



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
[37432]
 Machine Id
FREIGHTLINER TR-48
 Component
Diesel Engine
 Fluid
{not provided} (--- GAL)

RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We advise that you check for visible metal particles in the oil. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 30 Diesel Engine Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample. We suspect that the abnormal contaminant(s) is the result of incorrect sampling technique. **DISCLAIMER:** Interpretation of results is based on the sample as received from the customer. The condition of the sample and the method of sampling cannot be verified.

WEAR

Light concentration of visible metal present.

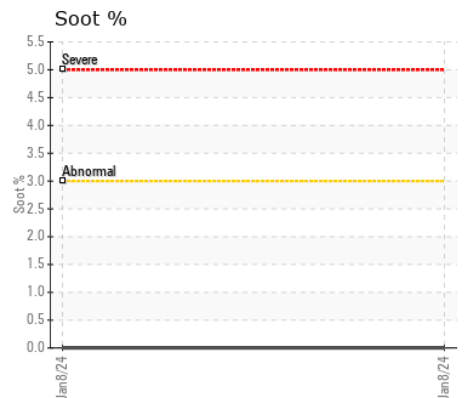
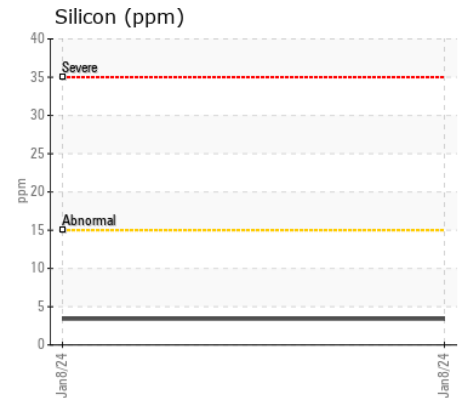
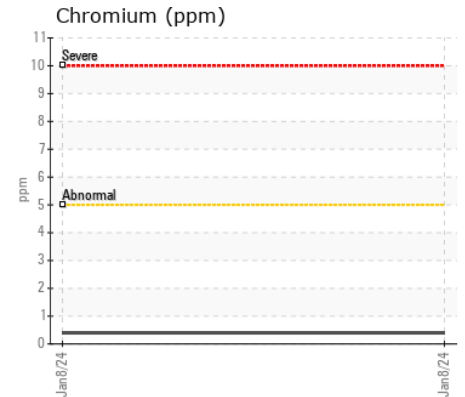
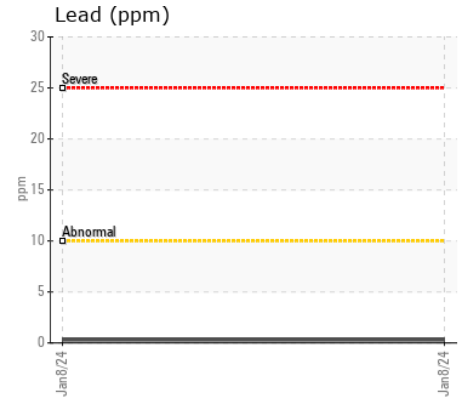
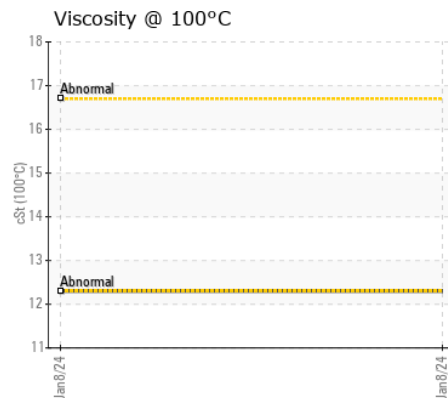
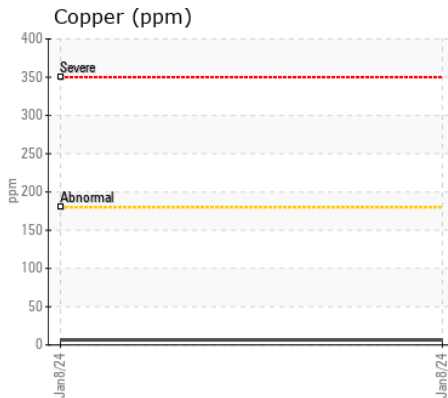
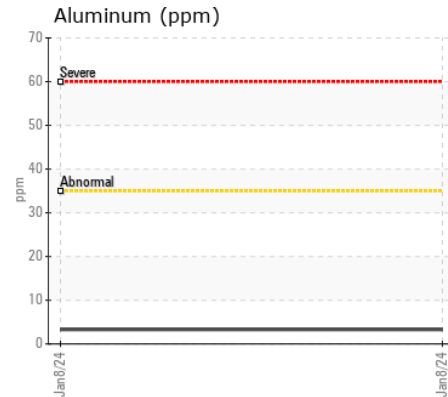
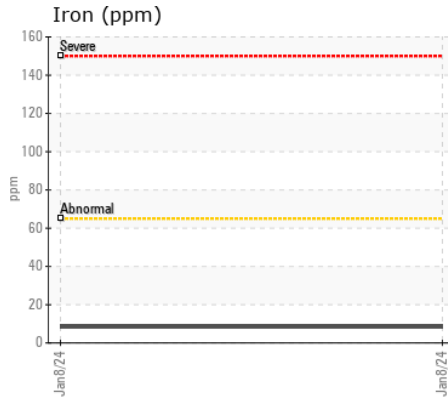
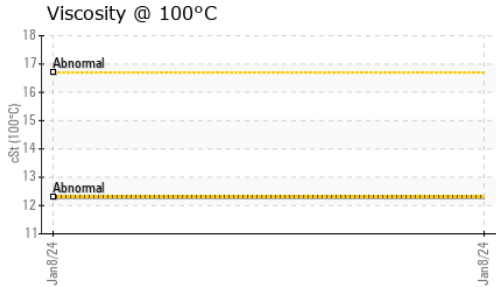
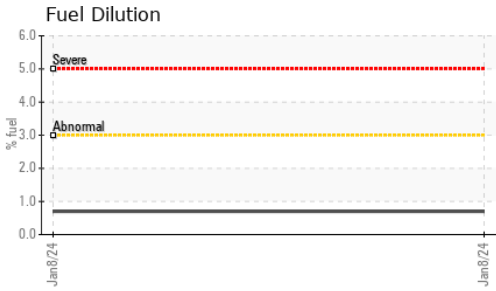
CONTAMINATION

