OIL ANALYSIS REPORT

Sample Rating Trend

GLYCOL

Machine Id
429
Component
Diesel Engine
Fluid
SAE 10W30 (--- GAL)

DIAGNOSIS

Recommendation
Check for low coolant level. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear
All component wear rates are normal.

Contamination
Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative.

Fluid Condition
The condition of the oil is acceptable for the time in service (see recommendation).

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0948305**	---	---
Sample Date		Client Info		**30 May 2024**	---	---
Machine Age	mls	Client Info		**147241**	---	---
Oil Age	mls	Client Info		**12009**	---	---
Oil Changed		Client Info		**Changed**	---	---
Sample Status				**ABNORMAL**	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	**<1.0**	---	---
Water		WC Method	>0.2	**NEG**	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>90	**36**	---	---
Chromium	ppm	ASTM D5185(m)	>20	**<1**	---	---
Nickel	ppm	ASTM D5185(m)	>2	**0**	---	---
Titanium	ppm	ASTM D5185(m)	>2	**0**	---	---
Silver	ppm	ASTM D5185(m)	>2	**0**	---	---
Aluminum	ppm	ASTM D5185(m)	>20	**4**	---	---
Lead	ppm	ASTM D5185(m)	>40	**0**	---	---
Copper	ppm	ASTM D5185(m)	>330	**24**	---	---
Tin	ppm	ASTM D5185(m)	>15	**0**	---	---
Antimony	ppm	ASTM D5185(m)		**0**	---	---
Vanadium	ppm	ASTM D5185(m)		**0**	---	---
Beryllium	ppm	ASTM D5185(m)		**0**	---	---
Cadmium	ppm	ASTM D5185(m)		**0**	---	---

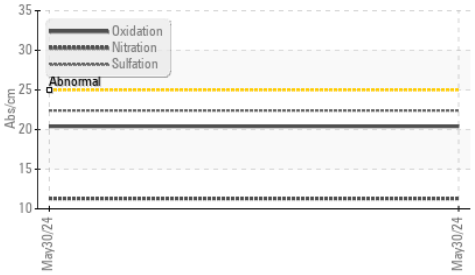
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**3**	---	---
Barium	ppm	ASTM D5185(m)		**0**	---	---
Molybdenum	ppm	ASTM D5185(m)		**66**	---	---
Manganese	ppm	ASTM D5185(m)		**<1**	---	---
Magnesium	ppm	ASTM D5185(m)		**1018**	---	---
Calcium	ppm	ASTM D5185(m)		**1094**	---	---
Phosphorus	ppm	ASTM D5185(m)		**947**	---	---
Zinc	ppm	ASTM D5185(m)		**1226**	---	---
Sulfur	ppm	ASTM D5185(m)		**2293**	---	---
Lithium	ppm	ASTM D5185(m)		**<1**	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	**3**	---	---
Sodium	ppm	ASTM D5185(m)	>228	**28**	---	---
Potassium	ppm	ASTM D5185(m)	>20	**42**	---	---
Glycol	%	ASTM D7922*		**0.0**	---	---

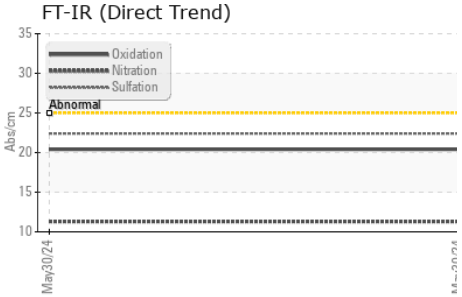
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	**0.5**	---	---
Nitration	Abs/cm	ASTM D7624*	>20	**11.3**	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	**22.4**	---	---

OIL ANALYSIS REPORT

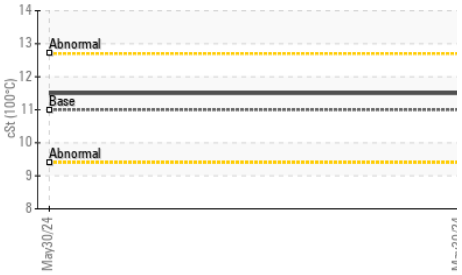
FT-IR (Direct Trend)



FT-IR (Direct Trend)



