Y30-4
BLUE-MAR

# NORTHERN TANK INSPECTIONS LTD.

## (Visual/Internal/Leak/Pressure/Thickness/Upper Coupler)

| | | | |
|---|---|---|---|
| Owner | Drive Logistics | Date | May 22/2025 |
| Address | 7802 102 ave. Peace River, AB. T8S1R2 | Manufacturer | Heil |
| | | Mfr. Serial No. | 5J23967 |
| Phone Number | 780-872-8772 | Tank Spec: | TC 407 |
| Unit No. | T80 | M.A.W.P. | 207 Kpa kPa/psi |

### EXTERNAL VISUAL INSPECTION CHECKLIST/INSPECTION REPORT

| Item | Activity | Complies | Needs Repair | See Remarks |
|---|---|---|---|---|
| 1 | Data plate: tank attachment - entries legible - no paint - corrosion | X | | |
| 2 | Shell and heads: condition of welds - dents - gouges - corrosion or abrasion | X | | |
| 3 | Tank wall thickness: checked in accordance with Ultrasonic Thickness Testing Checklist/Inspection Report | X | | |
| 4 | Upper coupler assembly: condition of plate - corrosion, deformation, and lubrication - bolt tightness - king pin wear and deformation (drop and service plate if necessary) | X | | |
| 5 | Void areas: signs of corrosion - fittings and drains unplugged and operable | X | | |
| 6 | Bolted attachments: piping brackets and supports - valve installations - valve operator installation - dust cap retainers - all tank-to frame and/or undercarriage attachments | X | | |
| 7 | 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 | X | | |
| 8 | For tanks that carry corrosive lading to the valves, all reclosing pressure relief valves shall either be:<br>□ replaced, or<br>□ tested to ensure they open at the required set-to-discharge pressure for the tank's MAWP and re-seated to a leak-tight condition at not less than 90% of that pressure, or the reseat pressure prescribed for the tank specification | X | | |
| 9 | 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 | X | | |
| 10 | Ladders, catwalks and platforms: attachments to tank - tightness of bolts - deformation of structures - ground clearance | X | | |
| 11 | 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 offiller cover and dome gaskets - evidence of product coagulation - condition of latches, hinges, all bolted connections, and drains. If necessary, remove dome cover and subject to 15 psig structural capability test. Enter test results in remarks. | X | | |
| 12 | Inspect and repair as necessary all parts and accessories | X | | |
| 13 | Tank marking: Date (month and year), service symbol (V) after all defects corrected, last digits of Northern Tank Inspection's registration number **(1190)** | X | | |

## INTERNAL VISUAL INSPECTION CHECKLIST/INSPECTION REPORT

| Item | Activity | Complies | Needs Repair | See Remarks |
|---|---|---|---|---|
| | **ALL COMPANY TANK ENTRY SAFETY PROCEDURES AND OH&S REGULATIONS MUST BE COMPILED WITH** | | | |
| 1 | Structure: Inspect for corrosion, abrasion, dents, pitting, or distortion at manhole area - around valve or drain sumps and splash deflectors - look for discoloration and bleeding - inspecting all structures for deformation - special attention to structure above upper coupler. (Identify in remarks all dents, gouges, or other abnormal surface changes, whether or not repairs are required.) (Mark any areas that require UT testing and identify in remarks.) | X | | |
| 2 | Tank wall thickness verified in accordance with Ultrasonic Thickness Testing Checklist/Inspection Report | X | | |
| 3 | Welds: check every inch of every weld in tank, making hand contact where possible - special attention to bulkhead and baffle welds - special attention to welds in stress area such as above fifth wheel upper coupler | X | | |
| 4 | Piping and Valves: Check installation tightness - check poppet travel and make visual inspection of valves surfaces - clear and make sure all screens - check for foreign matter in valves sumps - check mechanical linkages between valves and load/unload vents | X | | |
| 5 | Tank marking: Date (month and year), service symbol (1) after all defects corrected, last digits of Northern Tank Inspection's registration number **(1190)** | X | | |

