



AMERICAN RAILCAR LEASING, LLC
TANK CAR QUALIFICATION FORM

PROCEDURE: ARL 9.134 REV. CO

General Information

Reporting Mark and Car Number: 5HPX-205631
DOT Specification: DOT 111A100W-5
Facility: Fritcer
Address: 1965 South Blvd Brewton AL 36426

A. Exterior Inspection

NDT Procedure(s): FCSOP-F001

Defects (location, geometry, method): FR AL BR BL 2" cracks in Tank Pad @ sill beam

Repair: RIK

Inspector: [Signature] Title: II Date: 10-25-17

B. Interior Inspection

NDT Procedure(s): FCSOP-F001

Defects (location, geometry, method): Mechanical damage throughout tank surface (layers in tank surface and weld seams)

Repair: Grind surface gauges until removed to smooth center

Inspector: Jared Salter Title: VI-II Date: 10/23/17

C. Thickness Inspection

NDT Procedure(s): FCSM FWS

Instrument ID: DMSE 502-163

Defects (location, geometry, method): No defects were found during inspection

Repair: N/A

Inspector: Speed Sotter

Title: WTT-1

Date: 10/23/17

NOZZLE AND SUMP THICKNESS READINGS		
	A-END	B-END
MANWAY NOZZLE	.650	.656
OD NOZZLE		
SAFETY VALVE NOZZLE	.302	.294
TOP UNLOADING NOZZLE	.627	.627
SUMP		
OTHER		
OTHER		
OTHER		

TOP



A-HEAD

BOTTOM

B-HEAD

D. Lining Inspection (if applicable)

Use the lining or coating owner's inspection form.

E. Insulation Jacket Thickness Test

CAR NUMBER: SHPX 205631	UTT PROCEDURE USED: FCS OP-F005
DATE: 10/23/17	COUPLANT USED: Suntech Sundrae 30
LOCATION: Frit Cap, Inc. 1405 South Blvd Brenton, AL	EQUIPMENT TYPE: DMSE 502163
OPERATOR: Jared Sutter	SERIAL NO.: 502163
LEVEL UTT: II	CALIBRATION DUE DATE: 6/19/18
SIGNATURE: <i>Jared Sutter</i>	CALIBRATION BLOCK SERIAL NO.: A18673
	SURFACE CONDITION: Acceptable

TANK HEADS

"A" TOP .118
 "A" BOTTOM .117
 "B" TOP .117
 "B" BOTTOM .118

PLATFORM AREA

"A" END .122 .122
 "B" END .123 .123

LADDER AREA:

RIGHT SIDE .117 .121
 LEFT SIDE .119 .123

BOTTOM CENTER:

"A" END .122 .122
 "B" END .123 .122

1) AVERAGE THICKNESS = .120
2) LOST METAL = 0.1121" - AVERAGE THICKNESS = 0.0074
3) IF 1) >= 0.1121" THEN JACKET IS OK, NO FURTHER EVALUATION REQUIRED
4) LOST METAL PER YEAR = LOST METAL / AGE OF CAR
5) REQUIRED METAL FOR NEXT 10 YEARS = LOST METAL PER YEAR X 10
6) IF "4)" < or = "1)", THEN JACKET IS OK; IF "4)" > "1)", THEN JACKET IS TOO THIN

F. Insulation Inspection

Car Number: SHX 205031 Date: 8-30-17

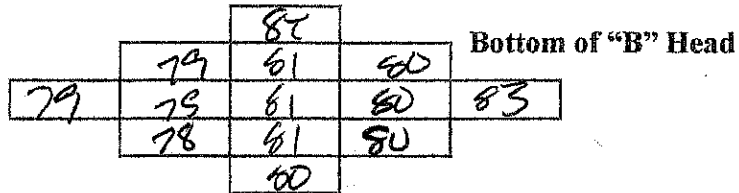
Weather: cloudy Location: RA

Tank Interior Temperature: 195°F

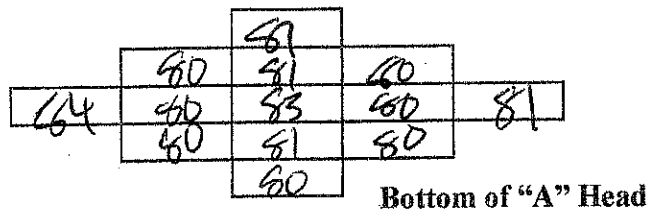
Temperature: 75°F

Technician: J. McCallum

Time of Day: 6:50 a.m.



B-Head Seam	5:00	3:00	2:00	1:00	12:00	11:00	10:00	9:00	7:00
Seam 1	79	80	80	79	84	83	79	79	78
	80	81	80	80	80	83	81	77	78
	80	80	80	81	81	81	81	86	77
Seam 2	91	80	80	80	87	81	83	86	78
	81	79	80	81	80	80	81	79	77
	81	79	83	81	81	82	81	79	77
Seam 3	79	78	80	84	88	81	83	79	78
	79	77	80	83	86	83	81	79	78
	79	79	83	83	84	83	84	79	78
Seam 4	80	77	79	80	87	80	85	81	78
	81	78	79	80	79	80	85	83	79
	82	79	80	82	82	79	81	79	80
Seam 5	82	80	81	78	80	79	83	79	78
	83	81	80	80	80	83	87	81	78
	81	81	81	81	80	83	81	83	78
Seam 6	80	80	82	83	83	87	81	79	78
	80	79	81	83	80	81	81	79	81
	80	78	81	79	84	81	80	78	80
Seam 7	81	82	83	81	80	83	80	77	80
	83	81	81	81	83	84	80	79	79
	79	81	83	82	80	83	79	78	78
Seam 8									
Seam 9									
A-Head Seam									
	5:00	3:00	2:00	1:00	12:00	11:00	10:00	9:00	7:00



G. Structural Inspection

NDT Procedure(s): FCSUP-FUNS Instrument ID: GE WMI G-04

G-0PLD15100102

Defects (location, geometry, method): No defects found during inspection

Repair: _____

Inspector: Stacy Salter Title: UT-II Date: 11/23/17

GIRTH WELDS

Weld Seam	12"	12"	CL	12"	12"	NDT METHOD
#1	----- ----- ----- -----					UT
#2	----- ----- ----- -----					UT
#3	----- ----- ----- -----					UT
#4	----- ----- ----- -----					UT
#5	----- ----- ----- -----					UT
#6	----- ----- ----- -----					N/A
#7	----- ----- ----- -----					N/A

Note: Weld seams are numbered from the B-end, starting with the head weld seam. The bottom longitudinal centerline is denoted as "CL".

STRUCTURAL AND TRUCK DEFECTS			
AREA	NDT	DEFECTS	REPAIR
TRANS FILLET WELDS	RVI	✓	
LONG. WELD TERM.	RVI	✓	
HEAD PAD TO TANK WELD	RVI	✓	
BOV ATTACH. WELDS	VT	✓	
SILL ATTACH. WELD	RVI	✓	
TANK PARENT METAL	RVI	✓	
CRADLE PAD METAL	PT	AL AN BL BR 2" cracks @ sill T	RIK
SILL WEB METAL	RVI	✓	
REAR LUG WELDS	RVI	✓	
BODY BOLSTER	VT	✓	

H. Service Equipment Inspection

NDT Procedure(s): Fm-234

Defects (location, geometry, method): NO DEFECTS

Repair: SEE LEAK TEST INSPECTION

Inspector: David Clauwell Title: Leadman Date: 8/30/17

I. Leak Test Inspection

NDT Procedure(s): FM 234

Defects (location, geometry, method): 1" S.S. JB SRFF Vent Valve - Leaking
3" S.S. JB Load Valve - Leaking, Set out Safety Valve
FOR Recondition

Repair: Applied New 1" S.S. TRRL Flange Valve RTR 3" JB SRFF
(New Kit - RKR 49TT 3" KIT) Applied Recondition MIDLAND A-1779P
Safety Valve

Inspector: Joshua William Title: Leadman Date: 12-05-17

J. Rule 88.B.2. Inspection

Draft Gear: Mark 50
 Truck Type: Barber
 Spring Group: D-5

Date: 10-25-17
 Inspector: [Signature]
 Title: II

Rule 88 Inspection Checklist:

Section <u>88.B.2.b.</u>	Items:	B-End:		A-End:		Action:
		Accept	Reject	Accept	Reject	1 = Repaired 2 = Replaced
(5)	Coupler & Components Inspected:		/		/	1
	Yoke Inspected:	/		/		
	Draft Gear & Follower Inspected:	/		/		
	Uncoupling Lever Inspected:		/		/	1
(8)	Side Frames Inspected:	/		/		
	Bolster Inspected:	/		/		
	Friction Wedges Inspected:	/		/		
	Springs Inspected:	/		/		
	Snubber Inspected:	N/A		N/A		
	Wheels & Axles Inspected:	/		/		
	Roller Bearings & Adapters Inspected:	/		/		
(1)	Body Bolster & Center Plate Inspected:	/		/		
(2), (6), (7)	Sills Inspected:		/		/	1
(9)	Tank Car Jacket Inspected:	/		/		
(10)	Hand Brakes Inspected:	/				
(N/A)	Coupler Height Checked:	/		/		
(N/A)	Side Bearing Height Checked:		/		/	1
<u>If Applicable:</u>						
(3), (4)	Cross-bearers & Cross-ties Inspected:	N/A		N/A		
(11)	Doors Inspected:	N/A		N/A		

K. Qualification Stencil

		STATION STENCIL	QUALIFIED	DUE
TANK QUALIFICATION		FRAL	2017	2027
THICKNESS TEST		FRAL	2017	LINING RMVL
SERVICE EQUIPMENT		FRAL	2017	2027
PRD:	PSI	FRAL	2017	2027
LINING		FRAL	2017	2027
88.B.2 INSPECTION		FRAL	2017	2027
STUB SILL INSPECTION		FRAL	2017	2027

American Railcar Leasing, LLC.

TANK CAR QUALIFICATION REPORT

Reporting Mark and Car Number: 5HPX-205631

DOT Specification: DOT111A100W-5

Facility: Fritcar

Qualification Test Plan: ARL 9.134 REV. CO

Address: 1965 South Blvd Brewton 36426

Complete all entries applicable to the type of qualification performed. Mark N/A if it applies. Any items reported as "Other" must be explained on this sheet. This Qualification Inspection Report verifies that the aforementioned tank car is requalified in accordance with all applicable industry regulations.

- 1.) Qualification Type:
- Tank Service Equipment Safety Valve Coating /Lining Rule 88 SS3 Inspection

- 2.) Visual Inspection:
- | | |
|--|----------------|
| Tank Interior | Acceptable N/A |
| Tank Exterior | Acceptable N/A |
| Piping, Valves, Fittings, Gaskets | Acceptable N/A |
| Visual Inspection for Missing or Loose Bolts, Nuts, etc. | Acceptable N/A |
| Proper Securement of Closures and Protective Housing | Acceptable N/A |
| Excess Flow Valve Tightness | Acceptable N/A |
| Stenciling Legibility | Acceptable N/A |
- 3.) Service Equipment (filling, discharging, venting, measuring, heater coils, etc.)
- Acceptable N/A
- 4.) Structural Integrity Inspection
- | | | |
|-------------------------|------------------------------------|----------------|
| Tank Butt Welds | VT UT PT MT Other _____ | Acceptable N/A |
| Long. Fillet Weld Term. | VT UT PT MT Other _____ | Acceptable N/A |
| Transverse Fillet Welds | VT UT PT MT Other _____ | Acceptable N/A |
| Sump Welds | VT UT PT MT Other _____ | Acceptable N/A |
| BOV Flange Welds | VT UT PT MT Other _____ | Acceptable N/A |
| Others _____ | VT UT PT MT Other _____ | Acceptable N/A |
- 5.) Ultrasonic Thickness Test
- Acceptable N/A
- 6.) Safety Systems Inspections
- Acceptable N/A
- Insulation / Thermal Coating
- Acceptable N/A
- Head Shields
- Acceptable N/A
- Discontinuity Protection (BOV skid, protective housing, etc.)
- Acceptable N/A
- Top and Bottom Shelf Couplers
- Acceptable N/A
- 7.) Safety Valve Test
- Acceptable N/A
- 8.) Lining/Coating
- Acceptable N/A
- 9.) Leakage Pressure Test
- Acceptable N/A
- 10.) Rule 88/Stub Sill Inspection
- Acceptable N/A

Q. A. Inspector: [Signature]
(Print Name and I.D. Number)

Q. A. Inspector: Edward L. H.
(Signature)

Date: 10-25-17

