Federal Railroad Administration
Office of Safety
Headquarters Assigned
Accident Investigation Report
HQ-2007-49

Kansas City Southern Railway Company (KCS)
Aguadulce, Texas
August 8, 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.

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

FRA FACTUAL RAILROAD ACCIDENT REPORT

FRA File # HQ-2007-49

1.Name of Railroad Operating Train #1: Kansas City Southern Rwy Co. [KCS]	1a. Alphabetic Code: KCS	1b. Railroad Accident/Incident No.: 9904888
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: Kansas City Southern Rwy Co. [KCS]	4a. Alphabetic Code: KCS	4b. Railroad Accident/Incident No.: 9904888
5. U.S. DOT_AAR Grade Crossing Identification Number: 793667X	6. Date of Accident/Incident: Month 08 Day 09 Year 2007	7. Time of Accident/Incident: 06:30: ☐ AM ☑ PM

8. 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) — Code: 07

9. Cars Carrying HAZMAT	10. HAZMAT Cars Damaged/Derailed	11. Cars Releasing HAZMAT	12. People Evacuated	13. Division
3	N/A	N/A	0	Laredo Subdivision

14. Nearest City/Town	15. Milepost (to nearest tenth)	16. State Abbr	16. State Code	17. County
Agua Dulce	130.5	N/A	TX	NUECES

18. Temperature (F) (specify if minus)	19. Visibility (single entry) 1. Dawn 2. Day 3.Dusk 4.Dark — Code	20. Weather (single entry) 1. Clear 2. Cloudy 3. Rain 4. Fog 5.Sleet 6.Snow — Code	21. Type of Track 1. Main 2. Yard 3. Siding 4. Industry — Code
84 F	2	2	1

22. Track Name/Number	23. FRA Track Class (1-9, X) — Code	24. Annual Track Density (gross tons in millions)	25. Time Table Direction 1. North 2. South 3. East 4. West — Code
Single Main Track	4	10.5	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	27. Was Equipment Attended? 1. Yes 2. No — Code	28. Train Number/Symbol
	1	1	MBNLR-09

29. Speed (recorded speed, if available) R - Recorded E - Estimated	Code	30. Trailing Tons (gross tonnage, excluding power units)
46 MPH	R	6468

31. 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)				
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: N/A

32. Principal Car/Unit	a. Initial and Number	b. Position in Train	c. Loaded (yes/no)
(1) First involved (derailed, struck, etc)	BN4544	1	N/A
(2) Causing (if mechanical cause reported)	0	1	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

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

35. Locomotive Units	a. Head End	Mid Train b. Manual	Mid Train c. Remote	Rear End d. Manual	Rear End c. Remote
(1) Total in Train	2	0	0	0	0
(2) Total Derailed	0	0	0	0	0

36. Cars	Loaded a. Freight	Loaded b. Pass.	Empty c. Freight	Empty d. Pass.	e. Caboose
(1) Total in Equipment Consist	58	0	0	0	0
(2) Total Derailed	0	0	0	0	0

37. Equipment Damage This Consist	38. Track, Signal, Way, & Structure Damage	39. Primary Cause Code	40. Contributing Cause Code
$6,000.00	$64,060.00	M308	N/A

Number of Crew Members

41. Engineer/ Operators	42. Firemen	43. Conductors	44. Brakemen
1	0	1	0

Length of Time on Duty

45. Engineer/Operator	46. Conductor
Hrs 1 Mi 45	Hrs 1 Mi 45

Casualties to:	47. Railroad Employees	48. Train Passengers	49. Other
Fatal	0	0	3
Nonfatal	0	0	2

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 — 2

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	54. Was Equipment Attended? 1. Yes 2. No — Code	55. Train Number/Symbol
	N/A	N/A	N/A

56. Speed (recorded speed, if available) R - Recorded E - Estimated	Code
N/A MPH	N/A

58. 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

58a. Remotely Controlled Locomotive? 0 = Not a remotely controlled; 1 = Remote control portable

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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

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

60. 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

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

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

64. Equipment Damage This Consist: N/A

65. Track, Signal, Way, & Structure Damage: N/A

66. Primary Cause Code: N/A

67. Contributing Cause Code: N/A

Number of Crew Members

68. Engineer/ Operators	69. Firemen	70. Conductors	71. Brakemen
N/A	N/A	N/A	N/A

Length of Time on Duty

72. Engineer/Operator: Hrs N/A Mi N/A

73. Conductor: Hrs N/A Mi N/A

Casualties to:	74. Railroad Employees	75. Train Passengers	76. Other
Fatal	N/A	N/A	N/A
Nonfatal	N/A	N/A	N/A

77. EOT Device? 1. Yes 2. No: N/A

78. Was EOT Device Properly Armed? 1. Yes 2. No: N/A

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

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 Code: N/A

82. Train Number/Symbol: N/A

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

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

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

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

87. 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

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

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

91. Equipment Damage This Consist: N/A

92. Track, Signal, Way, & Structure Damage: N/A

93. Primary Cause Code: N/A

94. Contributing Cause Code: N/A

Number of Crew Members

95. Engineer/ Operators	96. Firemen	97. Conductors	98. Brakemen
N/A	N/A	N/A	N/A

Length of Time on Duty

99. Engineer/Operator: Hrs N/A Mi N/A

100. Conductor: Hrs N/A Mi N/A

Casualties to:	101. Railroad Employees	102. Train	103. Other
Fatal	N/A	N/A	N/A
Nonfatal	N/A	N/A	N/A

104. EOT 1. Yes 2. No: N/A

105. Was EOT Device Properly 1. Yes 2. No: N/A

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

Highway User Involved

107. Code: D
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)

108. Vehicle Speed (est. MPH at impact): 45

109. geographical) Code: 1
1.North 2.South 3.East 4.West

Rail Equipment Involved

111. Equipment Code: 1
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)

112. Position of Car Unit in: 1

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110. Position	Code	113. Circumstance	Code
1.Stalled on Crossing 2.Stopped on Crossing 3.Moving Over Crossing 4. Trapped	3	1. Rail Equipment Struck Highway User 2. Rail Equipment Struck by Highway User	1
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	2	114b. Was there a hazardous materials release 1. Highway User 2. Rail Equipment 3. Both 4. Neither	4

114c. State here the name and quantity of the hazardous materials released, if any.
N/A

115. Type Crossing Warning	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
Code(s)	01	N/A	N/A	N/A	N/A	N/A	N/A					

116. Signaled Crossing (See instructions for codes)	Code	117. Whistle 1. Yes 2. No 3. Unknown	Code
	01		2

118. Location of Warning 1. Both Sides 2. Side of Vehicle Approach 3. Opposite Side of Vehicle Approach	Code	119. Crossing Warning with Highway Signals 1. Yes 2. No 3. Unknown	Code	120. Crossing Illuminated by Street Lights or Special Lights 1. Yes 2. No 3. Unknown	Code
	1		2		2

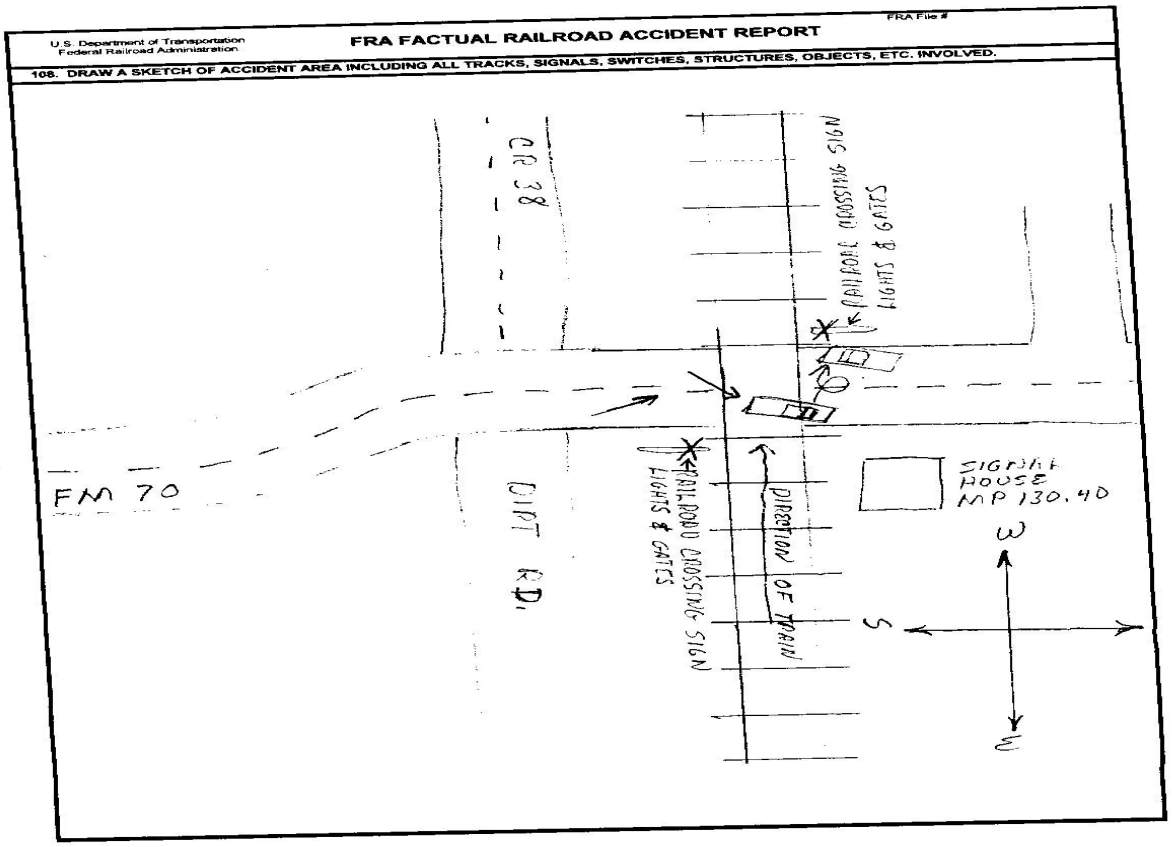
121. Age	122. Driver's Gender 1. Male 2. Female	Code	123. Driver Drove Behind or in Front of and Struck or was Struck by Second Train 1. Yes 2. No 3. Unknown	Code	124. Driver 1. Drove around or thru the Gate 2. Stopped and then Proceeded 3. Did not Stop 4. Stopped on Crossing 5. Other (specify in narrative)	Code
0		N/A		2		1

125. Driver Passed Highway Vehicle 1. Yes 2. No 3. Unknown	Code	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
	2		8

Casualties to:	Killed	Injured	127. Driver 1. Killed 2.Injured 3. Uninjured	Code	128. Was Driver in the Vehicle? 1. Yes 2. No	Code
				3		1
129. Highway-Rail Crossing Users	3	2	130. Highway Vehicle Property Damage (est. dollar damage)	18000	131. Total Number of Highway-Rail Crossing Users (include driver)	12

132. Locomotive Auxiliary Lights? 1. Yes 2. No	Code	133. Locomotive Auxiliary Lights Operational? 1. Yes 2. No	Code
	1		1
134. Locomotive Headlight Illuminated? 1. Yes 2. No	Code	135. Locomotive Audible Warning Sounded? 1. Yes 2. No	Code
	1		1

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



137. SYNOPSIS OF THE ACCIDENT

A westbound Kansas City Southern train collided with an Ford F250 crew cab truck trunk at a highway-rail grade crossing, on July 9, 2007, at 6:30 p.m. The accident occurred in Agua Dulce, Texas, at KCS Milepost 130.5 and Texas Farm to Market Road #70, on the KCS Laredo Subdivision.

The motor vehicle was occupied with an estimate of 12 persons. The vehicle was struck by the lead locomotive at the rear of the truck's bed. Five of the twelve occupants were in the bed of the pickup truck. Three were killed, two injured. The driver and occupants in the cab of the truck fled the scene. The lead locomotive sustained minor damage of about $6,000.00, and there was no derailment.

At the time of the incident it was daylight, partly cloudy, and no rain. The temperature was 89 degrees F.

The accident was caused by failure of the motor vehicle to yield to the train. According to a witness the crossing gates were down and the driver had time to stop.

138. NARRATIVE

CIRCUMSTANCES PRIOR TO THE ACCIDENT

The crew of train KCS M-BNLR-09 Westbound included a locomotive engineer, and a conductor. They first went on duty at 3 p.m. CST, August 9, 2007, at the KCS, Corpus Christi Yard, Corpus Christi, Texas. The crew was transported to the trains location at Spear siding, located in Robstown, Texas. This was not the home terminal for the crew, and all received more than the statutory off-duty period, prior to reporting to duty.

Their assigned freight train consisted of two locomotives, 51 loads, and 7 empty cars of several varieties. It was 3,369 feet long, and weighed 6,468 tons. The train was scheduled to travel to Laredo, Texas. The train received a Class III (set and release air brake test), and departed Spear siding at 6:30 p.m.

As the westbound train approached the accident area, the locomotive engineer was seated at the controls on the north side of the leading locomotive. The conductor was seated on the south side.

In this area of the railroad it is flat and straight. In this area of FM 70 there is a curve to the left of about 300 feet, followed by a tangent section of about 100 feet to the crossing.

The railroad time table direction was west. The geographic direction was west. Timetable directions are used throughout this report.

THE ACCIDENT

TRAIN - M-BNLR-09

The train was being operated at 46 mph approaching the accident area. The train crews view of the crossing was not obstructed. The conductor said he became aware of the of the impending collision about 1000 feet in advance and both the conductor and engineer simultaneously initiated an emergency train brake application. The train impacted the pickup truck at 46mph. Speed was recorded by the event recorder of the controlling

locomotive. The maximum authorized speed for this train is 49 mph.

HIGHWAY VEHICLE

The pickup truck was traveling south to north on FM 70. According to the conductor and a civilian witness following the truck. Witnesses said the driver of the truck slowed down and then proceeded to go around the crossing gate. A report filed by the Texas Department of Transportation (State Police) did not estimate the speed of the pickup truck, and there were no skid marks approaching the crossing. The posted speed limit was 55mph. The train struck the right rear of the truck, causing the vehicle to spin and come to rest north of the crossing. The train came to a stop about 1,500 feet west of this point.

A KCS trainmaster was dispatched to the scene from Corpus Christi and arrived about 8:00p.m. He ascertained the condition of the train and track structure. There were three cars loaded with hazardous materials and none were damaged and no release of product. There was minor structural damage to the lead locomotive. The train master discussed the situation with the state police. The train and crew was released to proceed to destination.

Witnesses estimated there were about ten to twelve occupants in the truck. According to witnesses the impact caused three people in the bed of the truck to be ejected and killed. The remaining occupants and the driver of the truck fled the scene. Two collapsed from injuries and were treated.

ANALYSIS

Per the state police report, the driver (unknown) was listed as a Human smuggler driving a stolen Blue Ford F -250 pickup truck. The other passengers were listed as non U.S. Citizens.

The highway-rail crossing at grade is equipped with warning lights bells and gates. There is an advanced warning sign posted about three tenths (.3) of a mile from the crossing. There are also pavement markings about two tenths (.2) of a mile from the crossing. The pavement markings are clearly distinguishable. The vegetation along the south side of the tracks is not on railroad property. This area of the accident is maintained by Nueces County.

The railroad has a whistle post in place about 1000 feet east of the crossing. The conductor said that the engineer began sounding the whistle when the train neared this post. This was later validated by analysis of the event recorder data.

The active warning devices were tested by KCS signal maintainers on the day of the accident. And found to function as intended. The tests were performed again in the presents of an FRA inspectors. The warning devises functioned as intended.

The lead locomotive was equipped with a headlight, auxiliary lights, and audible warning device required by Federal Regulations.

The locomotive was also equipped with a speed indicator and an event recorder as required. The relevant event recorder was downloaded and analyzed. The analysis disclosed that the locomotive engineer was in compliance with all applicable railroad operating and train handling requirements. FRA reviewed the results of this analysis and concurred with the conclusions.

CONCLUSIONS

The railroad was in full compliance with their own and all applicable Federal Requirements. The train crew members and two civilians were the only witnesses to the accident. The train crew had no information that could be used to determine why the automobile failed to stop at the crossing.

PROBABLE CAUSE AND CONTRIBUTING FACTORS

It was determined by the Federal Railroad Administration that the accident occurred because the driver of the pickup truck failed to stop at the highway-rail crossing at grade and proceeded to go around the warning gates.