Fuel content negligible. Moderate concentration of visible dirt/debris present in the oil.

FLUID CONDITION

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CU0021811	---	---
Sample Date		Client Info		08 Jan 2024	---	---
Machine Age	kms	Client Info		236680	---	---
Oil Age	kms	Client Info		0	---	---
Filter Age	kms	Client Info		0	---	---
Oil Changed		Client Info		Not Chngd	---	---
Filter Changed		Client Info		Not Chngd	---	---
Sample Status				ABNORMAL	---	---
Iron	ppm	ASTM D5185(m)	>65	8	---	---
Chromium	ppm	ASTM D5185(m)	>5	<1	---	---
Nickel	ppm	ASTM D5185(m)	>3	0	---	---
Titanium	ppm	ASTM D5185(m)	>5	0	---	---
Silver	ppm	ASTM D5185(m)	>2	<1	---	---
Aluminum	ppm	ASTM D5185(m)	>35	3	---	---
Lead	ppm	ASTM D5185(m)	>10	<1	---	---
Copper	ppm	ASTM D5185(m)	>180	7	---	---
Tin	ppm	ASTM D5185(m)	>8	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	▲ LIGHT	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Silicon	ppm	ASTM D5185(m)	>15	3	---	---
Potassium	ppm	ASTM D5185(m)	>20	5	---	---
Fuel	%	ASTM D7593*	>3.0	0.7	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>3	0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	5.9	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.8	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	▲ LTMOD	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---
Sodium	ppm	ASTM D5185(m)		8	---	---
Boron	ppm	ASTM D5185(m)		177	---	---
Barium	ppm	ASTM D5185(m)		0	---	---
Molybdenum	ppm	ASTM D5185(m)		28	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)		149	---	---
Calcium	ppm	ASTM D5185(m)		1757	---	---
Phosphorus	ppm	ASTM D5185(m)		802	---	---
Zinc	ppm	ASTM D5185(m)		937	---	---
Sulfur	ppm	ASTM D5185(m)		2560	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.7	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		12.3	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : CU0021811 **Received** : 10 Jan 2024
Lab Number : 02607769 **Diagnosed** : 12 Jan 2024
Unique Number : 5708855 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: BottomAnalysis, FILTERPATCH, FuelDilution, PercentFuel, Visual)

STEER ENTERPRISES LTD
 7051 COUNTY ROAD 9
 STAYNER, ON
 CA L0M 1S0
 Contact: Service Manager
 caitlyn@steer.ca

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

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F: