



615 PETRO COVE
WEST MEMPHIS, AR 72301
PHONE: 870-732-0404

M.C./D.O.T. CHECKLIST/INSPECTION REPORT FOR
UPPER COUPLER INSPECTION

DATE: _____

OWNER: _____ UNIT: _____ VIN: _____

MC/DOT SPEC: _____ MATL: _____ MFG: _____

DATE OF MFG: _____

MSWP/DESIGN PRESSURE: _____ psi TEST PRESSURE: _____ psi

COMPARTMENT SIZES F TO R: 1: _____, 2: _____, 3: _____, 4: _____ GAL.

TOTAL CAPACITY: _____ GAL. DOUBLE BULKHEAD? _____ INSULATED? _____

DOT mandatory items indicated with "M" on checklist:

<u>Item No.</u>	<u>Activity</u>	<u>Compiles</u>	<u>Repairs Needed</u>	<u>See Remarks</u>
<i>COMPANY TANK ENTRY SAFETY PREOCEDURES AND ALL OSHA REGULATIONS MUST BE COMPLIED WITH</i>				
1M	Remove upper coupler for inspection	_____	_____	_____
2M	Clean and inspect all mounting surfaces On plate and tank	_____	_____	_____
3M	Inspect all weld areas and crossmembers for Cracks and/or corrosion in upper coupler assy	_____	_____	_____
4M	Inspect and gauge pin for wear allowances	_____	_____	_____
5M	Reinstall upper coupler with new mounting hardware	_____	_____	_____
6M	Tank Marking: Date (month & year) and service symbol (UC) after all defects are corrected	_____	_____	_____

SIGNED: _____ DATE: _____

Grace Trailer Service, LLC.
615 Petro Cove West Memphis, AR 72301
1201 McNeil Drive North Little Rock, AR 72117
1224 Channel Ave. Memphis, TN 38109

Carrier/Customer _____

Address _____

Trailer# _____

Vin# _____

Wet Test Inspection

This document certifies the above trailer has completed and passed the annual wet test requirement for overfill protection probes. This certifies the entire operation of the truck overfill protection system is properly wired and the entire system is working properly. The trailer meets the requirement for the overfill probes to set where the maximum Safe fill is 60 gallons less than the manufactures specified compartment capacity.

Probes tested and set properly: (Y) Yes (N) No

Comp#1	Comp#2	Comp#3	Comp#4	Comp#5	Comp#6

Brake Interlock Inspection

Product Adapter - Brake Interlock Tested

Comp#1	Comp#2	Comp#3	Comp#4	Comp#5	Comp#6

Vapor Adapter - Brake Interlock Tested

Front	Middle	Rear

Signature of tester _____

Date of test _____

EXTERNAL VISUAL INSPECTION REPORT

(In Accordance with 49 CFR Part 180 Para. 180.407 [d] and 180.417)

Cargo Tank Owner _____ Work Order No. _____ Date _____
Owner's I.D. No. _____ Name of Tank Manufacturer _____
Manufacturer Serial No. _____ Year of Manufacture _____
MC/DOT No. _____

Minimum Thickness: Heads _____ Shell _____

Cargo Tank is Insulated ☐ Yes ☐ No Cargo Tank is Lined ☐ Yes ☐ No

Internal Visual Inspection Made ☐ Yes ☐ No

Cargo Tank is Used in Special or Dedicated Service ☐ Yes ☐ No

Capacity by Compartment:

Comp. 1 _____ Comp. 2 _____ Comp. 3 _____ Comp. 4 _____ Comp. 5 _____

Cargo tank used to haul product corrosive to tank ☐ Yes ☐ No

Upper Coupler Assembly Removed (required every two years for tanks in corrosive service) ☐ Yes ☐ No

Pressure Relief Vent Removed and Tested (required every two years if in corrosive svc. If yes, complete below) ☐ Yes ☐ No

	Comp. 1	Comp. 2	Comp. 3	Comp. 4	Comp. 5
Design PSI	_____	_____	_____	_____	_____
Open PSI	_____	_____	_____	_____	_____
Close PSI	_____	_____	_____	_____	_____

Inspection Steps	Acceptable	Non-Acceptable	See Corrective Action
Shell and heads: condition of welds – dents – gouges – corrosion or abrasion.			
Upper coupler assembly: condition of plate – corrosion, deformation and lubrication – bolt tightness – king pin wear and deformation.			
Boiled attachments: piping brackets and supports – valve installations – valve operator installation – dust cap retainers – all tank to frame and/or undercarriage attachments			
All major appurtenances and structural attachments on the cargo tank, including suspension system attachments, connecting structures, frame(s), cross-members, outriggers and bolsters			
Piping and all valves and adapters: attachments – leakage – handles and levers – cables or air lines – shear sections – dust caps – all gaskets or o-rings – lubrication points			
Internal valve operation: three means of closure (normal, remote and thermal) – function check – cable adjustment – condition of cables and pulleys – interconnection with load/unload vents – fusibles – brake interlocks – lubrication points			
Manhole assembly area (for each compartment): evidence of leakage – warpage, corrosion and impact damage to dome and filler covers, weld collar, gasket seal surfaces, overturn protection structure, clamping ring, and all welds – condition of filler cover and all dome gaskets – condition of latches, hinges, all bolted connections and drains			
Pressure relief devices: verify all vents present – verify venting adequate for tank – markings on vents – visual check of fusible plugs			
Placards, location and condition			
Specification plate markings legible and per 49CFR Part 178. Cargo tank inspection and test markings are current with 49CFR Part 180			

Corrective Action for Non-Acceptable Conditions:

Thickness testing performed on corroded or abraded areas ☐ Yes ☐ No

Is a sketch included to show area(s) ☐ Yes ☐ No

Were repairs made by welding ☐ Yes ☐ No

National Board 'R' Stamp No. _____ ASME 'U' Stamp No. _____

Is a sketch included to show area(s) ☐ Yes ☐ No

- ☐ Cargo tank meets the requirements of the DOT specification identified in this report.
- ☐ Cargo tank fails to meet the requirements of the DOT specification identified in this report.
- ☐ Marking applied Month ~ Year – Letter 'V'

Registered Inspector

Registration Number

Date

Cargo Tank Owner Acceptance

Date

Grace Trailer Service, LLC. • 615 Petro Cove • West Memphis, AR 72301
1201 McNeil Drive • North Little Rock, AR 72117

METHOD 27 – DETERMINATION OF VAPOR TIGHTNESS OF GASOLINE DELIVERY TANK
USING PRESSURE-VACUUM TEST

EPA 40CFR Part 60

DOT 49CFR [180.407(h)(2) and 180.417]

Cargo tank Owner _____ Date _____
Owner's I.D. No. _____ MC/DOT No. _____ Year of Mfg. _____
Manufacturer Name _____ Manufacturer Serial No. _____
Cargo Tank is Jacketed ☐ Yes ☐ No Cargo Tank is Lined ☐ Yes ☐ No
Cargo Tank used in Special or Dedicated Service ☐ Yes ☐ No
Cargo Tank Transports Corrosive Materials ☐ Yes ☐ No

