



OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Area

[67153]

Machine Id

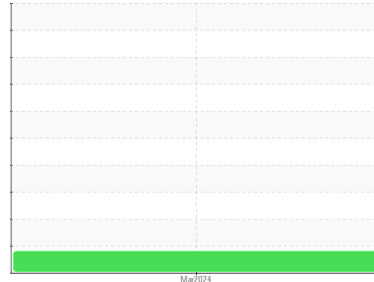
VOLVO VNL740 4701

Component

Diesel Engine

Fluid

DIESEL ENGINE OIL SAE 10W30 (--- GAL)



DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

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

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		WC0909034	---	---
Sample Date	Client Info		30 Mar 2024	---	---
Machine Age	kms	Client Info	83691	---	---
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	62	---
Chromium	ppm	ASTM D5185(m)	>20	1	---
Nickel	ppm	ASTM D5185(m)	>2	7	---
Titanium	ppm	ASTM D5185(m)		<1	---
Silver	ppm	ASTM D5185(m)	>2	<1	---
Aluminum	ppm	ASTM D5185(m)	>25	18	---
Lead	ppm	ASTM D5185(m)	>40	<1	---
Copper	ppm	ASTM D5185(m)	>330	24	---
Tin	ppm	ASTM D5185(m)	>15	5	---
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)	250	25	---
Barium	ppm	ASTM D5185(m)	10	<1	---
Molybdenum	ppm	ASTM D5185(m)	100	108	---
Manganese	ppm	ASTM D5185(m)		3	---
Magnesium	ppm	ASTM D5185(m)	450	700	---
Calcium	ppm	ASTM D5185(m)	3000	1649	---
Phosphorus	ppm	ASTM D5185(m)	1150	739	---
Zinc	ppm	ASTM D5185(m)	1350	874	---
Sulfur	ppm	ASTM D5185(m)	4250	1829	---
Lithium	ppm	ASTM D5185(m)		<1	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	35	---
Sodium	ppm	ASTM D5185(m)		5	---
Potassium	ppm	ASTM D5185(m)	>20	47	---
Fuel	%	ASTM D7593*	>6.0	0.5	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.3	---
Nitration	Abs/cm	ASTM D7624*	>20	14.1	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	27.1	---

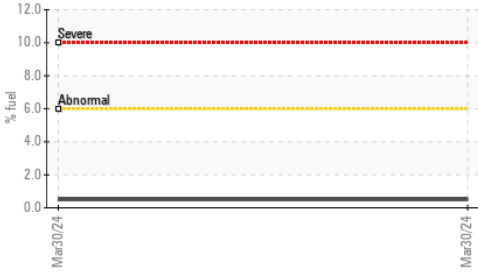


OIL ANALYSIS REPORT

▲ Ferrous Alloys



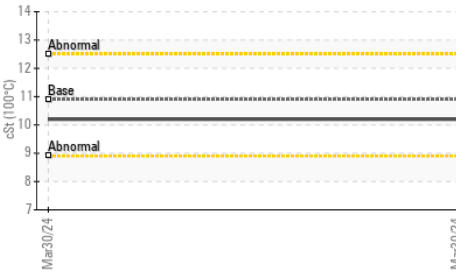
Fuel Dilution



FT-IR (Direct Trend)



Viscosity @ 100°C



FLUID DEGRADATION

Method	Limit/Base	Current	History1	History2
Oxidation	Abs/1mm ASTM D7414*	29.5	---	---

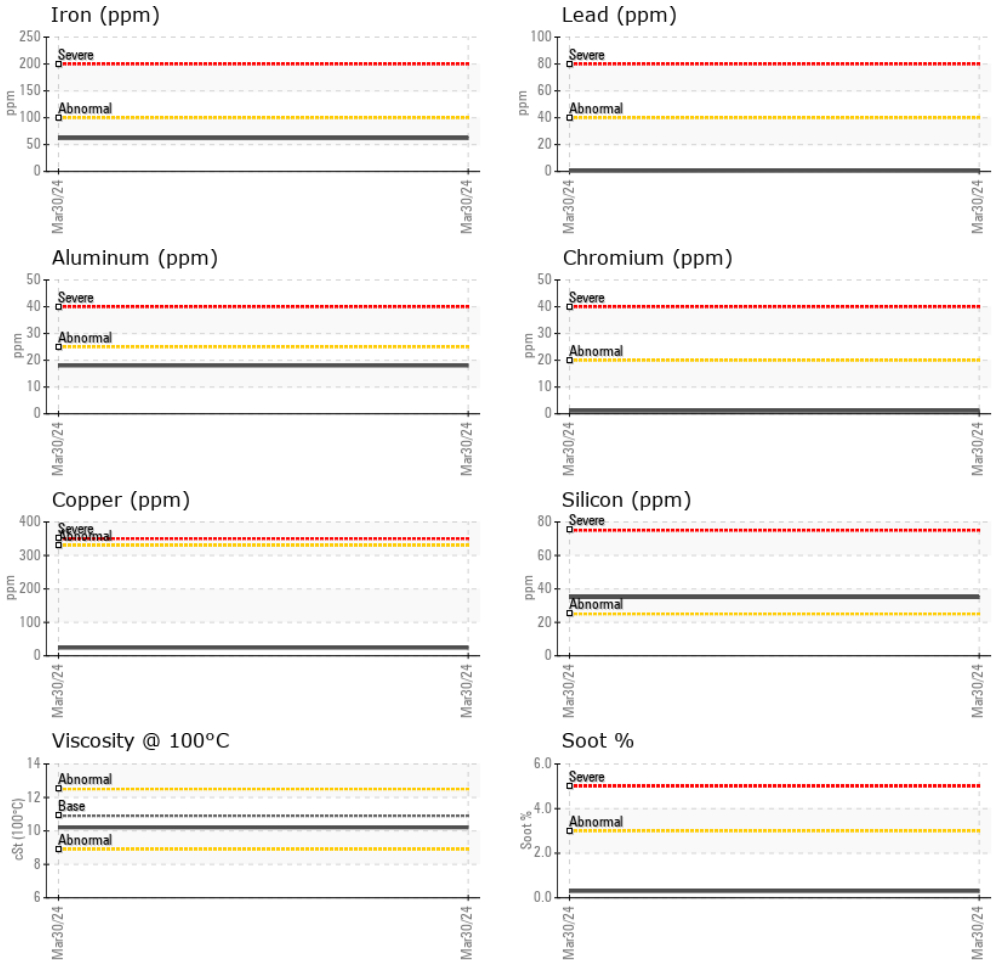
VISUAL

Method	Limit/Base	Current	History1	History2
White Metal	scalar Visual*	NONE	---	---
Yellow Metal	scalar Visual*	NONE	---	---
Precipitate	scalar Visual*	NONE	---	---
Silt	scalar Visual*	NONE	---	---
Debris	scalar Visual*	NONE	---	---
Sand/Dirt	scalar Visual*	NONE	---	---
Appearance	scalar Visual*	NORML	---	---
Odor	scalar Visual*	NORML	---	---
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)	10.2	---	---

GRAPHS



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0909034
Lab Number : 02626399
Unique Number : 5759531
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, Visual)

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.

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F: