

Machine Id
130 - MIDWEST WHEEL
Component
Diesel Engine
Fluid
SHELL Rotella T5 15W-40 (--- QTS)

RECOMMENDATION

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LF0001279	---	---
Sample Date		Client Info		13 Dec 2023	---	---
Machine Age	hrs	Client Info		64034	---	---
Oil Age	hrs	Client Info		1875	---	---
Filter Age	hrs	Client Info		1875	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	4	---	---
Chromium	ppm	ASTM D5185m	>20	<1	---	---
Nickel	ppm	ASTM D5185m	>4	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	3	---	---
Lead	ppm	ASTM D5185m	>40	0	---	---
Copper	ppm	ASTM D5185m	>330	0	---	---
Tin	ppm	ASTM D5185m	>15	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

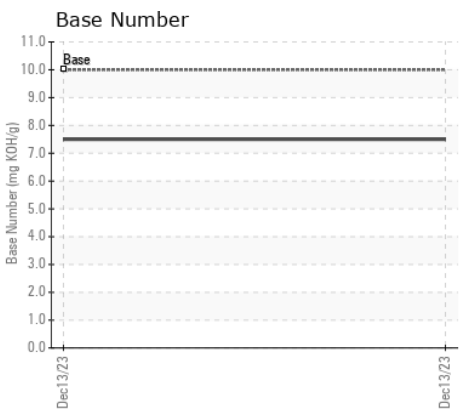
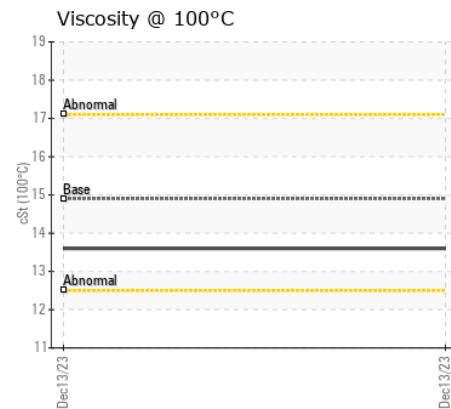
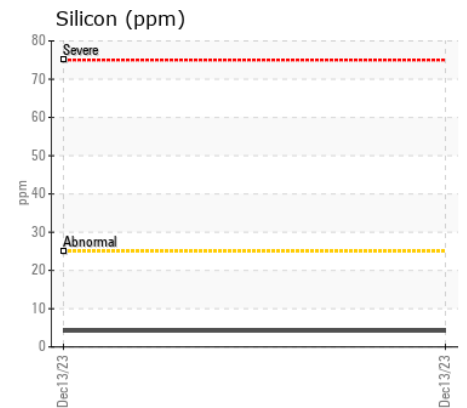
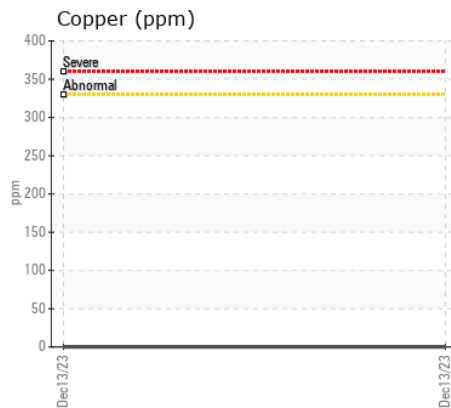
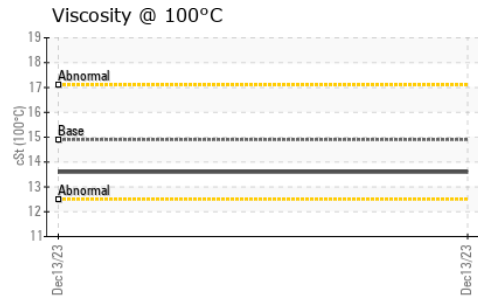
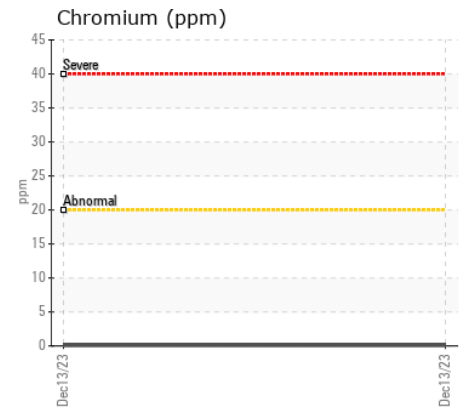
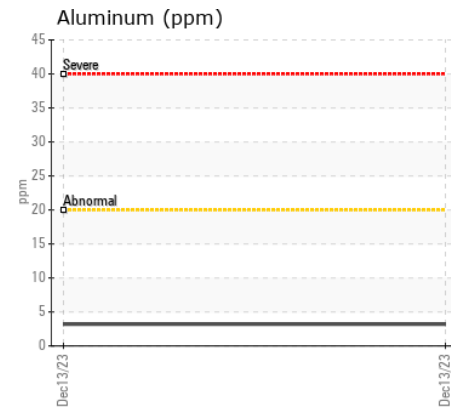
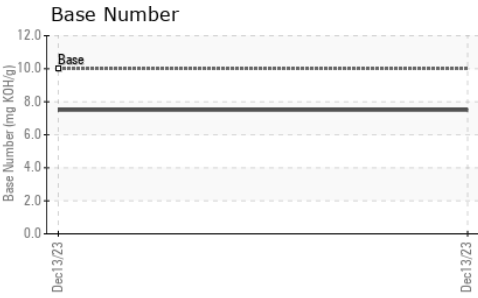
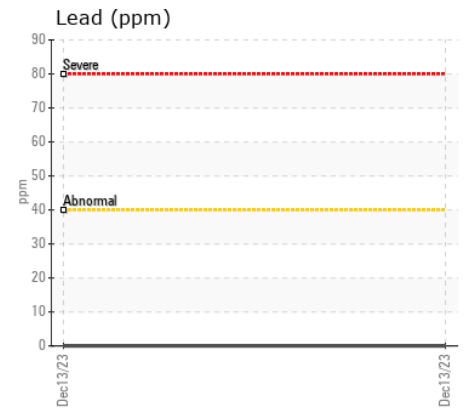
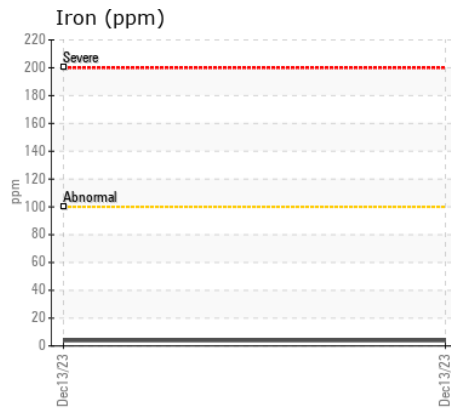
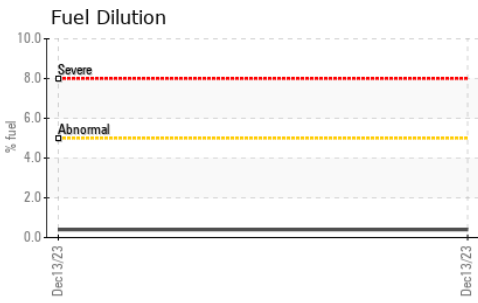
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	---	---
Potassium	ppm	ASTM D5185m	>20	<1	---	---
