



OIL ANALYSIS REPORT

Sample Rating Trend

WEAR

Area
[67113]
 Machine Id
VOLVO VNL740 4709
 Component
Diesel Engine
 Fluid
{not provided} (--- GAL)



DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 20 Diesel Engine Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample.

Wear

Nickel ppm levels are abnormal. Exhaust valve wear is indicated.

Contamination

Fuel content negligible. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Fluid Condition

Viscosity of sample indicates oil is within SAE 20 range, advise investigate. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0909030	---	---
Sample Date	Client Info		28 Mar 2024	---	---
Machine Age	kms	Client Info	84805	---	---
Oil Age	kms	Client Info	0	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	64	---	---
Chromium	ppm	ASTM D5185(m) >20	1	---	---
Nickel	ppm	ASTM D5185(m) >2	▲ 8	---	---
Titanium	ppm	ASTM D5185(m)	<1	---	---
Silver	ppm	ASTM D5185(m) >2	2	---	---
Aluminum	ppm	ASTM D5185(m) >25	40	---	---
Lead	ppm	ASTM D5185(m) >40	<1	---	---
Copper	ppm	ASTM D5185(m) >330	24	---	---
Tin	ppm	ASTM D5185(m) >15	6	---	---
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)	39	---	---
Barium	ppm	ASTM D5185(m)	<1	---	---
Molybdenum	ppm	ASTM D5185(m)	124	---	---
Manganese	ppm	ASTM D5185(m)	3	---	---
Magnesium	ppm	ASTM D5185(m)	688	---	---
Calcium	ppm	ASTM D5185(m)	1586	---	---
Phosphorus	ppm	ASTM D5185(m)	674	---	---
Zinc	ppm	ASTM D5185(m)	814	---	---
Sulfur	ppm	ASTM D5185(m)	1909	---	---
Lithium	ppm	ASTM D5185(m)	1	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	41	---	---
Sodium	ppm	ASTM D5185(m)	5	---	---
Potassium	ppm	ASTM D5185(m) >20	100	---	---
Fuel	%	ASTM D7593* >6.0	0.6	---	---

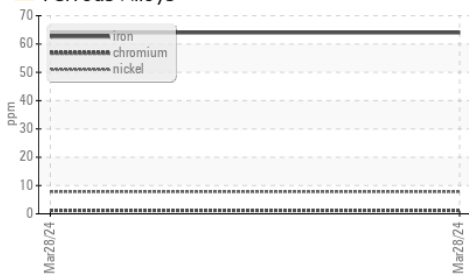
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	0.3	---	---
Nitration	Abs/cm	ASTM D7624* >20	12.7	---	---
Sulfation	Abs/.1mm	ASTM D7415* >30	26.1	---	---



OIL ANALYSIS REPORT

Ferrous Alloys



FLUID DEGRADATION

Method	Limit/Base	Current	History1	History2
Oxidation	Abs./1mm ASTM D7414*	27.2	---	---

VISUAL

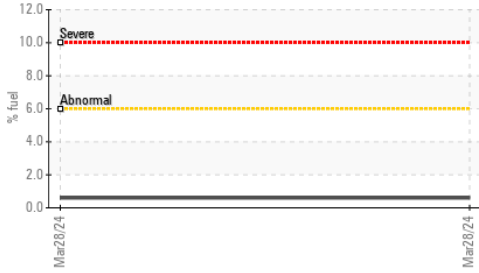
Method	Limit/Base	Current	History1	History2
Emulsified Water	scalar Visual*	NEG	---	---
Free Water	scalar Visual*	NEG	---	---

FLUID PROPERTIES

Method	Limit/Base	Current	History1	History2
Visc @ 100°C	cSt ASTM D7279(m)	9.3	---	---

GRAPHS

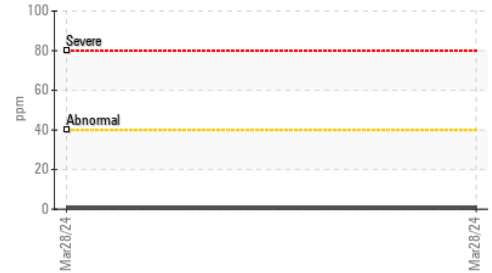
Fuel Dilution



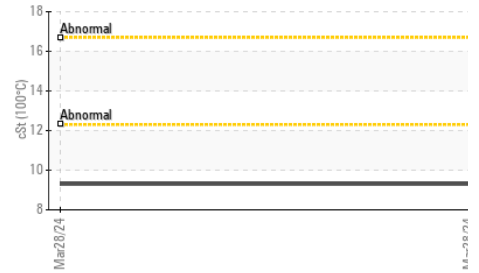
Iron (ppm)



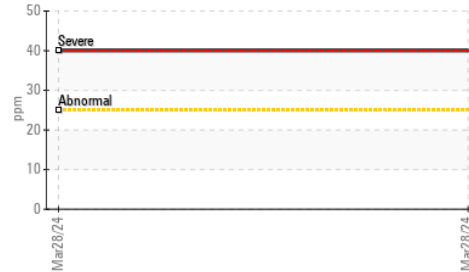
Lead (ppm)



Viscosity @ 100°C



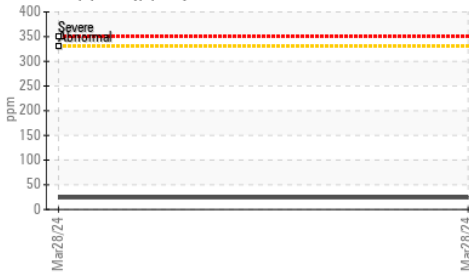
Aluminum (ppm)



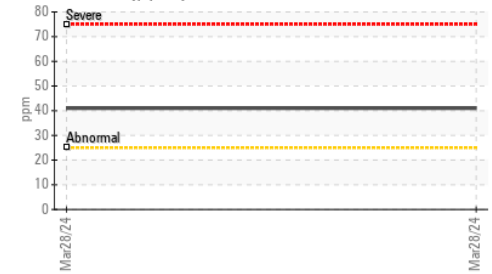
Chromium (ppm)



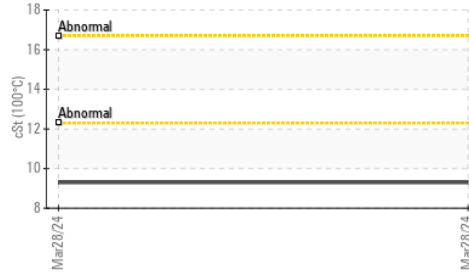
Copper (ppm)



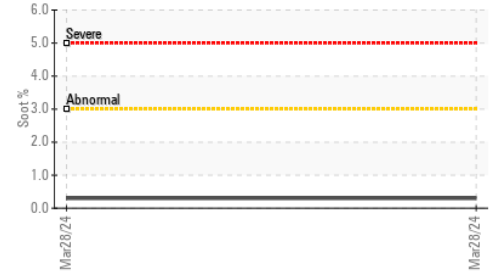
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0909030
Lab Number : 02625556
Unique Number : 5750675
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

PERFORMANCE EQUIPMENT - VISION TRUCK
 415 EVANS AVENUE
 ETOBICOKE, ON
 CA M8W 0B3
 Contact: Service
 etobservice@visiontruckgroup.com

*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.*

T:
F: