Federal Railroad Administration
Office of Safety
Headquarters Assigned
Accident Investigation Report
HQ-2006-32

Union Pacific (UP)
Dingle, Idaho
May 20, 2006

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.

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

FRA FACTUAL RAILROAD ACCIDENT REPORT

FRA File # HQ-2006-32

1.Name of Railroad Operating Train #1: Union Pacific RR Co. [UP]	1a. Alphabetic Code: UP	1b. Railroad Accident/Incident No.: 0506PC013
2.Name of Railroad Operating Train #2: N/A	2a. Alphabetic Code: N/A	2b. Railroad Accident/Incident: N/A
3.Name of Railroad Responsible for Track Maintenance: Union Pacific RR Co. [UP]	3a. Alphabetic Code: UP	3b. Railroad Accident/Incident No.: 0506PC013
4. U.S. DOT_AAR Grade Crossing Identification Number	5. Date of Accident/Incident: Month 05 / Day 20 / Year 2006	6. Time of Accident/Incident: 01:14: ☐ AM ☑ PM

7. Type of Accident/Indicent (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): 01

8. Cars Carrying HAZMAT	9. HAZMAT Cars Damaged/Derailed	10. Cars Releasing HAZMAT	11. People Evacuated	12. Division
0	0	0	0	Pocatello

13. Nearest City/Town	14. Milepost (to nearest tenth)	15. State Abbr	15. State Code	16. County
Montpelier	104.37	N/A	ID	BEAR LAKE

17. Temperature (F) (specify if minus)	18. Visibility (single entry) 1. Dawn 2. Day 3.Dusk 4.Dark	Code	19. Weather (single entry) 1. Clear 2. Cloudy 3. Rain 4. Fog 5.Sleet 6.Snow	Code	20. Type of Track 1. Main 2. Yard 3. Siding 4. Industry	Code
75 F		2		1		1

21. Track Name/Number	22. FRA Track Class (1-9, X)	Code	23. Annual Track Density (gross tons in millions)	24. Time Table Direction 1. North 3. East	Code
Single Main Track		4	53.4		4

OPERATING TRAIN #1

25. Type of Equipment Consist (single entry): 1. Freight train; 2. Passenger train; 3. Commuter train; 4. Work train; 5. Single car; 6. Cut of cars; 7. Yard/switching; 8. Light loco(s).; 9. Maint./inspect.car; A. Spec. MoW Equip. Code: 1

26. Was Equipment Attended? 1. Yes 2. No: 1

27. Train Number/Symbol: IDUSE-17

28. Speed (recorded speed, if available) R - Recorded E - Estimated: 49 MPH; Code: R

29. Trailing Tons (gross tonnage, excluding power units): 4031

30. Method(s) of Operation (enter code(s) that apply): a. ATCS; b. Auto train control; c. Auto train stop; d. Cab; e. Traffic; f. Interlocking; g. Automatic block; h. Current of traffic; i. Time table/train orders; j.Track warrant control; k. Direct traffic control; l.Yard limits; m.Special instructions; n. Other than main track; o. Positive train control; p. Other (Specify in narrative) Code(s): e, N/A, N/A, N/A, N/A

30a. 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; 2. South 4. West: 0

31. Principal Car/Unit	a. Initial and Number	b. Position in Train	c. Loaded (yes/no)
(1) First involved (derailed, struck, etc)	N/A	46	yes
(2) Causing (if mechanical cause reported)	N/A	N/A	N/A

32. If railroad employee(s) tested for drug/alcohol use, enter the number that were positive in the appropriate box.

Alcohol	Drugs
0	0

33. Was this consist transporting passengers? (Y/N): N

34. Locomotive Units	a. Head End	Mid Train b. Manual	Mid Train c. Remote	Rear End d. Manual	Rear End c. Remote	35. Cars	Loade a. Freight	Loade b. Pass.	Empty c. Freight	Empty d. Pass.	e. Caboose
(1) Total in Train	3	0	0	0	0	(1) Total in Equipment Consist	95	0	0	0	0
(2) Total Derailed	0	0	0	0	0	(2) Total Derailed	41	0	0	0	0

36. Equipment Damage This Consist	37. Track, Signal, Way, & Structure Damage	38. Primary Cause Code	39. Contributing Cause Code
392002	328935	T111	N/A

Number of Crew Members

40. Engineer/ Operators	41. Firemen	42. Conductors	43. Brakemen
N/A	0	1	0

Length of Time on Duty

44. Engineer/Operator: Hrs 5 Mi 29

45. Conductor: Hrs 5 Mi 29

Casualties to:	46. Railroad Employees	47. Train Passengers	48. Other
Fatal	0	0	0
Nonfatal	N/A	0	0

49. EOT Device? 1. Yes 2. No: 1

50. Was EOT Device Properly Armed? 1. Yes 2. No: 1

51. Caboose Occupied by Crew? 1. Yes 2. No: N/A

OPERATING TRAIN #2

52. Type of Equipment Consist (single entry): 1. Freight train; 2. Passenger train; 3. Commuter train; 4. Work train; 5. Single car; 6. Cut of cars; 7. Yard/switching; 8. Light loco(s).; 9. Maint./inspect.car; A. Spec. MoW Equip. Code: N/A

53. Was Equipment Attended? 1. Yes 2. No: N/A

54. Train Number/Symbol: N/A

55. Speed (recorded speed, if available) R - Recorded E - Estimated: 0 MPH; Code: N/A

57. Method(s) of Operation (enter code(s) that apply): a. ATCS; b. Auto train control; g. Automatic block; h. Current of traffic; m.Special instructions; n. Other than main track

57a. Remotely Controlled Locomotive? 0 = Not a remotely controlled; 1 = Remote control portable

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56. Trailing Tons (gross tonnage, excluding power units)	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
N/A			N/A N/A N/A N/A N/A	N/A

58. Principal Car/Unit	a. Initial and Number	b. Position in Train	c. Loaded (yes/no)	59. 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	N/A	N/A		N/A	N/A
(2) Causing (if mechanical cause reported)	0	N/A	N/A	60. Was this consist transporting passengers? (Y/N)	N/A	

61. Locomotive Units	a. Head End	Mid Train b. Manual	Mid Train c. Remote	Rear End d. Manual	Rear End c. Remote	62. Cars	Loade a. Freight	Loade b. Pass.	Empty c. Freight	Empty 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

63. Equipment Damage This Consist	64. Track, Signal, Way, & Structure Damage	65. Primary Cause Code	66. Contributing Cause Code
0	0	N/A	N/A

Number of Crew Members				Length of Time on Duty	
67. Engineer/ Operators	68. Firemen	69. Conductors	70. Brakemen	71. Engineer/Operator	72. Conductor
N/A	N/A	N/A	N/A	Hrs 0 Mi 0	Hrs 0 Mi 0

Casualties to:	73. Railroad Employees	74. Train Passengers	75. Other
Fatal	0	0	0
Nonfatal	0	0	0

76. EOT Device?	77. Was EOT Device Properly Armed?	78. Caboose Occupied by Crew?
1. Yes 2. No N/A	1. Yes 2. No N/A	1. Yes 2. No N/A

Highway User Involved

79. Type — Code: N/A
A. Auto B. Truck C. Truck-Trailer. D. Pick-Up Truck E. Van F. Bus G. School Bus H. Motorcycle J. Other Motor Vehicle K. Pedestrian M. Other (spec. in narrative)

80. Vehicle Speed (est. MPH at impact): N/A

81. Direction geographical) — Code: N/A
1.North 2.South 3.East 4.West

82. Position — Code: N/A
1.Stalled on Crossing 2.Stopped on Crossing 3.Moving Over Crossing 4. Trapped

86a. Was the highway user and/or rail equipment involved in the impact transporting hazardous materials? — Code: N/A
1. Highway User 2. Rail Equipment 3. Both 4. Neither

Rail Equipment Involved

83. Equipment — Code: N/A
1.Train(units pulling) 2.Train(units pushing) 3.Train (standing) 4.Car(s) (moving) 5.Car(s) (standing) 6.Light Loco(s) (moving) 7.Light(s) (standing) 8.Other (specify in narrative)

84. Position of Car Unit in Train: N/A

85. Circumstance — Code: N/A
1. Rail Equipment Struck Highway User
2. Rail Equipment Struck by Highway User

86b. Was there a hazardous materials release by — Code: N/A
1. Highway User 2. Rail Equipment 3. Both 4. Neither

86c. State here the name and quantity of the hazardous materials released, if any.
N/A

87. Type of Crossing Warning	88. Signaled Crossing Warning (See instructions for codes) Code	89. Whistle Ban Code
1.Gates 2.Cantilever FLS 3.Standard FLS 4.Wig Wags 5.Hwy. traffic signals 6.Audible 7.Crossbucks 8.Stop signs 9.Watchman 10.Flagged by crew 11.Other (spec. in narr.) 12.None	N/A	1. Yes 2. No 3. Unknown N/A
Code(s): N/A N/A N/A N/A N/A N/A N/A		

90. Location of Warning Code	91. Crossing Warning Interconnected with Highway Signals Code	92. Crossing Illuminated by Street Lights or Special Lights Code
1. Both Sides 2. Side of Vehicle Approach 3. Opposite Side of Vehicle Approach: N/A	1. Yes 2. No 3. Unknown: N/A	1. Yes 2. No 3. Unknown: N/A

93. Driver's Age	94. Driver's Gender Code	95. Driver Drove Behind or in Front of Train and Struck or was Struck by Second Train Code	96. Driver Code
0	1. Male 2. Female: N/A	1. Yes 2. No 3. Unknown: N/A	1. Drove around or thru the Gate 2. Stopped and then Proceeded 3. Did not Stop 4. Stopped on Crossing 5. Other (specify in narrative): N/A

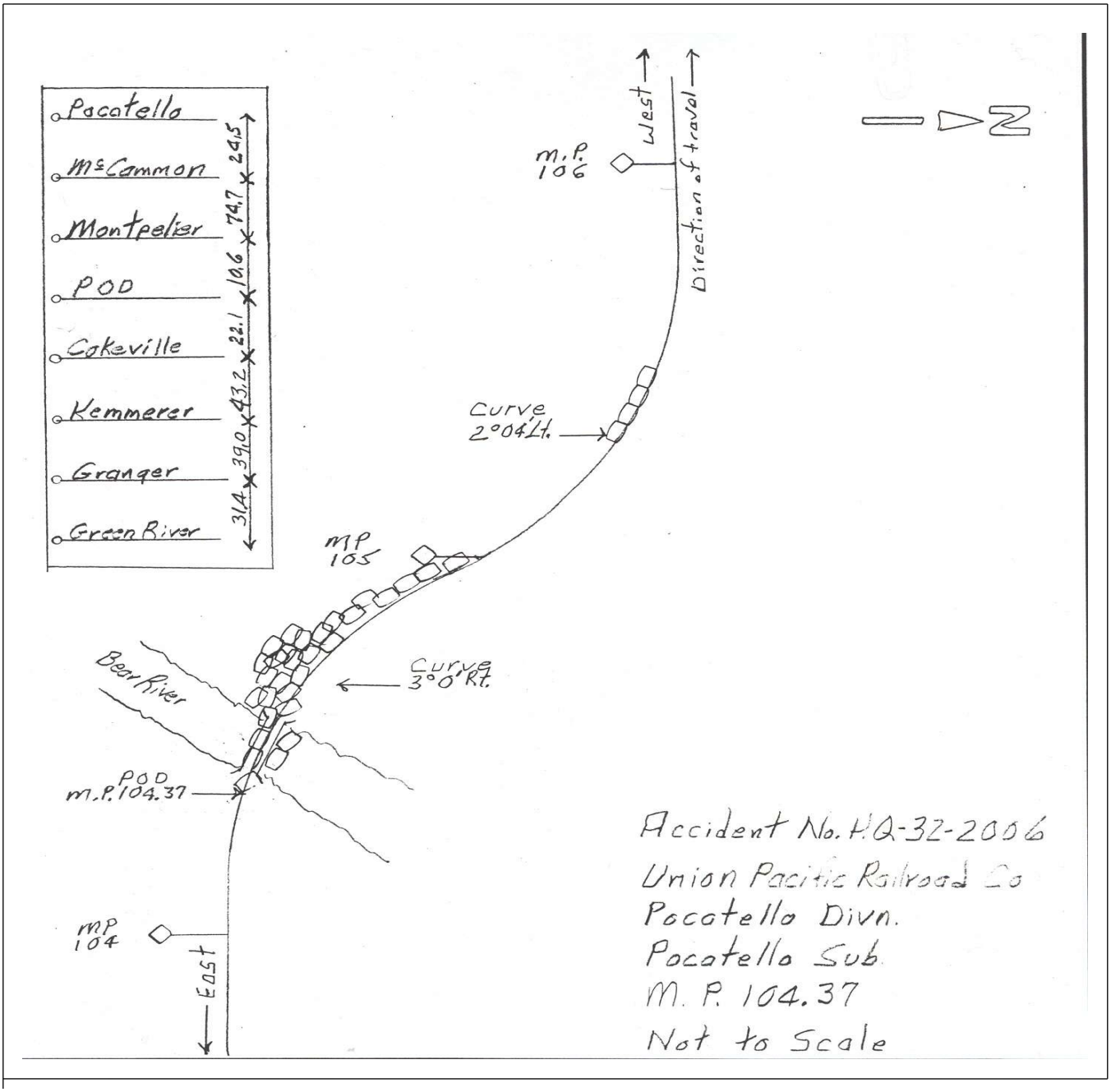
97. Driver Passed Standing Highway Vehicle Code	98. View of Track Obscured by (primary obstruction) Code
1. Yes 2. No 3. Unknown: N/A	1. Permanent Structure 2. Standing Railroad Equipment 3. Passing Train 4. Topography 5. Vegetation 6. Highway Vehicle 7. Other (specify in narrative) 8. Not obstructed: N/A

101. Casulties to Highway-Rail Crossing Users	Killed	Injured	99. Driver Was Code	100. Was Driver in the Vehicle? Code
	0	0	1. Killed 2.Injured 3. Uninjured: N/A	1. Yes 2. No: N/A
			102. Highway Vehicle Property Damage (est. dollar damage): 0	103. Total Number of Highway-Rail Crossing Users (include driver): 0

104. Locomotive Auxiliary Lights? Code	105. Locomotive Auxiliary Lights Operational? Code
1. Yes 2. No: N/A	1. Yes 2. No: N/A
106. Locomotive Headlight Illuminated? Code	107. Locomotive Audible Warning Sounded? Code
1. Yes 2. No: N/A	1. Yes 2. No: N/A

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

HQ-32-06
sketch.jpg



109. SYNOPSIS OF THE ACCIDENT

On May 20, 2006, at 1:14 p.m., Mountain Daylight Time (MDT), a westbound Union Pacific Railroad Company (UP) freight train (IDUSE-17) derailed on the Pocatello Service Unit, Pocatello Subdivision at mile 104.37, about 11 miles east of Montpelier, Idaho. The train was traveling on a single main track at a recorded speed of 49 miles per hour (mph). The maximum authorized speed for this area of the accident is 50 mph.

The train consisted of three locomotives, 95 loaded platforms, 4,031 trailing tons and was 6,458 feet in length. A total of 41 platforms, 46th through 86th, derailed. There were no injuries reported and no release of hazardous materials. The estimated damage of the derailment was $720.937 ($392,002 equipment and $328,935 track).

At the time of the accident it was daylight and clear. The temperature was 75°F.

The probable cause of the derailment was wide gage due to broken spikes (T111).

110. NARRATIVE

Circumstances Prior to Accident

On May 20, 2006 after completing more than the statutory off duty time, a crew consisting of an engineer and conductor reported for duty at Green River, Wyoming, at 7:45 a.m. MDT., their away from home terminal. The crew was assigned to operate a westbound UP platform train (IDUSE-17), from Green River to Pocatello, Idaho, a distance of 245 miles.

The train consisted of three locomotives, 95 loaded platforms, 4,031 trailing tons and was 6,458 feet in length. The crew boarded the train at about 8:45 a.m. MST., and performed a Class 3 air brake inspection before departing Green River. A Class 1 air brake inspection was completed in North Platte, Nebraska, on May 19, 2006.

The train approached the derailment area traveling geographically and timetable west. Timetable directions will be used throughout this report. The engineer was seated at the controls on the right (north) side of the leading locomotive and the conductor was seated on the left (south) side.

Approaching the accident site from east to west starting at mile 103.9, there is a tangent for 1,508 feet, and then a right hand 3-degree curve 628 feet to the point of derailment and 3,596 feet beyond. The grade approaching the accident area is 0.0 percent to the point of derailment and then ascending to a 0.14 percent grade.

According to the train crew, as the train approached the accident area, the trip had been uneventful.

The Accident

As the train approached the accident site and at the time the accident occurred, the train was being operated at a recorded speed of 49 mph. The speed was recorded by the event recorder of the controlling locomotive.

In the accident area, trains operate on a single main track under the authority of a Traffic Control System (TCS), controlled by a dispatcher in Omaha, Nebraska. The maximum authorized speed for freight trains is 50 mph as designated in the current Union Pacific Railroad Company, Portland Area Timetable No. 3.

According to the train crew there was no observation of any unusual track condition. According to the engineer, he felt a slight surge in the train, then the train went into a train line induced emergency air brake application. The engineer reduced the throttle setting and the train came to a stop. The engineer called the UP train dispatcher and notified them that the train had derailed. The dispatcher asked if they would require medical attention and if there was a fire, the response was negative. The conductor then left the train to survey the damages.

Emergency / Agencies Responders are as follows:

- Bear Lake Sheriffs Department
- Bear Lake County Fire Department

Analysis and Conclusion

The accident did not meet the requirement for FRA Post Accident Toxicology Testing, as required under Title 49 CFR, Part 219, Subpart C.

The Investigation revealed the track gage had widened due to broken spikes on the field side of the high rail of the 3-degree right hand curve at UP mile 104.37.

A total of 41 loaded platforms derailed (46th through 86th platforms from the head end of the train).

There were no injuries reported and no release of hazardous materials.

On September 9, 2004, the FRA T-17 track geometry vehicle traversed the accident area no defective conditions were noted in the accident area.

On May 17, 2006, a UP track inspector conducted a track inspection by hi-railing between mile 59.50 and 114.90. No defective conditions were noted in the accident area.

Probable Cause

The Federal Railroad Administration determined the probable cause to be a wide gage due to broken spikes (T111).