

Dec 6/24

VT104

EW29-1



A Trimac Company



ENERGY SERVICES

Inspection, Test and Repair Report in accordance with CSA B620 Page 1 of 9. Rev 1 August 14, 2024

Name of Inspection and Test Facility: National Tank Services 1813 Versatile Dr, Kamloops, BC TC Reg# 25-48.05		Name Owner/Carrier: <u>D+L Environmental Ltd.</u> Address Telephone No.	
Tank Spec <u>DOT 407</u>	Certification Date Month/Year <u>12-03</u>	ASME Code Stamp <input checked="" type="checkbox"/> National Board No, <u>85</u>	
TC 331, MC 330 QT <input type="checkbox"/> NQT <input type="checkbox"/> <u>N/A</u> Stress Relieved Post Manufacture <input type="checkbox"/>		Special Service Corrosive <input type="checkbox"/> LPG <input type="checkbox"/> NH3 <input type="checkbox"/> Other <u>HAZ.</u> Lined <input type="checkbox"/> Insulated and Jacketed <input type="checkbox"/> <u>MAT.</u> Lining Type	
Owner Unit No <u>VT104</u>	Tank Serial No. <u>WT0104888</u> VIN	Tank Mfr Date Month/Year <u>12-03</u>	Tank Manufacturer <u>Westec VAC.</u> <u>Systems</u> Assembler <u>Westec</u>
Tank Design Pressure kPa <input type="checkbox"/> PSI <input checked="" type="checkbox"/> <u>25</u> MAWP kPa <input type="checkbox"/> PSI <input checked="" type="checkbox"/> <u>25</u>	Original Tank Test Pressure kPa <input type="checkbox"/> PSI <input checked="" type="checkbox"/> <u>40</u> Tank Retest Pressure kPa <input type="checkbox"/> PSI <input checked="" type="checkbox"/> <u>20</u>	MDIN TCRN <u>ROSS42</u>	
Tank Vol. Cap Liters <input type="checkbox"/> USG <input checked="" type="checkbox"/> Comp 1 <u>3026</u> Comp 2 <u> </u> Comp 3 <u> </u> Comp 4 <u> </u> Comp 5 <u> </u> Comp 6 <u> </u> Exposed Surface Area SQ.M <input type="checkbox"/> SQ.FT <input checked="" type="checkbox"/> Comp 1 <u>314.11</u> Comp 2 <u> </u> Comp 3 <u> </u> Comp 4 <u> </u> Comp 5 <u> </u> Comp 6 <u> </u>			
Shell Manufactured Thickness MM <input type="checkbox"/> INCHES <input checked="" type="checkbox"/> Top <u>.312</u> Sides <u>.312</u> Bottom <u>.312</u> Heads Mfd. Thk. <u>.312</u> Shell Minimum Thickness MM <input type="checkbox"/> INCHES <input checked="" type="checkbox"/> Top <u>.250</u> Sides <u>.250</u> Bottom <u>.250</u> Heads Min Thk <u>.270</u> Shell Mat.Spec/Grade <u>SA 36</u> Heads Mat. Spec/Grade <u>SA285C</u> Weld Material <u>EM12K +</u> <u>ER70S-6</u>			

Types of inspections and tests performed.

External ☒ Leakage ☒ Internal ☐ Upper Coupler ☐ Thickness ☐ Pressure ☐ Lining Inspection ☐Legible pictures of the MIP and the ASME Nameplates are attached to this Inspection Test and Repair Report ☐Tank Disposition Statement: Tank Returned to Service ☒ Tank Removed from Service ☐

Rejection Criteria

In addition to any other criteria in clause 7.2.1 & 7.2.2.1, tanks shall be rejected when any of the following defects are found during an external inspection or Internal Inspection

- A) Less than the minimum thickness remaining under a cut, dig or gouge ;
- B) any dent with a depth of more than 12.7 mm (0.5 ") where it includes a weld;
- C) any dent with a depth greater than 10% of the length of the dent;
- D) any weld defect, including crack, pinhole, or incomplete fusion of the weld;
- E) any structural defect;
- F) any source of leakage;
- G) repairs made to liquid retaining components of metal tanks using overlay patches.

Ref	Internal Visual Inspection CSA B620 7.2.2	Pass	Fail	Corrected	NA
1	When the tank is not equipped with a manway or inspection opening, or the tank precludes an internal inspection due to lining, the tank shall be pressure tested.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Inspect entire interior surface of shell and heads for signs of corrosion, abrasion, pitting, dents or cracks. Overly patches are prohibited. Corroded or abraded areas shall be thickness tested and documented. Inspect linings and coatings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Non elastomeric linings. Inspection of linings shall conform to the procedures and equipment specified by the lining manufacturer or installer. Degraded or defective areas of the tank lining shall be removed, and the tank wall below the defect shall be inspected. Corroded areas of the tank shall be thickness tested and documented. Inspect for defects; cracks, deterioration, separation, blistering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Inspect all welded connections of tank shell and heads and all structural supports: inspect for corrosion, abrasion, dents, digs, gouges, distortions, defects in welds and other conditions that might render the tank unsafe for transportation. Check areas around baffle openings for sign of distortion or cracks. Corroded or abraded areas shall be thickness tested and documented.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Inspect all piping, valves, vents, fittings and gaskets for corrosion, abrasion, and defects in welds, leakage and other conditions that may render the tank unsafe for transportation. Corroded or abraded areas shall be thickness tested and documented.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Tank marking: Date (month and year), Symbol (I), Facility Registration Number applied after all defects corrected, inspected and tested	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No Defects Found ☐ Defects Found ☐ Defects Corrected, Inspected and Tested - Pass ☐.

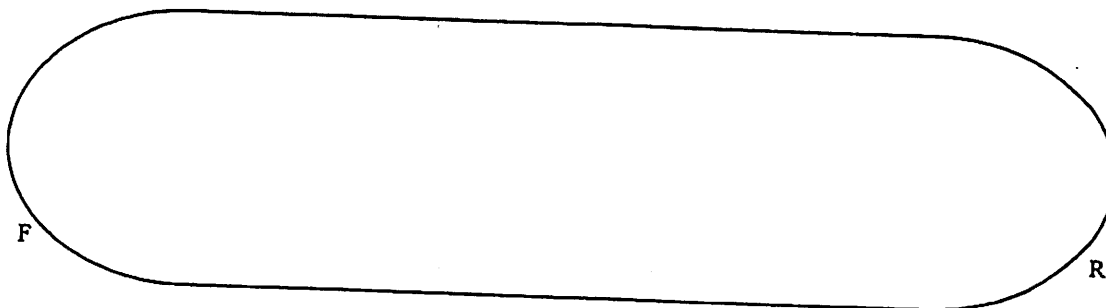
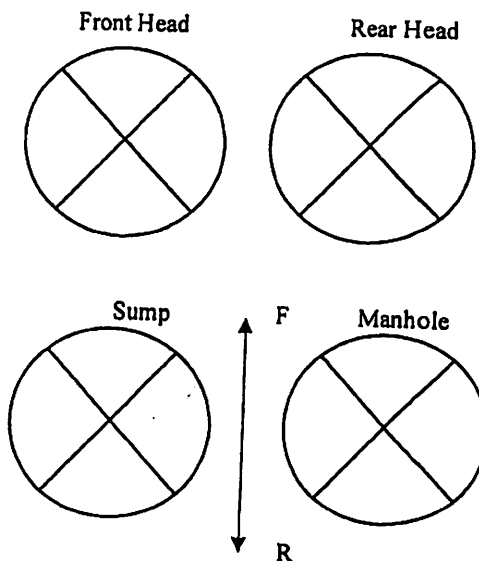
Name of Tank Inspector _____

Signature of Tank Inspector _____

Date Internal Inspection Completed _____

Ref	Thickness Test CSA B620 7.2.6	Pass	Fail	Corrected	NA
1	The shell and head thickness of all unlined tanks used for materials corrosive to the tank shell or heads must be tested at 2-year intervals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	The thickness test shall be performed on the tank head and shell in at least the following areas: <ul style="list-style-type: none"> around any piping that retains lading; high-stress areas of the shell such as the bottom of the tank; around openings, weld joints, shell reinforcements, and locations where appurtenances are attached; near the upper coupler (fifth wheel), suspension system attachments, and any connecting structures; any known thin areas in the tank and nominal liquid level lines; and structures joining multiple carbon steel tanks on a self-supporting transport unit. 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Tank marking: Date (month and year), Symbol (T), Facility Registration Number applied after all defects corrected, inspected, and tested.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	12:00	3:00	6:00	9:00	
					HEAD
					Sump
					Manhole
1					1
2					2
3					2
4					3
4					4
5					5
6					6
7					7
8					8
					HEAD
	12:00	3:00	6:00	9:00	



No Defects Found ☐ Defects Found ☐ Defects Corrected, Inspected and Tested - Pass ☐.

Name of Tank Tester _____

Signature of Tank Tester _____

Date Thickness Test Complete _____

Pressure Test CSA B620 7.2.7				
	Pass	Fail	Corrected	NA
Prior to performing the Pressure Test, the External Visual Inspection and Internal Visual Inspection shall be completed satisfactorily.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heating System Hydrostatic Pressure Test. Completed prior to pressure test.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In conjunction with the pressure test, all reclosing pressure-relief devices shall tested to ensure that they open at the required set-to-discharge pressure for the tank's MAWP and reseal at not less than 90% of that pressure or at the reseal pressure prescribed for the tank specification. Complete Pressure Relief Device Test Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When isolated from the pressure supply, the test pressure shall be retained for minimum 10 minutes, and a visual inspection of all external surfaces reveals no leaks, deformation and bulging.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All piping and accessories shall be pressure tested at not less than 80% of the tank's MAWP.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tank marking: Date (month and year), Symbol (P), and Facility Registration Number applied after all defects corrected, inspected and tested.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Tank Comp	Test Pressure	Pass	Fail	Corrected
1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heating System		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Length of Time Pressure Test Held _____ minutes.

Tank Pressure Test Method: Water ☐ Air ☐

Length of time heating system tested for _____ minutes.

Heating System Pressure Test Method: Water ☐ Air ☐

Additional Tank Markings applied after all defects corrected inspected and tested:

NQT (Not Quenched and Tempered) ☐ QT (Quenched and Tempered) ☐

No Defects Found ☐ Defects Found ☐ Defects Corrected, Inspected and Tested - Pass ☐

TC/MC 331 and MC 330:

Prior to and in conjunction with the Pressure Test a Wet Fluorescent Magnetic Particle Inspection (WF) shall be performed in accordance with CSA B620 and CGA P26.

Wet Fluorescent Magnetic Particle inspection completed satisfactorily and report attached ____ yes ____ N/A

No Defects Found ☐ Defects Found ☐ Defects Corrected, Inspected and Tested - Pass ☐.

Name of Tank Tester _____

Signature of Tank Tester _____

Date Pressure Test Completed _____