



***Federal Railroad Administration
Office of Safety
Headquarters Assigned
Accident Investigation Report
HQ-2007-62***

***DeQueen & Eastern Railroad Company (DQE)
Wright City, Oklahoma
October 18, 2007***

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 DeQueen & Eastern RR Co. [DQE]		1a. Alphabetic Code DQE		1b. Railroad Accident/Incident No. DE-07-40	
2. Name of Railroad Operating Train #2 N/A		2a. Alphabetic Code N/A		2b. Railroad Accident/Incident No. N/A	
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: DeQueen & Eastern RR Co. [DQE]		4a. Alphabetic Code DQE		4b. Railroad Accident/Incident No. DE-07-40	
5. U.S. DOT_AAR Grade Crossing Identification Number 845171L		6. Date of Accident/Incident Month 10 Day 18 Year 2007		7. Time of Accident/Incident 11:26:00 <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 07	
9. Cars Carrying HAZMAT 2		10. HAZMAT Cars Damaged/Derailed 0		11. Cars Releasing HAZMAT 0	
		12. People Evacuated 0		13. Division SYSTEM	
14. Nearest City/Town Wright City		15. Milepost (to nearest tenth) 6.90		16. State Abbr Code N/A OK	
17. County MCCURTAIN					
18. Temperature (F) (specify if minus) 85 F		19. Visibility (single entry) Code 1. Dawn 3. Dusk 2. Day 4. Dark 2		20. Weather (single entry) Code 1. Clear 3. Rain 5. Sleet 2. Cloudy 4. Fog 6. Snow 1	
21. Type of Track Code 1. Main 3. Siding 2. Yard 4. Industry 1					
22. Track Name/Number Single Main Track		23. FRA Track Code Class (1-9, X) 2		24. Annual Track Density (gross tons in millions) 4.5	
		25. Time Table Direction Code 1. North 3. East 2. South 4. West 4			
OPERATING TRAIN #1					
26. 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	
		27. Was Equipment Attended? 1. Yes 2. No 1		28. Train Number/Symbol W.DayLocal	
29. Speed (recorded speed, if available) Code R - Recorded E - Estimated 20 MPH R		30. Trailing Tons (gross tonnage, excluding power units) 2216		31. Method(s) of Operation (enter code(s) that apply) a. ATCS g. Automatic block m. Special instructions b. Auto train control h. Current of traffic n. Other than main track c. Auto train stop i. Time table/train orders o. Positive train control d. Cab j. Track warrant control p. Other (Specify in narrative) e. Traffic k. Direct traffic control Code(s) f. Interlocking l. Yard limits j N/A N/A N/A N/A	
		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 0			
32. Principal Car/Unit		a. Initial and Number (1) First involved (derailed, struck, etc) TOE D-16		b. Position in Train 1	
		c. Loaded (yes/no) N/A		33. If railroad employee(s) tested for drug/alcohol use, enter the number that were positive in the appropriate box. Alcohol Drugs N/A N/A	
(2) Causing (if mechanical cause reported)		0		0	
		N/A		34. Was this consist transporting passengers? (Y/N) N	
35. Locomotive Units		a. Head End (1) Total in Train 3		Mid Train b. Manual c. Remote 0 0	
		Rear End d. Manual c. Remote 0 0		36. Cars (1) Total in Equipment Consist 21	
(2) Total Derailed 3		0 0		(2) Total Derailed 1 0 0 0 0	
37. Equipment Damage This Consist \$250,000.00		38. Track, Signal, Way, & Structure Damage \$52,441.00		39. Primary Cause Code H205	
				40. Contributing Cause Code M503	
41. Engineer/Operators 1		42. Firemen 0		43. Conductors 1	
		44. Brakemen 1		45. Engineer/Operator Hrs 5 Mi 26	
46. Conductor Hrs 5 Mi 26					
Casualties to:		47. Railroad Employees 0		48. Train Passengers 0	
Fatal		0		49. Other 1	
Nonfatal		3		0	
				50. EOT Device? 1. Yes 2. No 1	
				51. Was EOT Device Properly Armed? 1. Yes 2. No 1	
				52. Caboose Occupied by Crew? 1. Yes 2. No N/A	
OPERATING TRAIN #2					
53. 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	
		54. Was Equipment Attended? 1. Yes 2. No N/A		55. Train Number/Symbol N/A	
56. Speed (recorded speed, if available) Code R - Recorded E - Estimated 0 MPH N/A		57. Method(s) of Operation (enter code(s) that apply) a. ATCS g. Automatic block m. Special instructions b. Auto train control h. Current of traffic n. Other than main track		58a. Remotely Controlled Locomotive? 0 = Not a remotely controlled 1 = Remote control portable	

57. Trailing Tons (gross tonnage, excluding power units) N/A	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) N/A N/A N/A N/A N/A	2 = Remote control tower 3 = Remote control transmitter - more than one remote control transmitter N/A
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59. Principal Car/Unit (1) First involved (derailed, struck, etc) 0	a. Initial and Number 0	b. Position in Train 0	c. Loaded(yes/no) N/A	60. If railroad employee(s) tested for drug/alcohol use, enter the number that were positive in the appropriate box. Alcohol: N/A Drugs: N/A
(2) Causing (if mechanical cause reported) 0	0	0	N/A	61. Was this consist transporting passengers? (Y/N) N/A

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 0	0	0 0	0 0	(1) Total in Equipment Consist 0	0 0	0 0	0
(2) Total Derailed 0	0	0 0	0 0	(2) Total Derailed 0	0 0	0 0	0

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

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

OPERATING TRAIN #3

80. 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	81. Was Equipment Attended? 1. Yes 2. No N/A	82. Train Number/Symbol N/A
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83. Speed (recorded speed, if available) R - Recorded E - Estimated N/A MPH 0	85. 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) N/A N/A N/A N/A N/A	85a. 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 N/A
84. Trailing Tons (gross tonnage, excluding power units) N/A				

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

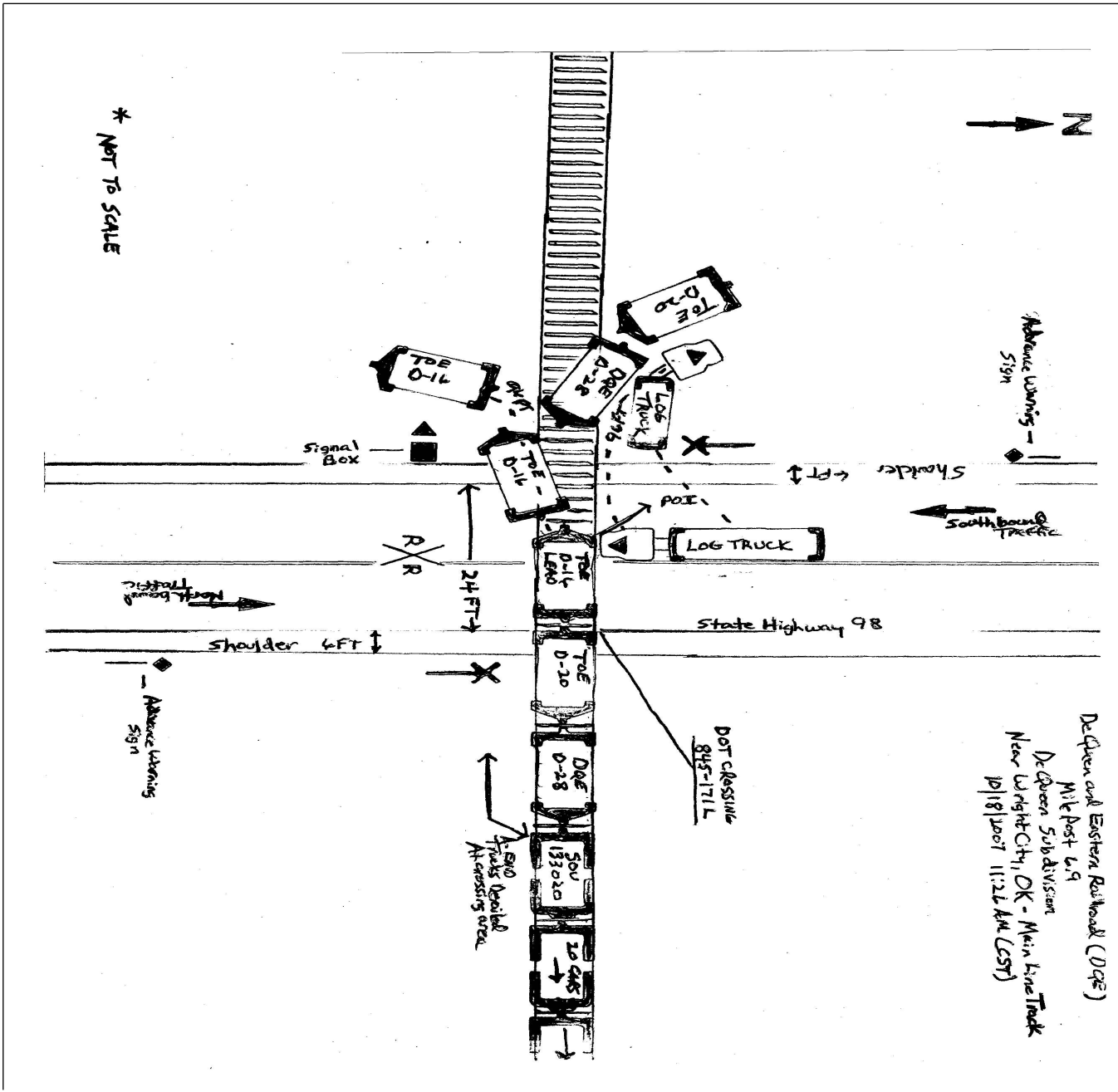
95. Engineer/Operators 0	96. Firemen 0	97. Conductors 0	98. Brakemen 0	99. Engineer/Operator Hrs 0 Mi 0	100. Conductor Hrs 0 Mi 0
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Casualties to:	101. Railroad Employees 0	102. Train 0	103. Other 0	104. EOT 1. Yes 2. No N/A	105. Was EOT Device Properly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

Highway User Involved				Rail Equipment Involved			
107. C. Truck-Trailer A. Auto B. Truck D. Pick-Up Truck E. Van	F. Bus G. School Bus H. Motorcycle	J. Other Motor Vehicle K. Pedestrian M. Other (spec. in narrative)	Code C	111. Equipment 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)	Code 1
108. Vehicle Speed (est. MPH at impact) 999	109. geographical 1. North 2. South 3. East 4. West			112. Position of Car Unit in 1			

110. Position 1. Stalled on Crossing 2. Stopped on Crossing 3. Moving Over Crossing 4. Trapped				Code 3	113. Circumstance 1. Rail Equipment Struck Highway User 2. Rail Equipment Struck by Highway User				Code 2		
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 2	114b. Was there a hazardous materials release 1. Highway User 2. Rail Equipment 3. Both 4. Neither				Code 4		
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 01 03 05 N/A N/A N/A N/A	116. Signaled Crossing (See instructions for codes)		Code 07	117. Whistle 1. Yes 2. No 3. Unknown		Code 2	
118. Location of Warning 1. Both Sides 2. Side of Vehicle Approach 3. Opposite Side of Vehicle Approach				Code 1	119. Crossing Warning with Highway Signals 1. Yes 2. No 3. Unknown		Code 2	120. Crossing Illuminated by Street Lights or Special Lights 1. Yes 2. No 3. Unknown		Code 2	
121. Age 32	122. Driver's Gender 1. Male 2. Female		Code 1	123. Driver Drove Behind or in Front of and Struck or was Struck by Second Train 1. Yes 2. No 3. Unknown			Code 2	124. Driver 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)		Code 3	
125. Driver Passed Highway Vehicle 1. Yes 2. No 3. Unknown			Code 2	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 8	
Casualties to:		Killed	Injured	127. Driver 1. Killed 2. Injured 3. Uninjured			Code 1	128. Was Driver in the Vehicle? 1. Yes 2. No		Code 1	
129. Highway-Rail Crossing Users		1	0	130. Highway Vehicle Property Damage (est. dollar damage)			170000	131. Total Number of Highway-Rail Crossing Users (include driver)			1
132. Locomotive Auxiliary Lights? 1. Yes 2. No				Code 1	133. Locomotive Auxiliary Lights Operational? 1. Yes 2. No				Code 1		
134. Locomotive Headlight Illuminated? 1. Yes 2. No				Code 1	135. Locomotive Audible Warning Sounded? 1. Yes 2. No				Code 1		

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



137. SYNOPSIS OF THE ACCIDENT

A westbound DeQueen and Eastern Railroad (DQ&E), West Day Local (WDL), freight train collided with a southbound loaded log truck at a highway-rail grade crossing on October 18, 2007, at 11:26 a.m. (CST). The accident occurred approximately one mile west of Wright City, Oklahoma at DQ&E mile post 6.9, on the DQ&E, DeQueen Subdivision.

The lone male driving the motor vehicle was killed. The motor vehicle received an estimated damage of \$170,000. Injuries sustained by the train crew of the West Day Local resulted with the engineer receiving serious injuries and the conductor and brakeman receiving minor injuries from this accident.

The railroad mechanical equipment damaged was the lead locomotive and two trailing locomotives, which derailed. The freight car that derailed was the first trailing car behind the locomotive consist. The subject car had the lead truck (A-end) derailed. Damages to railroad mechanical equipment was estimated at \$250,000. Track and signal structure damages were estimated at \$52,441.

At the time of the accident it was daylight and clear with good visibility. The temperature was 85 degrees fahrenheit.

Investigations determined factual evidence that railroad track warrants and bullentins instructed flag protection procedures to be performed at the subject crossing due to mechanical damages to warning devices. The warning devices had been taken out of service by the railroad two days prior to the accident. It was further determined that the train crew had failed to provide proper flag protection at this crossing as required and contributing cause factors determined that the DQ&E failed to make timely repairs to the crossing equipment warning devices.

There were no cameras, nor any related photographic equipment located on any of the locomotives for purpose of filming events, of which the locomotive and or train was involved in.

CONTRIBUTING FACTORS

The DQ&E Railroad failed to make timely repairs to the signal warning crossing equipment at State Highway 98 highway-rail grade crossing.

PROBABLE CAUSE

The WDL train crew had failed to provide proper flag protection at this crossing when required.

138. NARRATIVE

CIRCUMSTANCES PRIOR TO THE ACCIDENT

The train crew of the West Day Local (WDL), included a locomotive engineer, conductor and a brakeman. They first went on duty at 6:00 a.m. (CST), on October 18, 2007, at the DeQueen and Eastern Railroad (DQ&E) Yard in De Queen, Arkansas. This was the originating terminal for the train crew members and all received the statutory off duty period prior to reporting for duty at this location.

The train crew held job briefing and received their required documentation including track warrants and bullentins stipulating known conditions and instructions to be performed. The train crew began switching operations for train assemble of (about 59 freight cars) and air brake test and inspection were conducted for departure westward to destined Valliant, Oklahoma.

The WDL train traveling westward, arrived near Wright City, Oklahoma, (a distance of about 35 miles) and received instruction to set out 38 freight cars in the industry loop track. The train crew then brought their train out of the loop track and backed onto the main line connecting to the remainder of their train. The (WDL) manifest train at this location consisted of three locomotives and 21 loaded freight cars. It was 1,565 feet in length with 2,216 trailing tons. The required air brake tests and inspections had been performed by the train crew prior to departure.

As the train approached the accident site, the locomotive engineer was seated at the controls on the north side of the lead controlling locomotive and the conductor was seated on the south side of the lead controlling locomotive with the brakeman seated on an ice chest in the center of the cab of the lead controlling locomotive. There were no visible sight restrictions, as would be seen from a locomotive approaching State Highway 98 highway-rail grade crossing.

The motor vehicle involved was a 2006 Kenworth Diesel Truck with trailer loaded with logs, licensed 2LP-803 (OK). There was one occupant in the motor vehicle (the driver). The motor vehicle was traveling geographically southward prior to impact. The view at this location is unrestricted in all directions.

In this area of the accident site where the railroad and highway intersect, the railroad tracks traveling east to west, are straight level tangent track. Traveling north to south on State Highway 98, the highway grade is level.

State Highway 98 highway-rail grade crossing is equipped with automatic warning devices which were completely taken out of service on October 16, 2007, by railroad personnel due to gate mechanism damage.

The railroad timetable direction of the train is west. The timetable directions are used throughout this report.

THE ACCIDENT

The WDL train crew soon after departing Wright City, Oklahoma area, traveling timetable direction west, approached the subject crossing at mile post 6.9, traveling at a recorded speed of 20 mph and once occupying the subject crossing, was struck by a log truck at the right side below engineer cab window of lead locomotive TOE D-16, derailing the three locomotive consist and one freight car. The maximum authorized speed for this train was 39 mph, as designated in the current DQ&E Timetable No. 8.

The motor vehicle was traveling southward on State Highway 98 at a unknown rate of speed (posted speed limit for this highway is 65 mph). According to the conductor and brakeman: to the best of their knowledge, they had heard the train air burst and the train came to a stop. The conductor stated that he heard the train air burst and the train stopped before impact and the brakeman stated that he had heard the train air burst and the train went into emergency at point of impact. The locomotive event recorder downloads revealed the train went into emergency brake application at the point of impact.

An accident report, filed by the Oklahoma Highway Patrol officer, stated the motor vehicle attempted to cross the tracks, struck the lead locomotive and that the point of impact was approximately at center of the roadway. Following the impact the motor vehicle rotated clockwise and rested 96 feet west of point of impact. The lead locomotive was derailed and came to rest 96 feet west and 54 feet south of point of impact.

After the train stopped, the conductor established radio communications with the train dispatcher and also tried calling for assistance on his cell phone. The conductor saw fuel leaking from the locomotive and activated the side emergency fuel cut-off switch (about 5,129 gallons spilled). During this time the conductor contacted an ambulance with his cell phone and began to assist in helping to remove the locomotive engineer from the control seat.