Fuel	%	ASTM D3524	>5	0.4	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	5.5	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.0	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

FLUID CONDITION

The oil viscosity is normal. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		1	---	---
Boron	ppm	ASTM D5185m		396	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		79	---	---
Manganese	ppm	ASTM D5185m		0	---	---
Magnesium	ppm	ASTM D5185m		384	---	---
Calcium	ppm	ASTM D5185m		1186	---	---
Phosphorus	ppm	ASTM D5185m		989	---	---
Zinc	ppm	ASTM D5185m		1149	---	---
Sulfur	ppm	ASTM D5185m		3287	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.5	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	7.5	---	---
Visc @ 100°C	cSt	ASTM D445	14.9	13.6	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LF0001279 **Received** : 07 Feb 2024
Lab Number : 06083002 **Tested** : 13 Feb 2024
Unique Number : 10870447 **Diagnosed** : 13 Feb 2024 - Doug Bogart
Test Package : MOB 1 (Additional Tests: FUELDILUTION, PercentFuel, TBN)

TOTAL TRUCK CARE INC
 P.O. BOX 97
 LEMARS, IA
 US 51031
 Contact: BRENT BROWNMILLER
 ttinc@frontiernet.net;brent@totaltruckcareinc.com
 T: (712)546-4442
 F: (712)546-5048

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)