TCID Field Value	Tank Shell Interior	Tank Shell Exterior	Tank Head Interior	Tank Head Exterior	Center Sill Web *(full sill)*	Center Sill Flange *(full sill)*	Center Sill Both *(full sill)*	Bolster Pad *(tank cradle, top cover plate, BC*	Inboard Tank Reinforcement Pad	UF (Sill) Web Inbd of Bolster	Brake Support	Tank Bolster	Other	Stub Sill Web	Stub Sill Top Flange	Stub Sill Bottom Flange	Head Brace	Head Pad	Manway Nozzle	Safety Valve Nozzle	Top Fittings Nozzle	Manway Nozzle Reinforcement Pad	Safety Valve Nozzle Reinforcement Pad	Top Fitting Reinforcement Pad	Turnbuckle Brackets	Reinforcement Bars	Skid Attachment to Pad or Tank	Tank Anchor Pad *(full sill cars)*	Tank Anchor Web *(full sill cars)*	Miscellaneous Attachment Welds	Tank Stiffener Horn *(full sill aluminum car)*	Bolster Web *(BWPM)*	Bolster Bottom Cover Plate *(BBPM)*	Bolster Web Stiffener *(WBSW)*	Splice Plates	Wing Bars	Sill Center Filler (above center plate)	Miscellaneous Tank Pad	BOY Skid	Sump	BOY Mounting Saddle	Wash Out
Failure Type																																										
Buckle *(also Bent)*	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
Crack - Parent Metal	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
Crack - Girth Seams / Butt Welds	X	X	X	X									X						X	X	X																					
Crack - Weld Not on Templates	X	X		X	X	X	X	X	X			X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X
Corrosion - Random Pits	X	X	X	X									X						X	X	X	X	X	X							X									X	X	X
Corrosion - Grouped Pits	X	X	X	X															X	X	X	X	X	X																X	X	X
Corrosion - Bathtub Ring	X		X																																							
Corrosion - Vertical Grooving	X		X																																							
Corrosion - Girth Weld Seams	X	X	X	X																																						
Dent	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Blister	X	X	X	X																																						
Scores and Gouges	X	X	X	X									X																													
Wheel Burns		X		X																																						
Repairs to Fire Damaged tanks	X	X	X	X																																				X	X	X
Cause of Failure																																										
Workmanship	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Missing Weld					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Unknown	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Overstressed/Abused/RR Damage	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Corrosion	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
How Repaired																																										
Patch Plate Repair- AAR Tanks	X		X																																							
Weld Surfacing *(weld buildup)*	X	X	X	X															X	X	X																			X	X	X
Welded Inserts and Tank Sections	X	X	X	X																																						
Repairs to Tank Anchors																												X	X	X												
Reinforcing Plate Application per FM Rule 57					X	X	X							X	X	X																										
RIK - Replace in Kind Not Otherwise Listed in the Repair Codes			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Welding with PWHT	X	X	X	X									X						X	X	X																			X	X	X
Welding without PWHT or Pre-Heat	X	X	X	X									X						X	X	X																			X	X	X
Welding with Pre-Heat	X	X	X	X									X						X	X	X																			X	X	X
Pressing, or Jacking of Dents/Buckles of the Tank	X	X	X	X																																						
Straightening					X	X	X	X	X	X	X	X	X	X	X	X									X	X		X	X		X	X	X	X								
Grinding and Blending with no Weld Buildup	X	X	X	X									X																													
Repair of Threaded or Non-threaded Holes													X															X													X	
Length of Crack/ Defect	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Number of Cracks/Defects	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Location on Car																																										
A End	X	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X						X	X				X		X	X				
B End	X	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X						X	X				X		X	X				
C Center	X	X			X	X	X		X		X		X	X	X	X			X	X	X	X	X	X						X					X			X	X	X	X	X
BR Side					X	X	X	X	X	X	X	X	X	X	X	X									X	X	X	X	X	X		X	X	X	X	X		X					
BL Side					X	X	X	X	X	X	X	X	X	X	X	X									X	X	X	X	X	X		X	X	X	X	X		X					
AR Side					X	X	X	X	X	X	X	X	X	X	X	X									X	X	X	X	X	X		X	X	X	X	X		X					
AL Side					X	X	X	X	X	X	X	X	X	X	X	X									X	X	X	X	X	X		X	X	X	X	X		X					
CR - Center Right					X	X	X				X		X																										X	X	X	X
CL - Center Left					X	X	X				X		X																										X	X	X	X
ATS - A End Top Shell	X	X																																								
ABS - A End Bottom Shell	X	X																																				X				
ALS - A End Left Shell	X	X																																								
ARS - A End Right Shell	X	X																																								
BTS - B End Top Shell	X	X																																								
BBS - B End Bottom Shell	X	X																																				X				
BLS - B End Left Shell	X	X																																								
BRS - B End Right Shell	X	X																																								
CTS - Center Top Shell	X	X																																								
CBS - Center Bottom Shell	X	X																																				X				
CRS - Center Right Shell	X	X																																								
CLS - Center Left Shell	X	X																																								
ATH - A End Top Head			X	X																																						
BTH - B End Top Head			X	X																																						
ABH - A End Bottom Head			X	X																																						
BBH - B End Bottom Head			X	X																																						
Inspection Method																																										
[AE] Acoustical Emission	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
[LT] Leak Test	X	X	X	X															X	X	X	X	X	X														X	X	X	X	X
[MT] Magnetic Particle	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X
[PT] Liquid Penetrant	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
[RT] Radiographic	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
[UT] Ultrasonic	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
[UTT] Ultrasonic Thickness	X	X	X	X															X	X	X	X	X	X														X		X		X
[VT] Direct Visual	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
[RVT] Remote Visual	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
[OT] Other	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X