track through the switch to the siding track.

UP subscribes to the General Code of Operating Rules (GCOR). The train crew of UP Train IDUSE-05 violated the following GCOR Rules:

- Duties of Crew Members 1.47: The conductor and the engineer are responsible for the safety and protection of their train and observance of the rules. They must ensure that their subordinates are familiar with their duties, determine the extent of their experience and knowledge of the rules, and instruct them, when necessary, on how to perform their work properly and safely. If any conditions are not covered by the rules, they must take precautions to provide protection.

* Looking for Signals 5.2.1: To recognize and follow signals correctly, employees must:

1. Always be on the lookout for signals.
2. Comply with the intent of the signal.
3. Not act on any signal that they do not understand or that may be intended for other trains or engines.

- Where Stop Must Be Made 9.5: When movement is being made beyond a block signal requiring a train to be prepared to stop at the next signal, the stop must be made before any part of a train passes the block signal requiring the train to stop.

The train crew of UP Train IDUSE-05 also violated the following UP Special Instructions effective July 30, 2007:

- Stop Signal 9.2.15, which signals trains to stop.

The train crew of UP Train IDUSE-05 also violated Federal Law CFR 49 240.305(a) (1)

- Prohibited conduct, stating in part "it shall be unlawful to operate a locomotive or train past a signal indication, excluding a hand or a radio signal indication or a switch that requires a complete stop before passing it".

The leading locomotive of the westbound train sustained damages of \$7,000, and four cars from the eastbound train, three of which were derailed, sustained damages of about \$51,000.

The track and structure damage on the siding was \$17,200. There was no main track or signal equipment damages.

PROBABLE CAUSE & CONTRIBUTING FACTORS

The FRA and UP investigation determined that the side collision occurred because the train crew of the UP Train IDUSE-05 failed to comply with an automatic block signal displaying a stop indication.

The probable cause of the accident was automatic block or interlocking signal displaying a stop indication -

failure to comply (H221).

CONTRIBUTING FACTORS

- Failure of UP Train IDUSE-05 crew to comply with restricted speed in connection with the restrictive indication of a block or interlocking signal (H605).
- Fatigue was a probable contributing factor in this collision.