

Tank Car Final Inspection and Test Report

Form: FM-201-1
 Revision: 1
 Page: 1 of 1

Car Reporting Mark and Number: TCBX 194145	Inspector (print name): Aldo Garcia Alvarez	Inspection Date: 2-2-17
Stenciled Specification: DOT 111A100W1	Reporting Facility: RESCAR	Facility Station Stencil: RESI
Reporting Facility Street Address: 16920 Vincent Road	Facility City: Savanna	Facility State/Province: IL

Old Commodity: (Before qualification or repair) Ethanol	New Commodity: (After qualification or repair) UNKNOWN
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Inspection and Test Information: Choose one
 Inspection and Test Marking: As stenciled on car (After work performed)

Inspection and Test Information	Altitest Form Number	Pass	Fail	Station Stencil	Date Observed
FM-125-1: Rule 88.8-2					
FM-202-1: Tank Visual & Safety Systems Insp. AVC		<input checked="" type="checkbox"/>	<input type="checkbox"/>	RESI	2017 2027
FM-203-1: Insulation System Insp., Thermography		<input checked="" type="checkbox"/>	<input type="checkbox"/>	RESI	2017 2027
FM-203-2: Insulation/Thermal Protection Sys. Insp.		<input type="checkbox"/>	<input checked="" type="checkbox"/>	RESI	2017 2027
FM-205-1: Thickness Meas., Benchmark SCB		<input checked="" type="checkbox"/>	<input type="checkbox"/>	RESI	2017 2027
FM-205-2: Thickness Meas., Post-Repair QA		<input type="checkbox"/>	<input checked="" type="checkbox"/>	RESI	2017 2027
FM-205-4: Thickness Meas., Corrosion-Grid SCB		<input type="checkbox"/>	<input checked="" type="checkbox"/>	RESI	2017 2027
FM-206-1: Service Equipment Inspection SAW		<input checked="" type="checkbox"/>	<input type="checkbox"/>		
FM-206-2: Valve and Fitting Inspection Report SAW		<input checked="" type="checkbox"/>	<input type="checkbox"/>		
FM-207-1: Interior Coating Inspection SCB		<input type="checkbox"/>	<input checked="" type="checkbox"/>		
FM-207-2: Interior Lining Inspection SCB		<input type="checkbox"/>	<input checked="" type="checkbox"/>		
FM-210-1: Tank and Heater Coil Hydrotest		<input type="checkbox"/>	<input checked="" type="checkbox"/>		
FM-211-1: PRV Certificate of Test and Bench Test SCB		<input checked="" type="checkbox"/>	<input type="checkbox"/>	RESI	2017 2027
FM-211-2: Pressure Relief Valve Inspection Report SAW		<input checked="" type="checkbox"/>	<input type="checkbox"/>	RESI	2017 2027
FM-212-1: Valve Bench Test SAW		<input checked="" type="checkbox"/>	<input type="checkbox"/>		
FM-214-1: Structural Integrity Defect Record VLC		<input type="checkbox"/>	<input checked="" type="checkbox"/>		
FM-214-2: Report of Tank Car Stub Sill Inspection VLC		<input type="checkbox"/>	<input checked="" type="checkbox"/>		
FM-214-3: Tank Qualification: Fillet Welds VLC		<input type="checkbox"/>	<input checked="" type="checkbox"/>		
FM-214-3: Tank Qualification: Butt Welds SAW		<input checked="" type="checkbox"/>	<input type="checkbox"/>		
FM-215-1: Tank Car Alteration & Component Repair SAW		<input checked="" type="checkbox"/>	<input type="checkbox"/>		
FM-234-1: Leakage Pressure Test SAW		<input type="checkbox"/>	<input checked="" type="checkbox"/>		

I hereby certify that the inspections and tests performed by this facility on the above tank car were done in accord with Federal Regulations and Industry Standards for tank cars and that the tank is qualified for continued use. I attest to the accuracy of the inspections, tests, and records indicated above by signing and dating this form.

Management Representative (print name): Aldo Garcia Alvarez	Management Representative Signature: 	Date: 3/9/17
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Service Equipment Inspections and Tests

Form: FM-206-1
 Revision: F
 Page: 1 of 1

Car Reporting Mark and Number: TCBx194115	Inspector (print name): Stawstrom	Inspection Date: 3-9-17
Reporting Facility: RESCAR	Facility Station Stencil: RESI	Compartment # 1 of 1

Condition Legend	
✓ = Okay	05 = Bent
N/A = Not Applicable	08 = Not Standard to Car
01 = Worn Out	12 = Inoperative
02 = Broken	15 = Leaking
03 = Missing	18 = Loose
04 = Defective	26 = Corrosion, Product Damage
	33 = Derailment Damage
	34 = Unfair Usage

Service Equipment Visual Inspection	GS	HP	Acid
Manway Cover / Hinge Lugs	/		
Manway Cover Eyebolts / Nuts / Washers / Lugs			
Fill Hole Cover			
Fill Hole Cover Eyebolts / Nuts / Washers / Lugs			
Outage Bar			
Nozzles / Flanges			
Stuffing Box (Top operated BOM) / Chain			
Gasket Sealing Surfaces			
Re-Closing Pressure Relief Device			
Safety Vent / Rupture Disk			
Pressure Regulating Valves			
Protective Housing and Side Covers			
Protective Housing Cover Assembly			
Protective Housing Vent Opening & Cover			
Protective Housing Cover Lift Assist			
Fittings Cover Plate			
Education Pipe(s)			
Education Pipe Guide(s) / Pipe Clearance			

Service Equipment Visual Inspection	GS	HP	Acid
Excess Flow Valve(s) Seat Tightness			
Liquid Connection Assembly			
Liquid Valve(s)			
Vapor Connection Assembly			
Vapor Valve(s)			
Thread Engagement, Nuts, Studs, Bolts			
Vacuum Relief Valve			
Thermowell Fitting Assembly			
Gauging Device Assembly			
Sample Line Valve Assembly			
Sample Line Excess Flow Valve			
Security Seal Provisions			
Bottom Outlet Cap			
Bottom Outlet Nozzle			
Bottom Outlet Plug & Chain			
Bottom Outlet Valve Assembly			
Washout Assembly			
Interior Heater Coils, Pipes, Caps			
Other: (specify)			

GS - General Service Car (low pressure) HP - High Pressure Car

Inspector Signature: _____ Date: 3-9-17



Valve and Fitting Inspection Report

Form: FM-206-2
Revision: Original
Page: 1 of 1

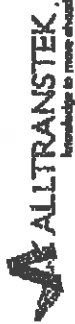
Car Reporting Mark and Number: <i>19X194145</i>	Inspector (print name): <i>Steve Gibarian</i>	Inspector ID #: <i>2826</i>
Reporting Facility: <i>Rescor</i>	Facility Station Stencil: <i>RES</i>	Facility Phone Number: <i>815 273 5308</i>

(For pressure relief valve inspections, use Form FM-211-2)

Car and Valve/Fitting Info	Valve/Fitting type
2. Last lading (UN or NA / 4 digit number): <i>UN NA</i>	<input type="checkbox"/> Plug valve <input checked="" type="checkbox"/> BOV Ball
3. Last service equipment qualification year: <i>2006</i>	<input checked="" type="checkbox"/> Ball valve <input type="checkbox"/> Vacuum relief valve <input type="checkbox"/> BOV Plug
4. Last service equipment qualification facility: <i>AXXV</i>	<input type="checkbox"/> Needle valve <input type="checkbox"/> Magnetic gauge <input type="checkbox"/> BOV Watersphere
5. Valve or fitting manufacturer: <i>SAFETY VALV</i>	<input type="checkbox"/> Thermometer well <input type="checkbox"/> Excess flow valve <input type="checkbox"/> Other
6. Valve or fitting model number: <i>5 RET</i>	
7. Serial Number: <i>NA</i>	
8. Manufacture Date (mm/yyyy): <i>NA</i>	
11. Station Stencil Tag Information <i>NA</i>	

16. Stem:	<input type="checkbox"/> Acceptable <input type="checkbox"/> Cracked	<input type="checkbox"/> Dirty <input type="checkbox"/> Bent	<input type="checkbox"/> Acceptable <input type="checkbox"/> Cracked	<input type="checkbox"/> Dirty <input type="checkbox"/> Misshaped
17. Packing Gland:	<input type="checkbox"/> Acceptable <input type="checkbox"/> Corroded	<input checked="" type="checkbox"/> Dirty <input type="checkbox"/> Gouged	<input type="checkbox"/> NA <input type="checkbox"/> NA	<input type="checkbox"/> Acceptable <input type="checkbox"/> Gouged
18. Body:	<input type="checkbox"/> Acceptable <input type="checkbox"/> Corroded	<input checked="" type="checkbox"/> Dirty <input type="checkbox"/> Gouged	<input type="checkbox"/> NA <input type="checkbox"/> NA	<input type="checkbox"/> Acceptable <input type="checkbox"/> Gouged
19. Body Insert/Retainer:	<input type="checkbox"/> Acceptable <input type="checkbox"/> Corroded	<input checked="" type="checkbox"/> Dirty <input type="checkbox"/> Gouged	<input type="checkbox"/> NA <input type="checkbox"/> NA	<input type="checkbox"/> Acceptable <input type="checkbox"/> Cracked
20. Ball, Disc or Plug:	<input type="checkbox"/> Acceptable <input type="checkbox"/> Corroded	<input checked="" type="checkbox"/> Dirty <input type="checkbox"/> Gouged	<input type="checkbox"/> NA <input type="checkbox"/> NA	<input type="checkbox"/> Acceptable <input type="checkbox"/> Corroded
21. Seat Seal Retainer:	<input type="checkbox"/> Acceptable <input type="checkbox"/> Corroded	<input checked="" type="checkbox"/> Dirty <input type="checkbox"/> Gouged	<input type="checkbox"/> NA <input type="checkbox"/> NA	<input type="checkbox"/> Acceptable <input type="checkbox"/> Cracked
22. Other:	<input type="checkbox"/> Acceptable <input type="checkbox"/> Corroded	<input type="checkbox"/> Dirty <input type="checkbox"/> Gouged	<input type="checkbox"/> NA <input type="checkbox"/> NA	<input type="checkbox"/> Acceptable <input type="checkbox"/> Cracked
30. Comments: <i>NONE</i>				

Inspector: <i>[Redacted]</i>	Date: <i>2-23-17</i>
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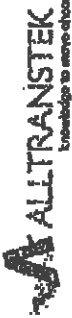
Pressure Relief Device Certificate of Test and Bench Test

Car Reporting Mark and Number: TeX 194/45 Inspector (print name): Stoverstrom Inspection Date: 2-25-17
 Reporting Facility: RESCAR Facility Station Stencil: RESI Compartment # 1 of 1

Check which apply:	Test Procedure Number	FM-211	Rev. Level
<input type="checkbox"/> VQ: PRD Qualification			<u>G</u>
<input type="checkbox"/> VA: PRD Application (The facility applying the PRD to the tank must complete the header of this form and verify that all applicable fields are completed.)			
VQ: VA: Design Verification - FM-211 App. A			
<input checked="" type="checkbox"/> Tank test pressure stenciled on tank car			
<input checked="" type="checkbox"/> Table A - Nominal STD Min	140807704		
<input checked="" type="checkbox"/> Table A - Nominal STD Max	0706008		
<input checked="" type="checkbox"/> PRV model from nameplate	4-22-17		
<input checked="" type="checkbox"/> PRV STD from nameplate		<input type="checkbox"/> Contact	<input checked="" type="checkbox"/> Non-contact
<input checked="" type="checkbox"/> Is STD within acceptable range?		Pressure Gage	
<input checked="" type="checkbox"/> PRV STD stenciled on tank car			
<input checked="" type="checkbox"/> Is STD marking on car same as valve?			
VQ: VA: Line Items per C-III Appendix D Reporting			
<input checked="" type="checkbox"/> 3. Stenciled specification			
7. Pressure relief device (PRD)			
c. Manufacturer			
Model/type number			
d. Serial number			
e. Start-to-discharge pressure, psi (kPa)			
f. Vapor-tight-pressure, psi (kPa)			
g. New seal material			
B. Combination device			
a. Rupture disc pressure, psi (kPa)			
b. Breaking pin lower diaphragm tight at psi (kPa)			
1. PRD test date year on tank car			
3.b PRD due date year on tank car			

Valve has been set to start-to-discharge and is vapor-tight at pressure shown. For combination devices, the start-to-discharge and vapor-tight pressures of the valve portion is shown.
 I HEREBY CERTIFY THAT TESTS PERFORMED TO TANK CAR TANKS, PRESSURE RELIEF VALVES AND/OR HEATER SYSTEMS WERE DONE IN ACCORD WITH THE DEPARTMENT OF TRANSPORTATION REGULATIONS AND THE AAR SPECIFICATIONS FOR TANK CARS AND REPORTED CORRECTLY.

VQ: 2-25-17 Stoverstrom Signed: RESI Facility Station Stencil
 VA: 3-8-17 DANIEL STOLLY Signed: RESI Facility Station Stencil



Pressure Relief Valve Inspection Report

Form: FM-211-2
Revision: B
Page: 1 of 1

Car Reporting Mark and Number: ICBX 1941HS	Inspector (print name): Steve Goring / Stan Western	Inspector ID #: 2876
Reporting Facility: Rescar	Facility Station Stencil: RES	Facility Phone Number: 815 273 3308

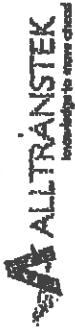
2. Last loading (UN or NA / 4 digit number)	<input type="checkbox"/> UN <input type="checkbox"/> NA	2006
3. Last valve qualification date (yyyy)		TXV
4. Last valve qualification location (if stenciled)		mmc
5. Valve manufacturer		2165 BN
6. Valve model number		5Y 120
7. a. Serial Number		10 / 2006
b. Manufacture Date (mm/yyyy)		

8. Gauge pressure on car	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> No	psig
9. Passed leak test on car?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
10. Is flow passageway fully open?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
11. Was tank car cleaned before removing PRV?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

Bench Testing			
12. a. PRV type	<input type="checkbox"/> Combo with Disc	<input type="checkbox"/> Combo with Diaphragm	<input checked="" type="checkbox"/> Reclosing
12. b. On a combination valve, leak test at %			
STD and open tail-tale indicator		<input checked="" type="checkbox"/> No leak	<input type="checkbox"/> Leaks
13. Start to leak:	160	psig	
14. STD 1:	160	psig	15. VTP 1: 126 psig
16. STD 2:	160	psig	17. VTP 2: 126 psig
18. STD 3:	160	psig	18. VTP 3: 126 psig
20. Comments: NONE			

21. Spring(s):	<input checked="" type="checkbox"/> Good condition	<input type="checkbox"/> Some corrosion
	<input type="checkbox"/> All corrosion	<input type="checkbox"/> Cracked
22. Spring free height:	1 5/8	inches
23. Stem/Adjusting Screw:	<input type="checkbox"/> Good	<input checked="" type="checkbox"/> Dirty
	<input type="checkbox"/> Cracked	<input type="checkbox"/> Bent
24. Body Seat:	<input type="checkbox"/> Bright/Clean	<input checked="" type="checkbox"/> Dirty
	<input type="checkbox"/> Corroded	<input type="checkbox"/> Gouged
25. Seat O-ring/Seal Material:	<input type="checkbox"/> Like new	<input checked="" type="checkbox"/> Dirty
	<input type="checkbox"/> Swelled	<input type="checkbox"/> Metal-to-metal
26. Plug/Stem O-ring:	<input type="checkbox"/> Like new	<input checked="" type="checkbox"/> Dirty
	<input type="checkbox"/> Swelled	<input type="checkbox"/> Cracked
27. Seal Retainer/Seal Disc:	<input type="checkbox"/> Bright/Clean	<input checked="" type="checkbox"/> Dirty
	<input type="checkbox"/> Corroded	<input type="checkbox"/> Gouged
28. Disc/Diaphragm marking and condition:		
NA		
29. Comments: None		

Inspector Signature:	Date: 2-24-17
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Valve Bench Test Form

Form: FM-212-1
Revision: A
Page: 1 of 1

Car Reporting Mark and Number: TCBX/94/45 Inspector (print name): Stannwestern Inspector Level: #
 Reporting Facility: RESCAR Facility Station Stencil: RESI Compartment # 1 of 1

Bench Test Procedure Number: FM-212 Revision Level: D Leak Test Procedure Number: FM-224 Revision Level: N
 Temperature Measuring Device: 140807704 o to 600°F 4-22-17 Contact Non-contact
 Pressure Measuring Device: 1094174 o to 1000PSI 4-3-17 Analog Digital
 Media: NA Analog Digital
 Compressed Air

Shutlock
 35 to 110°F

ID Number	Part Name / Size	Clamp	Surge Pressure Level	Pressure Level	Pressure Level	Part Name	Part Number	Pressure	Part Number	Pressure	Part Number	Pressure	Part Number	Pressure	Part Number	Pressure	Part Number	Pressure		
NA	NSV 4"	5"RET	689 PSI	900 PSI	1800 PSI	Stannwestern														

Inspector Signature (verifying all tests have been completed): [Signature] Date: 2-27-17

4. Component Where Failure Occurred:

(1) - Bolster Bottom Cover Plate (BBPM)	(11) - Head Brace	(21) - Skid Attachment to Pad or Tank	(31) - Tank Head Interior
(2) - Bolster Pad (Tank Cradle, Top Cover Plate, BCPM)	(12) - Head Pad	(22) - Stub Sill Bottom Flange	(32) - Tank Shell Exterior
(3) - Bolster Web (BWPM)	(13) - Inboard Tank Reinforcement Pad	(23) - Stub Sill Structure - General	(33) - Tank Shell Interior
(4) - Bolster Web Stiffener (WBSW)	(14) - Manway Nozzle	(24) - Stub Sill Top Flange	(34) - Tank Stiffener Horn (Full Sill Aluminum Car)
(5) - BOV or Sump or Washout Flange Attachment	(15) - Miscellaneous Attachment Welds	(25) - Stub Sill Web	(35) - Top Fittings Nozzle
(6) - Brake Dead Lever	(16) - No exceptions found	(26) - Stub Sill Weld (For Reporting Templates Codes)	(36) - Turnbuckle Brackets
(7) - Brake Support	(17) - Other	(27) - Tank Anchor Pad (Full Sill Cars)	(37) - UF (Sill) Web Inbd of Bolster
(8) - Center Sill Both (Full Sill)	(18) - Reinforcement Bars	(28) - Tank Anchor Web (Full Sill Cars)	
(9) - Center Sill Flange (Full Sill)	(19) - Safety Valve Nozzle	(29) - Tank Bolster	
(10) - Center Sill Web (Full Sill)	(20) - Sill Pad (Outboard Of Bolster)	(30) - Tank Head Exterior	

5. Type of Failure:

(1) - Blister	(4) - Corrosion - Girth Weld Seams	(7) - Corrosion - Vertical Grooving	(10) - Crack - Weld
(2) - Buckle (also Bent)	(5) - Corrosion - Grouped Pits	(8) - Crack - Girth Seams / Butt Welds	(11) - Dent
(3) - Corrosion - Bathub Ring	(6) - Corrosion - Random Pits	(9) - Crack - Parent Metal	

6. Cause of Failure:

(1) - Corrosion	(4) - Overstressed/Abused/RR Damage	(6) - Workmanship
(2) - Missing Weld	(5) - Unknown	

Note - (3) has been removed from use.

8. Attachment Welds

Use weld codes from templates in FM-214 Attachment A.

9. Inspection Method Used to Detect Defect:

(AE) - Acoustic Emission	(PT) - Liquid Penetrant	(UT) - Ultrasonic	(O7) - Other
(LT) - Leak Test	(RT) - Radiographic Examination	(UTT) - Ultrasonic Thickness test	
(MT) - Magnetic Particle	(RV) - Remote visual	(VT) - Direct Visual	

10. Location of Repair on Car

(A) - A End	(ATH) - A End Top Head	(BR) - B End, Right Side	(CLS) - Center Left Shell
(ABH) - A End Bottom Head	(ATS) - A End Top Shell	(BRS) - B End Right Shell	(CR) - Center Right
(ABS) - A End Bottom Shell	(B) - B End	(BTH) - B End Top Head	(CRS) - Center Right Shell
(AL) - A End, Left Side	(BBH) - B End Bottom Head	(BTS) - B End Top Shell	(CTS) - Center Top Shell
(ALS) - A End Left Shell	(BBS) - B End Bottom Shell	(C) - Center	
(AR) - A End, Right Side	(BL) - B End, Left Side	(CBS) - Center Bottom Shell	
(ARS) - A End Right Shell	(BLS) - B End Left Shell	(CL) - Center Left	

11. How Repaired: (a number such as 9.2 refers to Appendix R 9.2)

(1) - 9.2 Welding of Cracks	(5) - 10.1 Patch Plate Repair	(9) - 11.5 Wheel Burns	(13) - 5.0 Stub Sill Repairs
(2) - 9.5 Repair of Surface Cracks	(6) - 24.0 Weld Overlay (Repair by Weld Buildup)	(10) - 12.0 Welded Inserts and Tank Sections	(14) - FM Rule 57 - Center Sills
(3) - 24.0 Random Pits	(7) - 11.1 Dents/Buckles	(11) - 21.0 Repairs to Tank Anchors	(15) - FM Rule 82 - Weld Sill Outboard of Tank
(4) - 24.0 Grouped Pits/Corrosion	(8) - 11.4 Scores and Gouges	(12) - 22.0 Repairs to Fire Damaged Tanks	(17) - RIK - Replace in Kind

Note - (16) has been removed from use.

Car Reporting Mark and Number: <u>TCB X 194145</u>	Inspector (print name): <u>Krissa Calhoun</u>	Inspection Date: <u>2-21-17</u>
Reporting Facility: <u>Rescar</u>	Facility Station Stencil: <u>RES1</u>	

1. Stub Sill Design (as inspected): 1 EN023 2. Stub Sill Modification (if any): N/A

In all cases: Enter max crack length to nearest 1/4 inch. (0, .25, .5, .75). Enter 0 if no crack. Enter N/A if item not applicable.

Transverse Weld Cracks (if more than one, record longest)

- 3. A-1 Pad to Tank
- 4. B-1 Pad to Sill (if no head brace)
- 5. C-1 Head Brace to Sill
- 6. D-1 Head Brace to Pad
- 7. E-1 Other - Car Builder Specified

Inspection Technique	A-END Number of Cracks	Maximum Length	Inspection Technique	B-END Number of Cracks	Maximum Length
<u>VT</u>	<u>0</u>	<u>0</u>	<u>VT</u>	<u>0</u>	<u>0</u>
<u>N/A</u>	<u>0</u>	<u>0</u>	<u>N/A</u>	<u>0</u>	<u>0</u>
<u>VT</u>	<u>0</u>	<u>0</u>	<u>VT</u>	<u>0</u>	<u>0</u>
<u>N/A</u>	<u>0</u>	<u>0</u>	<u>N/A</u>	<u>0</u>	<u>0</u>

Longitudinal Weld Cracks (if more than one, record longest)

- 8. A-2 Pad to Tank
- 9. B-2 Pad to Sill
- 10. C-2 Head Brace to Sill
- 11. D-2 Head Brace to Pad
- 12. E-2 Other - Car Builder Specified

Inspection Technique	A-END Number of Cracks	Maximum Length	Inspection Technique	B-END Number of Cracks	Maximum Length
<u>VT</u>	<u>0</u>	<u>0</u>	<u>VT</u>	<u>0</u>	<u>0</u>
<u>VT</u>	<u>0</u>	<u>0</u>	<u>VT</u>	<u>0</u>	<u>0</u>
<u>VT</u>	<u>0</u>	<u>0</u>	<u>VT</u>	<u>0</u>	<u>0</u>
<u>VT</u>	<u>0</u>	<u>0</u>	<u>VT</u>	<u>0</u>	<u>0</u>
<u>N/A</u>	<u>0</u>	<u>0</u>	<u>N/A</u>	<u>0</u>	<u>0</u>

Parent Metal Cracks (if more than one, record longest)

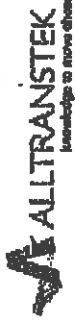
- 13. Tank
- 14. Pad
- 15. Sill Webs
- 16. Sill Top Flange
- 17. Sill Bottom Flange
- 18. Head Brace
- 19. Other - Design Specific

Inspection Technique	A-END Number of Cracks	Maximum Length	Inspection Technique	B-END Number of Cracks	Maximum Length
<u>VT</u>	<u>0</u>	<u>0</u>	<u>VT</u>	<u>0</u>	<u>0</u>
<u>VT</u>	<u>0</u>	<u>0</u>	<u>VT</u>	<u>0</u>	<u>0</u>
<u>VT</u>	<u>0</u>	<u>0</u>	<u>VT</u>	<u>0</u>	<u>0</u>
<u>VT</u>	<u>0</u>	<u>0</u>	<u>VT</u>	<u>0</u>	<u>0</u>
<u>VT</u>	<u>0</u>	<u>0</u>	<u>VT</u>	<u>0</u>	<u>0</u>
<u>N/A</u>	<u>0</u>	<u>0</u>	<u>N/A</u>	<u>0</u>	<u>0</u>

Inspection Technique Codes:
MT Magnetic Particle
OT Other
PT Liquid Penetrant
RT Radiographic
RV Remote Visual
UT Ultrasonic
VT Visual

Inspector's Signature: _____ Date: 3-9-17

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Tank Qualification Inspection

Form: FM-214-3
Revision: Original
Page: 1 of 1

Car Reporting Mark and Number: <i>CBX 195140</i>	Inspector (print name): <i>Vanessa Calhoun</i>	Inspection Date: <i>2-21-17</i>
Reporting Facility: <i>Rescar</i>	Facility Station Stencil: <i>RESI</i>	Compartment # <i>1</i> of <i>1</i>

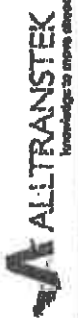
PT : Liquid Penetrant
 VT : Visual Inspection
 MT : Magnetic Particles
 RM : Remote Visual Inspection
 UT : Ultrasonic Angle Beam
 RT : Radiographic Testing

Method		Test Procedure Number	Revision Level	Inspector (print name)	Inspector Level	Inspector Signature	Method	N/A	Accepted	Rejected
Fillet Welds										
Interior Fillet Welds > 1/4 inch within 4 feet of each side of the bottom longitudinal center line.										
VT		FM 229	I	Vanessa Calhoun	II	[Redacted]	VT		<input checked="" type="checkbox"/>	<input type="checkbox"/>
VT		FM 233	I	Vanessa Calhoun	II	[Redacted]	VT		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Exterior Fillet Welds > 1/4 inch within 4 feet of each side of the bottom longitudinal center line.										
Exterior Fillet Welds - window weld behind head brace										
							VT		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Exterior Fillet Welds - non-continuous reinforcement weld terminations										
							RNF	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
							N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Method		Test Procedure Number	Revision Level	Inspector (print name)	Inspector Level	Inspector Signature	Method	N/A	Accepted	Rejected
Butt (Groove) Welds										
Interior Tank Shell Butt Welds within 2 feet of each side of the bottom longitudinal center line.										
							UT		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Exterior Tank Shell Butt Welds within 2 feet of each side of the bottom longitudinal center line.										
							N/A		<input type="checkbox"/>	<input type="checkbox"/>

Comments: *None*

Inspector (print name): <i>[Redacted]</i>	Date: <i>3-9-17</i>
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Tank Car Alteration and Conversion Report

Form: FM-216-1
 Revision: Original
 Page: 1 of 1

Car Reporting Mark and Number: ICAX A4145	Facility Representative (print name): <i>Steven Webster</i>	Date: 3-9-17
Reporting Facility: RESCAR	Facility Station Stencil: RESZ	

Check if Changed	From	To	Check if Applicable
<input type="checkbox"/> Rail Car Marks	<i>NA</i>	<i>NA</i>	<input type="checkbox"/> AEI Tags Updated
<input type="checkbox"/> Stencil Class	<i>NA</i>	<i>NA</i>	<input type="checkbox"/> ID Plates and/or Head Stamping Complete
<input type="checkbox"/> Commodity Service			
<input type="checkbox"/> Other			

~ Complete Change Log Below ~

Change Log			Compartment
Change Type (Circle one per row)	Drawing Title	AAR Approval #	
A B C D E F G H	A-220-W-NS, A-222-W-NS	E 112091	1 of 1
A B C D E F G H			
A B C D E F G H			
A B C D E F G H			
A B C D E F G H			
A B C D E F G H			
A B C D E F G H			

Change Type Legend	Description / Reason
A - Pressure Relief Device	<i>Per customer request change from blind flange to a vacuum relief valve</i>
B - Arrangement	
C - Assembly	
D - Bottom Fitting Model	
E - Top Fitting Model	
F - Gage Device Model	
G - Part	
H - Repair	

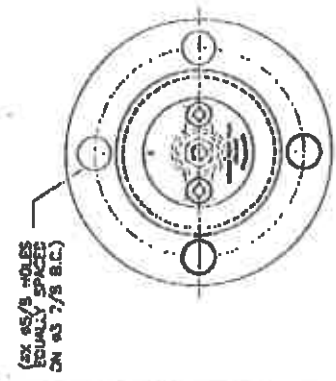
Signature: _____ Date: **3-9-17**

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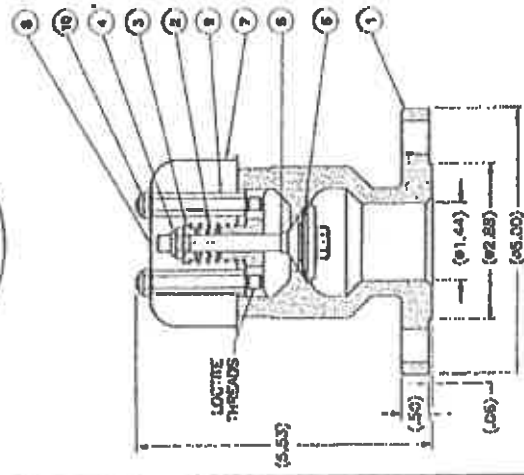
A-220-W-NS, A-222-W-NS

ID#	QTY	PART NAME	A-220-W-NS		A-222-W-NS		A-222-W-NS-40-PRA		A-222-W-NS-40-PA		A-222-W-NS-40-PRA-PA	
			MATERIAL	PART NO.	MATERIAL	PART NO.	MATERIAL	PART NO.	MATERIAL	PART NO.	MATERIAL	PART NO.
1	1	BODY	CARBON STEEL	220-10-05	STAINLESS	222-10-05	STAINLESS	222-10-05-PA (C)	STAINLESS	222-10-05-PA (C)	STAINLESS	222-10-05-PA-PA (C)
2	1	SPRING	SEE TABLE	SEE TABLE	SEE TABLE	SEE TABLE	SEE TABLE	SEE TABLE	SEE TABLE	SEE TABLE	SEE TABLE	SEE TABLE
3	1	SPRING SEAT	STAINLESS	217-3-05	STAINLESS	217-3-05	STAINLESS	217-3-05	STAINLESS	217-3-05	STAINLESS	217-3-05
4	1	LOCK WAF	STAINLESS	217-01-05	STAINLESS	217-01-05	STAINLESS	217-01-05	STAINLESS	217-01-05	STAINLESS	217-01-05
5	1	SEAL	STAINLESS	217-00-00	STAINLESS	217-00-00	STAINLESS	217-00-00-PA (C)	STAINLESS	217-00-00-PA (C)	STAINLESS	217-00-00-PA-PA (C)
6	1	PRESSURE SEAL	BUNA N (1)	215-0-04	BUNA N (1)	215-0-04	BUNA N (1)	215-0-04	BUNA N (1)	215-0-04	BUNA N (1)	215-0-04
7	1	WEDGEP BIP	STAINLESS	215-70-05	STAINLESS	215-70-05	STAINLESS	215-70-05	STAINLESS	215-70-05	STAINLESS	215-70-05
8	1	WEDGEPART	STAINLESS	217-04-05	STAINLESS	217-04-05	STAINLESS	217-04-05	STAINLESS	217-04-05	STAINLESS	217-04-05
9	2	POST	STAINLESS	217-00-05	STAINLESS	217-00-05	STAINLESS	217-00-05	STAINLESS	217-00-05	STAINLESS	217-00-05
10	2	LOCKWAF	STAINLESS	720-101-05	STAINLESS	720-101-05	STAINLESS	720-101-05	STAINLESS	720-101-05	STAINLESS	720-101-05



(5) 05/8 HOLES
EQUALLY SPACED
ON 43 7/8 B.C.

- (1) ALTERNATE MATERIAL AVAILABLE.
- (2) PARTS CERTIFIED FOR ASTM A282 PRACTICE A.
- (3) PARTS TO BE PASSIVATED PER QQ-P-35 & FEDERAL TESTED PER ASTM A 380.



VACUUM SETTINGS ARE SHOWN IN TABLE

VACUUM SETTING (PS)	SPRING PART NUMBER
.75	215-2-40
1.5	215-2-40
3	215-27-40
4	215-23-40
5-8	215-28-40
10	215-22-40

NET FLOW AREA .71 SQ. IN.

E 112001



ALLTRANSTEK
Knowledge to move ahead

Ultrasonic Flaw Detection Report

Form: FM-226-1
Revision: B
Page: 1 of 1

Car Reporting Mark and Number: TCBX 194145
 Reporting Facility: Rescar 154 Savannah, IL
 Inspector (print name): Jason Clark
 Facility Station Stencil: RESI
 Inspection Date: 3-3-17
 Compartment # 1 of 1

UT Procedure No.: FM 226 Revision: E UT Meter I.D.: SN140802511 Meter Cal. Due Date: 05/2017
 Straight-Beam Trans. Frequency: 5 MHz Delay Line: 0 Dia: .5" Serial No: 4363
 Angle-Beam Trans. Frequency: 2.25 MHz Wedge Angle (s): 70° Dia: .5" Serial No: 020606
 DAC Block - Thickness: .750" Serial No: RCTL #1 Block Cal. Due Date: 08-2017
 IRW or DSC Block - Type: DSC Serial No: 05-6106 Block Cal. Due Date: 01-2018
 Couplant Manufacturer: Sonotech Couplant Type: Sonotrace Gr. 40 Surface Condition Acceptable:

Weld/Component	LOCATION AND IDENTIFICATION	INITIAL EXAM		REPAIR EXAM		REMARKS
		Accept	Reject	Accept	Reject	
7 Girth Welds	Bottom 4' of each	✓				
Notes: <u>None</u>						

Inspector Signature: _____ Date: 3-3-17



Direct Visual Inspection Report

Form: FM-229-1
Revision: A
Page: 1 of 1

Car Reporting Mark and Number: ICPX 194145 Inspector (print name): VANESSA CABRAN Inspector Level: H

Reporting Facility: Rescar Facility Station Stencil: RES Compartment # 1 of 1

Test Procedure Number: FM 229 Test Procedure Revision Level: H

Inspector Level: AWS CMI AWS CAWI AWS CAVI Company CWMT Level II

Reviewed Customer's Requirements: Surface Preparation Acceptable:

New / Repair Weld(s) Existing weld(s) (Welder Stamp ID, WPS used, & WPS revision Not Applicable)

Complete the following if new or repair weld: Welders Stamp ID: AKJ ATU 3-9-17

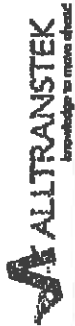
Check for Usage of Proper Welding Procedure: WPS used: ESFOR-170-3-9-17 Revision: ATU 3-9-17

Record below all components and/or weldments inspected and the results:

WELD / COMPONENT	LOCATION AND IDENTIFICATION	INITIAL EXAM		REPAIR EXAM		REMARKS
		Accept	Reject	Accept	Reject	
Tank	B-END	/				NONE
Tank	A-END	/		/		SEE NOTES
Bev	Center	/				NONE
Shield Protection	Center	/				NONE
Notes: AR Pad to Tank weld has incomplete fusion (area 1)						
AR Pad to Tank weld has incomplete fusion (area 2)						
All defect removed with grinding no need to weld.						

Inspector: [Redacted] Date: 3-9-17

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Liquid Penetrant Inspection Report

Form: FM-231-1
Revision: A
Page: 1 of 1

Car Reporting Mark and Number: TCBX 194/45 Inspector (print name): Stanwestern Inspector Level: 1

Reporting Facility: RESCAR Facility Station Stencil: RESI Compartment # 1 of 1

Test Procedure Number: FM-231 Test Procedure Revision Level: H

Visible Penetrant Used Solvent-Removable Water-Washable

Penetrant Manufacturer: MagnaFlux Type: SKL-SP2 13T/OK

Developer Manufacturer: MagnaFlux Type: SKD-S2 13K/4K

Cleaner Manufacturer (if applicable): MagnaFlux Type: SKC-S 14COLA

Surface Thermometer ID: 140807704 Calibration Due Date: 4-22-17

Surface Temperature: 68 °F

Surface Preparation Acceptable Post Inspection Cleaning Complete

Record below all components and/or weldments inspected and the results:

WELD / COMPONENT	LOCATION AND IDENTIFICATION	INITIAL EXAM		REPAIR EXAM		REMARKS
		Accept	Reject	Accept	Reject	
Stem	Stem For A2165 S.U.	<input checked="" type="checkbox"/>				NONE

Notes: NONE

Inspector Signature: _____ Date: 2-25-17

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Bubble Leak Test Form

Car Reporting Mark and Number: TCBX 194145	Inspector (print name): James Shurman	Inspector Level: II
Reporting Facility: Rescar	Facility Station Stencil: RESI	Compartment # 1 of 1

Test Procedure Number: **FM - 234**

Test Procedure Revision Level: **N**

Temperature Measuring Device	
Identification Number:	90105040
Range:	0 - 600° F
Calibration Due Date:	12-7-17
Type (check one):	<input type="checkbox"/> Contact <input checked="" type="checkbox"/> Non-contact

Pressure Gage	
Identification Number:	03-60-5
Range:	0 - 60 psi.
Calibration Due Date:	11-21-17


Leak Detector Manufacturer:	Sherlock	Gas or Medium:	Compressed Air
Leak Detector Temp. Range:	35° to 160°F	Test Pressure:	30 <input checked="" type="checkbox"/> psig. <input type="checkbox"/> kPag
Surface Preparation Accepted:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Rejected)	Surface Temperature:	83 <input checked="" type="checkbox"/> °F. <input type="checkbox"/> °C.

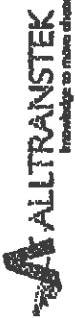
Is this a retest? (check one): Yes No **Pre-bubble leak**

Component(s) Tested: **Manway, Pressure Plate, 1" Ball Valve, 3" Ball Valve, Air Inlet Flange, Education Flange, Blind Flange, Safety Valve, BOV, BOV Nozzle, BOV Cap, BOV Stem**

Examination Accepted? (check one): Yes No (Rejected)

If rejected, list details: **BOV Cap leaking (See photos)**

Inspector Signature: 	Date: 2-21-17
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Bubble Leak Test Form

Form: FM-234-1
Revision: B
Page: 1 of 1

Car Reporting Mark and Number: <i>TRX141HS</i>	Inspector (print name): <i>Stewart Stern</i>	Inspector Level: <i>H</i>
Reporting Facility: <i>Rescar</i>	Facility Station Stencil: <i>RESI</i>	Compartment # <i>1</i> of <i>1</i>

Test Procedure Number: FM - 234 Test Procedure Revision Level: N

Temperature Measuring Device: <i>140607709</i>
Identification Number: <i>0 to 600F</i>
Range: <i>4.22-17</i>
Calibration Due Date:
Type (check one): <input type="checkbox"/> Contact <input checked="" type="checkbox"/> Non-contact

Pressure Gage
Identification Number: <i>TR001</i>
Range: <i>0 to 60 PSI</i>
Calibration Due Date: <i>1-27-08</i>

Leak Detector Manufacturer: <i>Shredex</i>	Gas or Medium: <i>Compressed Air</i>
Leak Detector Temp. Range: <i>35 to 60°F</i>	Test Pressure: <i>36</i> <input checked="" type="checkbox"/> psig. <input type="checkbox"/> kPag
Surface Preparation Accepted: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Rejected)	Surface Temperature: <i>44</i> <input checked="" type="checkbox"/> °F. <input type="checkbox"/> °C.

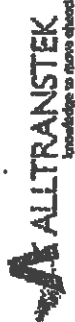
Is this a retest? (check one): Yes No

Component(s) Tested: *Safety valve, millhousing, 90 in/d, 3" section, VRY, manifold, Boy, Nozzle and cap*

Examination Accepted? (check one): Yes No (Rejected)

If rejected, list details: *NONE*

Inspection Date: <i>1-1-08</i>	Date: <i>3-8-07</i>
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Rule 88.B.2 Inspection Checklist

Form: FM-125-1
 Revision: E
 Page: 1 of 1

Car Reporting Mark and Number: TCBX 194145
 Inspector (print name): Aldo Garcia Alvarez
 Reporting Facility: RESOR
 Facility Station Stencil: RES
 Inspection Date: 2-21-17

Description	Inspected		Rejected		Description	Inspected		Rejected	
	Y/N	Accept	Y/N	Accept		Y/N	Accept	Y/N	Accept
BODY COMPONENTS									
1. Body Bolsters (jacket removal NOT required)	/				18. Doors	/			
2. Tank Hold Down Straps (at bolsters)	/				19. Handbrake	/			
3. Tank Jacket (Bent - Gouged - Missing)	/				20. Stenciling	/			
4. Center Plates, Vertical Pin	/				WHEEL COMPONENTS				
5. Strikers	/				21. Wheels	/			
6. Front Draft Lugs	/				22. Roller Bearings, Adaptor, Adaptor, Wear Plates	/			
7. Rear Draft Lugs	/				23. Axles	/			
8. Couplers, Wear Plate (when required)	/				TRUCK COMPONENTS				
9. Yokes	/				24. Inspect Friction Castings and Gage	/			
10. Draft Gears, Draft Key, Follower Block	/				25. Bolster Bowls (circle one if applicable: Out of round Cracks Missing or broken rim)	/			
11. Tank Center Anchor and Bolts	/				26. Bolsters	/			
12. Cross Bearers	/				27. Springs Type (circle one):	/			
13. Crossies	/				28. Side Frames (buttons within tolerance)	/			
14. End Sill Frames	/				29. Truck Mounted Brake Cylinders	/			
15. End Sill Grating	/				30. Single Cylinder (conventional brakes)	/			
16. Side Sills	/				31. Side Bearings	/			
17. Center Sills	/								

A 16 1/8
 X 16 1/8
 B 16 1/8
 X 16 1/8

A 15 7/8
 X 15 7/8
 B 15 7/8
 X 15 7/8

Note 1: Any rejected items MUST be repaired. Add comments if car must be shipped out for repair.
 Note 2: ONLY a certified facility with the proper activity codes can make welded repairs to tank car tanks
 Note 3: Place a check mark if any items are accepted and, if rejected, put the individual location (A, B, AR, AL, etc.) or "All" if all are rejected.
 Comments:

Inspector Signature: _____ Date: 3/9/17
 QA Inspector Name: _____ Date: _____
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