The DQ&E train dispatcher, received a phone call at 11:28 a.m., from the conductor of the WDL stating the emergency. He annotated the information from the conductor and then called medical emergency responders in Wright City, Oklahoma and Valliant, Oklahoma.

The train dispatcher stayed in contact with the train crew and informed them that emergency responders were en route to their location. He maintained communications with the train crew throughout the incident.

The train dispatcher, also contacted the railroad officials immediately. The railroad officials responded to the accident site and the dispatcher maintained communications with the officials and continued dispatching trains.

The driver of the motor vehicle was pronounced dead at the scene and taken to Nunley Funeral Home for examination by medical examiner in Idabel, Oklahoma. The locomotive engineer sustained serious injuries

and was air lifted to University Medical Center in Little Rock, Arkansas. The conductor and brakeman sustained minor injuries and were treated at local area Medical Center in Idabel, Oklahoma.

The Oklahoma Department of Environmental Quality and Highway 59 Environmental hazardous material team were also at the scene for assessment, containment and clean up of diesel fuel released from the damaged locomotives. No fire was present from the locomotives and no evacuation was issued for the Wright City, Oklahoma area.

Damages to railroad mechanical equipment were estimated at \$250,000. Track and signal structure damages were estimated at \$52,441. R. J. Corman Derailment Services provided rerailling to the damaged equipment and clean up estimated at \$202,873.05.

ANALYSIS

The driver of the motor vehicle was a 32 year old male. Autopsy examinations were performed by medical examiner in Idabel, Oklahoma. The driver blood alcohol tests were negative. No other toxicology tests were performed. Probable cause by medical examiner revealed the cause of death was due to blunt force head and chest trauma.

The highway-rail grade crossing runs north and south and is in good road condition composed of asphalt with cement planks for the main line track. It is equipped with warning devices that include lights, bells, gates and crossbucks.

The crossing signal warning system had been reported and taken out of service with crossing gates removed by the DQ&E signal maintainer personnel on October 16, 2007, due to gate mechanism damage. There had been no testing of the warning devices from the time the crossing had been taken out of service and prior to the accident, due to parts and repairs needed. DQ&E railroad official has stated that the crossing gates are damaged 1 to 3 times a month by speeding log trucks at this location. There are advance warning signs and pavement markings in place at State Highway 98 highway-rail grade crossing for both north and south directional approaches.

The DQ&E Railroad have whistle boards and procedures for sounding the locomotive horn when approaching highway-rail grade crossings. The conductor and brakeman both have stated the locomotive engineer was sounding the horn as validated by the locomotive event recorder download and the locomotive crossing bell, headlights and auxiliary lights were equipped and working. Tests and inspection of the audible warning devices were performed by DQ&E mechanical personnel prior to locomotive use on October 18, 2007 as indicated by mechanical inspection records.

The Oklahoma Highway Patrol accident report, stated that a passing motor vehicle, prior to the accident, had witnessed the WDL train traveling at a slow speed with their headlights on, when they were east of the subject crossing. It was further stated in the Oklahoma Highway Patrol accident report, that the driver of the motor vehicle, while attempting to go through the highway-rail grade crossing, was distracted by an electronic communication device prior to the accident. No citations were submitted by the Oklahoma Highway Patrol as indicated in their report.

The train crew members had received DQ&E Track Warrant No. 7 and Bullentin No. 59, clearly instructing the train crew to provide the required flag procedures at this crossing. Further investigation of the locomotive event recorder downloads, revealed that the WDL train crew, never stopped when approaching and occupying the subject grade crossing, prior to the accident.

Interviews with the train crew, determined by their own statements, that they failed to provide flag protection when required at this crossing.

FATIGUE ANALYSIS

FRA obtained fatigue related information, including a 10-day work history, for a locomotive engineer, conductor and brakeman involved in this incident.

FATIGUE CONCLUSION

FRA concluded that fatigue was not probable for any of the employees. However, the brakeman was using a prescribed medicine.

CONCLUSION

The railroad was not in full compliance with their own and all applicable Federal standards.

REPORT DISCREPANCIES

The Federal Railroad Administration does not dispute the DQ&E Railroad findings per report DE-07-40.

CONTRIBUTING FACTORS

The DQ&E Railroad failed to make timely repairs to the signal warning crossing equipment at State Highway 98 highway-rail grade crossing.

PROBABLE CAUSE

The FRA determined that the WDL train crew failed to provide required flag protection at this crossing.