## HYDROSTATIC LEAK TEST CHECKLIST/INSPECTION REPORT

| Item | Activity | Complies (QCI initial) | Needs Repair | See Remarks |
|---|---|---|---|---|
| | **Procedure must be completed for each compartment - Inert and red flag all vents that function at less than test pressure** | | | |
| 1 | Close all valves and fill tank with water or other liquid having similar properties at a temperature not exceeding 38°C (100°F), with filler cover open. Check all surfaces for leaks. Checks all top and bottom component installations below water line for leaks - cleanouts - welds - vents - valve sumps | X | | |
| 2 | Internal valve: open discharge valves - check for leaks - close discharge valve | X | | |
| 3 | Discharge valves: Open internal valves, fill piping with water - check for leaks - close internal valves | X | | |
| 4 | Install pressure gauge and line relief petcock on vapour recovery return line adapter | X | | |
| 5 | In accordance with Northern Tank Inspections' safety manual, set pressure manifold to just above the test pressure required for the tank being worked on | X | | |
| 6 | Close all tanks openings and valves, and then apply pressure at top of tank as is noted in Table 4.1 of TC Procedure, or Table 7.3 of B620 | X | | |
| 7 | Check all piping and accessories at not less than 80% of MAWP | X | | |
| 8 | Check all surfaces and component installations for leaks - particular attention in manhole assembly area | X | | |
| 9 | Internal valves: open dishacrge valves and drain piping - check for continued drainage - close discharge valve | X | | |
| 10 | Discharge Valves: Open internal valves, fill piping with water - check for leaks - close internal valvesleakage from discharge valve | X | | |
| 11 | Vapor recovery system: check for leaks around hood and all components under pressure | X | | |
| 12 | Loading/unloading vent: close internal valve - relieve pressure in vapour system by opening and closing line relief petcock - monitor gauge to detect any leakage past loading/unloading vent | X | | |

| | | | | |
|---|---|---|---|---|
| 13 | Remote valve operators: open internal valve with normal operator - close with remote operator - open discharge valve and drain piping - check for continued drainage - close discharge valve - open and close internal valve with normal operator, fill piping with water | X | | |
| 14 | Inspect overall piping system for leakage | X | | |
| 15 | With all valves close, hold test pressure for 5 minutes for successful test | X | | |
| 16 | Restore operations of all vents - remove red flags | X | | |
| 17 | Tank Marking: Date (month and year), service symbol (T) after all defects are corrected, the last 4 digits of Northern Tank Inspections' TCRN 1190 | X | | |

## PRESSURE TEST REPORT

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|---|---|
| Test Pressure: | 310 Kpa |
| Holding Time at Test Pressure: | 20 Min |
| Results: | Pass |
| Authorized Inspector Witnessing Test: | Taylor Read |

## ULTRASONIC THICKNESS TEST CHECKLIST/INSPECTION REPOT

| Item | Activity | Complies (QCI initial) | Needs Repair | See Remarks |
|---|---|---|---|---|
| | ALL COMPANY TANK ENTRY SAFETY PROCEDURES AND OH&S REGULATIONS MUST BE COMPILED WITH. | | | |
| 1 | Clean, dry, or buff down to bare metal surfaces to be measured. | X | | |
| 2 | Calibrate the UT instrument. | X | | |
| 3 | Perform thickness testing on the tank head and shell: | X | | |
| | -Around any piping that retains lading | X | | |
| | -High stress areas of the shell, suchs as the tank bottom | X | | |
| | -Around openings, weld joints, shell reinforcements, and locations where appurtenances are attached | X | | |
| | -Exterior surfaces of shell and heads: suspect areas in parent mental and along welds - areas around internal valve installations and manhole weld collars - weld pads | X | | |
| | -Fifth wheel upper coupler assembly: upper coupler and vertical framing | X | | |
| | -Suspension system attachements and connecting structures: longitudinal frames - bolsets - gussets | X | | |
| | -Known thin areas: Identified in prior inspection tests | X | | |
| | -Internal compartment surfaces: along product level lines - around splash deflectors - around valve sumps - along tank bottom | X | | |
| | -Any structures joining multiple carbon steel tanks on a self-supporting transport unit | X | | |
| 4 | Tank Marking: Date (month and year), service symbol (T) after all defects are corrected, the last 4 digits of Northern Tank Inspections' TCRN 1190 | X | | |

## UPPER COUPLER INSPECTION CHECKLIST/INSPECTION REPORT

| Item | Activity | Complies | Needs Repair | See Remarks |
|---|---|---|---|---|
| 1 | Remove upper coupler for inspection | X | | |

| | | | | |
|---|---|---|---|---|
| 2 | Areas covered by the upper coupler inspected for corroded or abraded areas, cracks, dents, distortions, defects in welds, and other conditions that might render the tank unsafe for transportation. | X | | |

Remarks: Thickness:
Heads: F:0.358 R:0.362
Shell: B:0.234 S:0.237 T:0.242
Defects:
-Both lower sumps corroded and replaced.
-ESD non op

| Tank Inspector or Tank Tester | | Corporate Officer or Manager responsible for compliance |
|---|---|---|
| Signature | Taylor Read Digitally signed by Taylor Read Date: 2021.06.28 14:50:07 -06'00' | Signature |
| Print Name | Taylor Read | Print Name |
| By: | Northern Tank Inspections Ltd.<br>1011 Westerra Place<br>Stony Plain, T7Z 2W9<br>Phone: (780) 497-2975 | TCRN: 1190 |