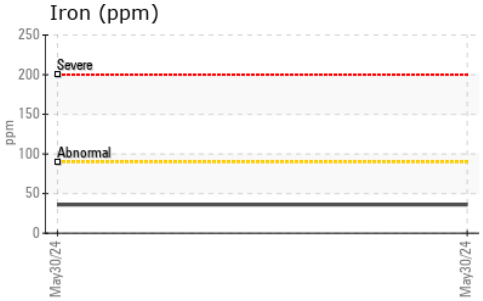
Viscosity @ 100°C



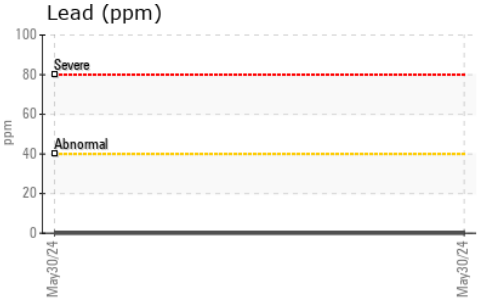
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**20.4**	---	---
VISUAL		**method**	**limit/base**	**current**	**history1**	**history2**
Emulsified Water	scalar	Visual*	>0.2	**NEG**	---	---
Free Water	scalar	Visual*		**NEG**	---	---
FLUID PROPERTIES		**method**	**limit/base**	**current**	**history1**	**history2**
Visc @ 100°C	cSt	ASTM D7279(m)	11.0	**11.5**	---	---

GRAPHS

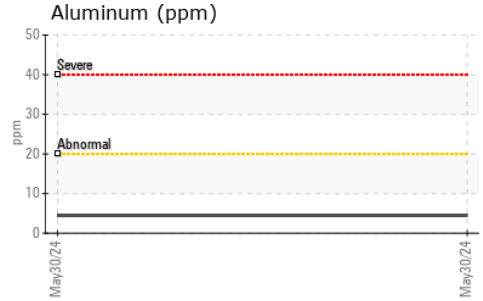
Iron (ppm)



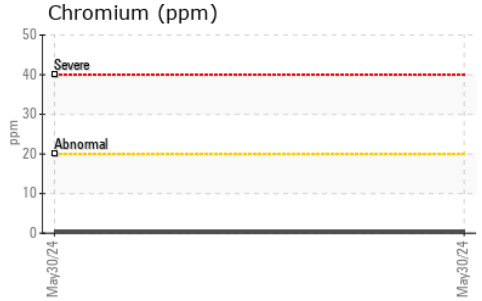
Lead (ppm)



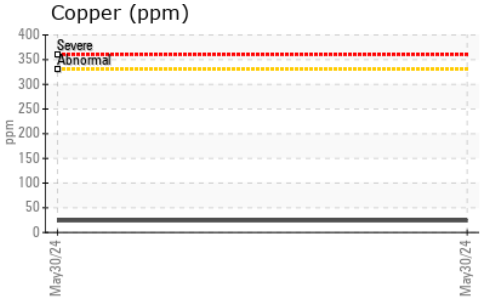
Aluminum (ppm)



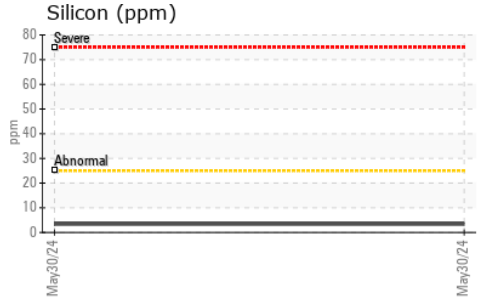
Chromium (ppm)



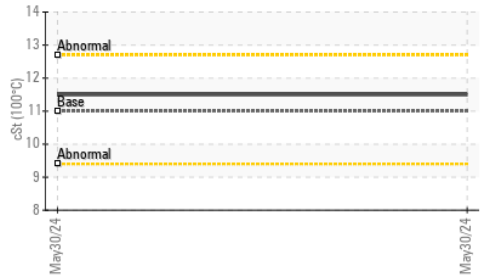
Copper (ppm)



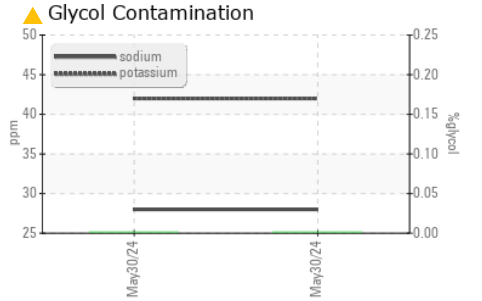
Silicon (ppm)



Viscosity @ 100°C



Glycol Contamination



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0948305
Lab Number : 02641048
Unique Number : 5798587
Test Package : MOB 1 (Additional Tests: Glycol)

Received : 11 Jun 2024
Tested : 11 Jun 2024
Diagnosed : 11 Jun 2024 - Kevin Marson

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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