TEST PROCEDURE

1. Open and close each dome cover.
2. Connect static electric ground connections to cargo tank. Attach vapor return hose(s) to vapor return line.
3. Attach the test cap to the end of the last vapor recovery hose. Test cap should have a pressure/vacuum inlet, monometer inlet pressure regulator or ball valve. A relief valve would insure safety.
4. Close all discharge valves and open all internal valves.
5. With regulator or ball valve in the closed position, attach pressure source to pressure/vacuum inlet.
6. Slowly open the pressure inlet valve (regulator or ball valve) and slowly pressurize the cargo tanks to 18" or water column.
7. Close the shut-off valve and allow the pressure in the tank to stabilize, adjusting the pressure if necessary to maintain pressure of 18" water column. When the pressure stabilizes, record the time and initial pressure.
8. At the end of 5 minutes, record the time and final pressure.
9. Repeat steps 7 through 9 until the change in pressure for two consecutive runs agrees with 18" +0/-1" criteria and the measured change of pressure between the two consecutive runs agrees within 0.5 H₂O. Calculate the arithmetic average of the two results.
10. Compare the average measured change in pressure to the allowable pressure change +0/-1" water column. If the delivery tank does not satisfy the vapor tightness criterion, repair the source of leakage and repeat the pressure test until the criterion is met.
11. Disconnect the pressure source from the pressure-vacuum inlet and slowly open the shut-off valve to bring the tank to atmospheric pressure.
12. Connect the vacuum source to the pressure-vacuum.
13. Open the valve in the test cap. Slowly evacuate the tank to 6" water column.
14. Close the valve and allow the pressure in the tank to stabilize, adjusting the pressure if necessary to maintain a 6" +0/-1" vacuum pressure. When the pressure stabilizes, record the time and initial vacuum.
15. At the end of 5 minutes, record the time and final vacuum.
16. Repeat steps 14 through 16 until the change in vacuum for the two consecutive runs agrees with criteria 6" +0/-1 and the measured change of vacuum between the two consecutive runs agrees within 0.5 H₂O. Calculate the arithmetic average of the two results.
17. Compare the average measured change in vacuum to the allowable vacuum changes, +0/-1" water column. If the delivery tank does not satisfy the vapor tightness criterion specified in the regulation, repair the sources of leakage and repeat the vacuum test until the criterion is met.
18. Disconnect the vacuum source from the pressure-vacuum inlet and slowly open the valve to bring the tank to atmospheric pressure.
19. Connect the pressure source to the pressure-vacuum inlet, pressurize the cargo tank to just above 18" of water column (W.C.). When the pressure reaches 18" W.C., close the vapor valves. Bleed the pressure from the vapor line to zero pressure. Close the valve on the vapor line test fitting and begin timing the test. At the end of 5 minutes, the allowed pressure build up in the vapor line is 5" W.C. If it exceeds 5", repair or replace vapor valve(s) and repeat test.

TEST RESULTS

Pressure Test: No. 1	Time	Pressure Test: No. 2	Time
Start Pressure _____ "W.C.	_____	Start Pressure _____ " W.C.	_____
Finish Pressure _____ "W.C.	_____	Finish Pressure _____ " W.C.	_____
Change _____ "W.C.	_____	Change _____ " W.C.	_____

Measured Change From Test 1 to Test 2 = _____ " W.C.
Calculate the Arithmetic Average of the Two Tests = _____ " W.C.

Vacuum Test: No. 1	Time	Vacuum Test: No. 2	Time
Start Pressure _____ "W.C.	_____	Start Pressure _____ " W.C.	_____
Finish Pressure _____ "W.C.	_____	Finish Pressure _____ " W.C.	_____
Change _____ "W.C.	_____	Change _____ " W.C.	_____

Measured Change From Test 1 to Test 2 = _____ " W.C.
Calculate the Arithmetic Average of the Two Tests = _____ " W.C.

Measured increase in vapor vent test _____ " W.C.

Repairs Required for Compliance:

☐ Yes (see area marked Description of Defects and Corrosive Action) ☐ No

Were repairs made by welding to the cargo tank shell or heads ☐ Yes ☐ No

Nat. Bd. "R" Stamp No. _____ ASME "U" Stamp No. _____

Description of Defects and Corrective Action:

☐ Cargo tank meets the requirements of the DOT specification identified in this report.

☐ Cargo tank fails to meet the requirements of the DOT specification identified in this report.

☐ Marking applied Month – Year- K-EPA27.

Facility Conducting Test _____

Registered Inspector

Registration Number

Date

Cargo Tank Owner Acceptance

Date



LEAKAGE TEST REPORT

(In Accordance with 49 CFR Part 180 Para. 180.407 [h] and 180.417)

Cargo Tank Owner _____ Work Order No. _____ Date _____
Owner's I.D. No. _____ MC/DOT No. _____
Manufacturer serial Number _____ Year of Mfg. _____
Name of Tank Manufacturer _____

Cargo Tank is Insulated ☐ Yes ☐ No Cargo Tank is Lined ☐ Yes ☐ No

Cargo Tank is used in Special or Dedicated Service ☐ Yes ☐ No
MAWP _____ Leakage Test Pressure _____
Fluid used in Hydrostatic Method _____

Capacity by compartment

Comp. 1 _____ Comp. 2 _____ Comp. 3 _____ Comp. 4 _____ Comp. 5 _____ Comp. 6 _____

The following must be completed for each compartment. Red flag all vents removed or rendered inoperative. Replace vents after completing test.

	Acceptable	Non-acceptable (See remarks)
Install test fitting into manhole assembly, clean out, or any other top opening. With manhole cover and internal valve in the closed position, and discharge valve open, gradually pressurize cargo tank to 80% of MAWP. Hold for appropriate amount of time to ensure zero leakage from manhole cover, internal valve seat, etc.	<input type="checkbox"/>	<input type="checkbox"/>
Close discharge valve and open internal valve. Stabilize internal pressure at 80% of MAWP (required leakage test pressure). Hold at zero pressure drop for 5 minutes.	<input type="checkbox"/>	<input type="checkbox"/>

Remarks:

Were repairs made by welding ☐ Yes ☐ No
Nat. Bd. "R" Stamp No. _____ ASME "U" Stamp No. _____
Was the affected compartment pressure tested ☐ Yes ☐ No

- ☐ Cargo tank meets the requirements of the DOT specification identified in this report.
- ☐ Cargo tank fails to meet the requirements of the cargo tank identified in the report.
- ☐ Marking applied 'Month – Year – Letter 'K'.

Facility Performing Test

Registered Inspector _____ Registration Number _____ Date _____
Cargo Tank Owner Acceptance _____ Date _____

1201 McNeil Drive • North Little Rock, AR 72117

INTERNAL VISUAL INSPECTION REPORT

(In accordance with 49 CFR Part 180 Para. 180.407(e) and 180.417)

Cargo Tank Owner _____ Work Order No. _____ Date _____
 Owner's I.D. No. _____ Name of Tank Manufacturer _____
 Manufacturer Serial No. _____ Year of Manufacture _____
 MC/DOT No. _____

Minimum Thickness Heads _____ Shell _____

Cargo Tank is Insulated ☐ Yes ☐ No Cargo Tank is Lines ☐ Yes ☐ No

Cargo Tank is used in Special or Dedicated Service ☐ Yes ☐ No

Cargo Tank Transports Corrosive Materials ☐ Yes ☐ No

Capacity by Compartment

Comp. 1 _____ Comp. 2 _____ Comp. 3 _____ Comp. 4 _____

Comp. 5 _____ Comp. 6 _____

Acceptable

Non-Acceptable
(See remarks)

Inspect entire surface for corrosion, abrasion, dents, pitting or distortion (special attention to tank heads and shell area covered by the upper coupler)...

□

Inspect gauging devices for vertical alignment and tightness.....

5

4

Inspect areas around piping, sumps, and valves for foreign material that could prevent proper functioning.....

Remarks:

Thickness testing performed on corroded or abraded areas ☐ Yes ☐ No

Sketch included to show area(s) ☐ Yes ☐ No

Were repairs made by welding ☐ Yes ☐ No

Nat. Bd. "R" Stamp No. _____ ASME "U" Stamp No. _____

Sketch enclosed to show welded area(s) ☐ Yes ☐ No

Was the repaired compartment pressure tested ☐ Yes ☐ No

☐ Cargo tank meets the requirements of the DOT specification identified in this report.

☐ Cargo tank fails to meet the requirements of the DOT specification identified in this report.

☐ Marking applied Month – Year – Letter 'I'

Registered Inspector

Registration No.

Date _____

Cargo Tank Owner Acceptance

Date _____

PRESSURE RETEST – HYDROSTATIC METHOD

(In Accordance with 49CFR Part 180 Para. 180.407[g] and 180.417)

Cargo Tank Owner _____ Date _____
Work Order No. _____ Owner's I.D. No. _____ MC/DOT No. _____
Name of Tank Manufacturer _____
Manufacturer Serial No. _____ Year of Mfg. _____
Cargo Tank is Jacketed ☐ Yes ☐ No Cargo Tank is Lined ☐ Yes ☐ No
Cargo Tank is used in Special or Dedicated ☐ Yes ☐ No
Cargo Tank is used in Corrosive Service ☐ Yes ☐ No

Capacity by Compartment

Comp. 1 _____ Comp. 2 _____ Comp. 3 _____ Comp. 4 _____ Comp. 5 _____
Comp. 6 _____

Heat Panels Tested ☐ Yes ☐ No Test Pressure _____

Fluid Used For Testing _____

Comp.	Design Pressure	Test Pressure	Reclosing Vents (in PSI)		
			Design	Open	Re-Seat
1					
2					
3					
4					
5					

Normal Vents Tested ☐ Yes ☐ No ☐ Replaced

Complete this procedure for each compartment. Remove plug and red flag all vents that relieve at less than test pressure.

Acceptable

Non-acceptable
(See Remarks)

Bench test all reclosing vents removed from tank

☐

☐

Pull vacuum test on emergency valve and discharge
valve to determine seal integrity before filling tank

(RECOMMENDED, NOT REQUIRED).....

☐

☐

Close internal valve, leaving discharge valve open.
Close manhole cover and install test fitting at top of tank.
Fill with water or other liquid having similar viscosity to top
of dome cover. Temperature of liquid shall not exceed 100°F.
Open dump valve on test fitting and start pressurizing tank.
When water begins to flow from dump valve, close valve
And bring tank to full test pressure. Hold at prescribed test
pressure for at least 10 minutes and inspect for leakage or
bulging.....

☐

☐

Upper coupler must be dropped to inspect the frame,
crossmembers and area of shell and heads that may be
covered by the upper coupler. Upper Coupler removed

☐ Yes ☐ No

☐

☐

Remarks:

Were weld repairs made to the cargo tank shell or heads ☐ Yes ☐ No

Affected Compartment Pressure Tested After Weld Repair ☐ Yes ☐ No

National Board "R" Stamp No. _____ ASME "U" Stamp No. _____

- ☐ Cargo tank meets the requirements of the DOT specification identified in this report.
☐ Cargo tank fails to meet the requirements of the DOT specification identified in this report.
☐ Marking applied Month – Year – Letter 'P'

Registered Inspector

Registration Number

Date

Cargo Tank Owner Acceptance

Date

THICKNESS TEST REPORT

(In Accordance with 49 CFR Part 180.407(i) and 180.417)

Cargo Tank Owner _____ Date _____
Work Order No. _____ Owner's I.D. No. _____ MC/DOT No. _____
Name of Tank Manufacturer _____
Manufacturer Serial No. _____ Date of Manufacture _____
Manufactured Thickness Heads: _____
Thickness at which test becomes an annual requirement: Heads _____
Shell: Top _____ Sides _____ Bottom _____
Min. Thickness Shell: Top _____ Sides _____ Bottom _____ Min. Thickness Heads _____
Cargo Tank is Insulated and Jackered ☐ Yes ☐ No Tank is Lined ☐ Yes ☐ No
Cargo Tank is in Special or Dedicated Service: ☐ Yes ☐ No
Cargo Tank Transports Corrosive Materials: ☐ Yes ☐ No
Number of Compartments _____ Total Capacity _____

Procedure:

1. Calibrate the Ultrasonic Thickness Tester.
2. Starting with the front head at the 12 o'clock position, tank eight readings in a clockwise rotation, on the knuckle radius of the head. Enter the readings on the grid below.
3. Move back, and again facing forward, starting at the 12 o'clock position, take eight readings on the shell, adjacent to the head to shell weld, in a clockwise rotation. Enter the readings on the grid.
4. Move back to the shell areas adjacent to the #1 ring. Face forward, starting at the 12 o'clock position, take eight readings in a clockwise rotation. Take the other readings a 2, 4, 8 and 10 o'clock adjacent to any longitudinal welds. Enter the readings on the grid and label the grid "No.1 RING".
5. Continue moving to the rear of the tank, taking measurements adjacent to each ring and girth seam(s), starting at 12 o'clock, in a clockwise rotation. Label each grid for what you are measuring.
6. The rear head will be the last entry on the grid. Take eight readings starting at the 12 o'clock position, but this time move in a COUNTER CLOCKWISE rotation.

Were welded repairs made to the cargo tank wall? ☐ Yes ☐ No
National Board "R" Stamp No. _____ ASME "U" Stamp No. _____
Was the repaired compartment pressure tested after welding? ☐ Yes ☐ No

- ☐ Cargo tank meets the requirements of the DOT specification listed in this report.
☐ Cargo tank fails to meet the requirements of DOT specification listed in this report.
☐ Marking applied to the tank: Month - Year - Letter "T".

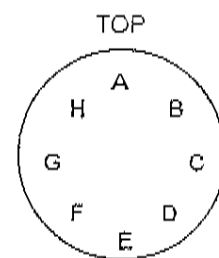
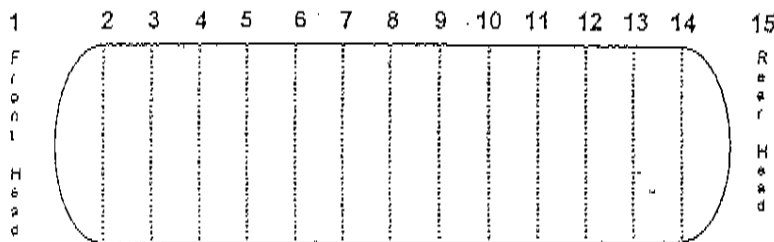
Name of Facility Conducting Test: Grace Trailer Service, LLC.

Registered Inspector

CT Number

Cargo Tank Owner Acceptance


THICKNESS TEST GRID



Looking Forward In Tank

180.407 (i)(2) Measurements must be made using a device capable of accurately measuring thickness to +/- 0.002 of an inch

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A															
B															
C															
D															
E															
F															
G															
H															

 Minimum required inspection points

Deficiencies found and corrective action taken: _____

MC 330/331 LEAKAGE TEST REPORT

(PER 49 CFR 180.407 b)

Cargo Tank Owner _____ Work Order No. _____ Date _____
Owner's I.D. No. _____ D.O.T Specification _____ Original Test Date _____
Manufacturer _____ MAWP _____ psig AT _____ °F
Manufacturer Serial Number _____
Material Specification _____ Leakage Test Pressure _____ psig
Special Service of the Cargo Tank _____
Liquid Used for the Test _____

Hose I.D. Number _____ Date of Original Hose Assy. _____
Hose I.D. Number _____ Date of Original Hose Assy. _____
Hose I.D. Number _____ Date of Original Hose Assy. _____
Hose I.D. Number _____ Date of Original Hose Assy. _____
Hose I.D. Number _____ Date of Original Hose Assy. _____

ITEM	DESCRIPTION	COMPLIES	NEEDS REPAIRS
1.	With internal valves closed and discharged valves open, pressurize vessel, if necessary, to a pressure allowed in 180.407 (h)(1)(i) or (ii). Check for internal valve leakage.	_____	_____
2.	Close discharge valves, open internal valves, bring vessel, components piping and hose(s) if attached, to full leakage test pressure. Hold for 5 minutes with zero pressure drop. Inspect all surfaces for leaks. Inspect all gasketed, threaded and welded joints for leaks.	_____	_____
3.	Inspect piping system for any: and welded joints for leaks.	_____	_____
	(a) External leaks identifiable without the use of instruments	_____	_____
	(b) Bolts that are loose, missing or severely corroded	_____	_____
	(c) Manual stop valves that will not activate	_____	_____
	(d) Rubber hose flexible connectors with any condition described in 180.416 (g)(1)	_____	_____
	(e) Stainless steel flexible connectors with damaged reinforcement braid	_____	_____
	(f) Internal self-closing stop valves that fail to close or that permit leakage through the valve detectable without the use of instruments	_____	_____
	(g) Pipe or joints that are severely corroded	_____	_____
4.	Leakage test for delivery hose(s).		
	<input type="checkbox"/> Metered Service <input type="checkbox"/> Non-Metered Service		
	<input type="checkbox"/> Hose(s) attached to vessel		
	<input type="checkbox"/> Hose(s) tested separately at same leakage test pressure as vessel		
	(a) For hose(s) attached to vessel, extend, secure, plug end(s) if necessary and open valve(s) to fully pressurize	_____	_____
	(b) Inspect hose assembly(ies) for any of the following conditions	_____	_____
	(i) Damage to hose cover that exposes the reinforcement	_____	_____
	(ii) Wire braid reinforcement that has been kinked or flattened so as to permanently deform the wire braid	_____	_____
	(iii) Soft spots when not under pressure, bulging under pressure, or loose outer covering	_____	_____
	Damaged, slipping, or excessively worn hose couplings	_____	_____
	(iv) Loose or missing bolts or fastenings on bolted hose coupling assemblies	_____	_____
	(vi) Hose expiration date has passed	_____	_____

Defects found, location and corrective action.

- ☐ Cargo tank meets the DOT specification requirements listed in this report.
☐ Cargo tank does not meet the DOT specification requirements listed in this report.
☐ Month - Year - 'K' marked on the cargo tank

Were welded repairs made to the cargo tank shell or heads ☐ Yes ☐ No

Nat. Bd. Stamp Number _____ ASME Stamp Number _____

Name of Facility Conducting Test: Grace Trailer Service, LLC.

Registered Inspector _____

CT Number _____

Cargo Tank Owner Acceptance _____

Date _____

PRESSURE RETEST – PNEUMATIC METHOD

(In Accordance with 49 CFR Part 180 Para. 180.407[g] and 180.417)

Cargo Tank Owner _____ Date _____
Work Order No. _____ Owner's I.D. No. _____ MC/DOT No. _____
Name of Tank Manufacturer _____
Manufacturer Serial No. _____ Date of Manufacture _____

Cargo Tank is Jacketed ☐ Yes ☐ No Cargo Tank is Lined ☐ Yes ☐ No

Cargo Tank is used in Special or Dedicated Service ☐ Yes ☐ No

Cargo Tank is used in Corrosive Service ☐ Yes ☐ No

Capacity by Compartment

Comp. 1 _____ Comp. 2 _____ Comp. 3 _____ Comp. 4 _____ Comp. 5 _____
Comp. 6 _____

Heat Panels Tested ☐ Yes ☐ No Test Pressure _____

Comp.	Design Pressure	Test Pressure	Reclosing Vents (in PSI)		
			Design	Open	Re-Seat
1					
2					
3					
4					
5					

Normal Vents Tested ☐ Yes ☐ No ☐ Replaced

Complete this procedure for each compartment. Remove plug and red flag all vents that relieve at less than test pressure.

Acceptable

Non-acceptable
(See Remarks)

Bench test all reclosing vents removed from tank

☐

☐

Pull vacuum test on emergency valve and discharge valve to determine seal integrity before filling tank.

(RECOMMENDED, NOT REQUIRED)

☐

☐

Close internal valve, leaving discharge valve open.
Close manhole cover and install test fitting at top of tank.
Induce air, or inert gas to 50% of test pressure and hold.
Gradually increase test pressure in stages of 10% of test pressure until test pressure is reached. Reduce pressure to MAWP, maintain at MAWP and using a soap water solution,

Inspect entire tank surface and all fittings for leaks

☐

☐

Upper coupler must be dropped to inspect the frame, crossmembers and area of shell and heads that may be

covered by the upper coupler. Upper Coupler removed

☐

☐

☐ Yes ☐ No

Remarks:

Were weld repairs made to the cargo tank shell or heads ☐ Yes ☐ No

Affected Compartment Pressure Tested After Weld Repair ☐ Yes ☐ No

National Board "R" Stamp No. _____ ASME "U" Stamp No. _____

☐ Cargo tank meets the requirements of the DOT specification identified in this report.

☐ Cargo tank fails to meet the requirements of the DOT specification identified in this report.

☐ Marking applied Month – Year – Letter 'P'

Name of Test Facility: Grace Trailer Service, LLC.

Registered Inspector

Registration Number

Date

Cargo Tank Owner Acceptance

Date

LINING INSPECTION

(In Accordance with 49CFR Part 180 Para. 180.407(f) and 180.417)

Cargo Tank Owner _____ Date _____ Owner's I.D. No. _____
Work Order No. _____ Manufacturer Serial No. _____
Manufacturer Name _____ MC/DOT No. _____ Year of Mfg. _____
Minimum thickness Heads _____ Shell _____ MAWP _____
Cargo Tank is Jacketed ☐ Yes ☐ No
Cargo Tank used in Special or Dedicated Service ☐ Yes ☐ No
Cargo Tank Transports Corrosive Materials ☐ Yes ☐ No

	Acceptable	Non-acceptable See Remarks
Calibrate high frequency spark tester in accordance with 180.407 (f).....	<input type="checkbox"/>	<input type="checkbox"/>
Visually inspect lining for potential defects such as cracks, distortion, deterioration, discoloration. Bubbles, blisters and separation. At areas around sumps and drains, also look for liner termination. Mark all defects with chalks.....	<input type="checkbox"/>	<input type="checkbox"/>
Sweep liner (4" or 8" brush) using a constant uninterrupted motion, working from front to rear of tank.....	<input type="checkbox"/>	<input type="checkbox"/>
Sweep entire head area, particularly area of the knuckle.....	<input type="checkbox"/>	<input type="checkbox"/>
Slowly sweep chalked areas or previously repaired areas.....	<input type="checkbox"/>	<input type="checkbox"/>
On defective areas, remove lining material and inspect shell or head for corrosion or deterioration. Thickness test if necessary.....	<input type="checkbox"/>	<input type="checkbox"/>
Re-inspect and retest replaced lining section.....	<input type="checkbox"/>	<input type="checkbox"/>
Remarks: _____		

Defects Found during Inspection and Test and Corrective Action

Grid Location	Tank Location		Area Corroded			Repair Method
	Shell	Head	No	Yes	Meas.	

Were weld repairs by welding performed on the cargo tank shell or heads ☐ Yes ☐ No
Nat. Bd. "R" Stamp No. _____ ASME "U" Stamp No. _____

- ☐ Cargo tank meets the requirements of the DOT specification identified in this report.
☐ Cargo tank fails to meet the requirements of the DOT specification identified in this report.
☐ Marking applied Month – Year – Letter 'L'

Registered Inspector _____ Registration Number _____ Date _____

Cargo Tank Owner Acceptance _____

