



OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Area

[69415]

Machine Id

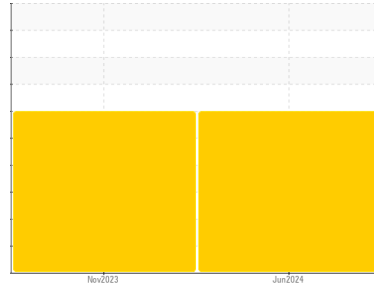
VOLVO VNR660 4618

Component

Diesel Engine

Fluid

PETRO CANADA DURON 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 severe. Exhaust valve wear is indicated.

Contamination

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. Tests indicate that there is no fuel present in the oil. 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		WC0948221	WC0869670	---
Sample Date	Client Info		28 Jun 2024	11 Nov 2023	---
Machine Age	kms	Client Info	376611	278466	---
Oil Age	kms	Client Info	0	128691	---
Oil Changed	Client Info		Changed	Changed	---
Sample Status			SEVERE	SEVERE	---

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>100	67	107	---
Chromium	ppm	ASTM D5185(m)	>20	2	3	---
Nickel	ppm	ASTM D5185(m)	>2	▲ 10	▲ 22	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)	>2	<1	<1	---
Aluminum	ppm	ASTM D5185(m)	>25	8	15	---
Lead	ppm	ASTM D5185(m)	>40	3	5	---
Copper	ppm	ASTM D5185(m)	>330	19	36	---
Tin	ppm	ASTM D5185(m)	>15	2	5	---
Antimony	ppm	ASTM D5185(m)		0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
Beryllium	ppm	ASTM D5185(m)		0	0	---
Cadmium	ppm	ASTM D5185(m)		0	0	---

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	1	4	7	---
Barium	ppm	ASTM D5185(m)	1	<1	<1	---
Molybdenum	ppm	ASTM D5185(m)	1	60	62	---
Manganese	ppm	ASTM D5185(m)	1	1	3	---
Magnesium	ppm	ASTM D5185(m)	10	888	840	---
Calcium	ppm	ASTM D5185(m)	2942	1296	1380	---
Phosphorus	ppm	ASTM D5185(m)	1102	887	912	---
Zinc	ppm	ASTM D5185(m)	1351	1165	1135	---
Sulfur	ppm	ASTM D5185(m)	3903	2092	1876	---
Lithium	ppm	ASTM D5185(m)		<1	<1	---

CONTAMINANTS

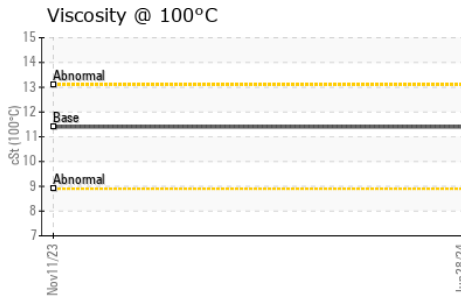
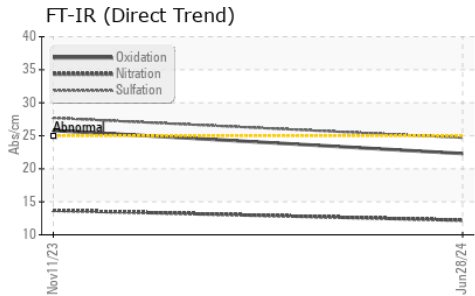
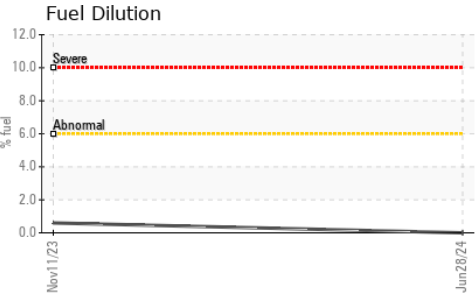
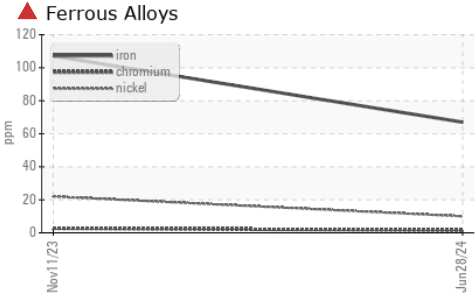
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	9	16	---
Sodium	ppm	ASTM D5185(m)		3	5	---
Potassium	ppm	ASTM D5185(m)	>20	11	31	---
Fuel	%	ASTM D7593*	>6.0	0.0	0.6	---

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0.7	1	---
Nitration	Abs/cm	ASTM D7624*	>20	12.2	13.7	---
Sulfation	Abs./1mm	ASTM D7415*	>30	24.7	27.7	---



OIL ANALYSIS REPORT

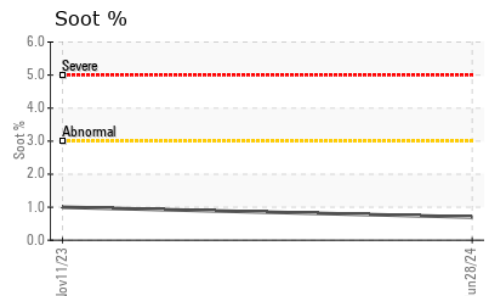
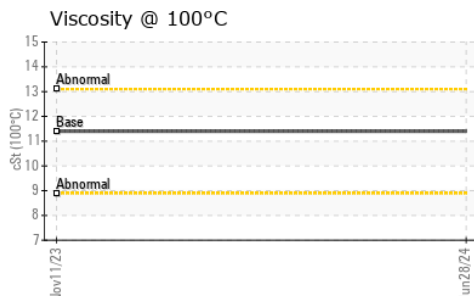
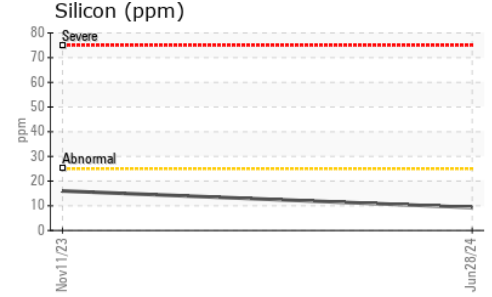
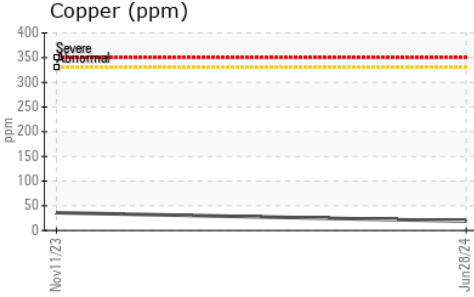
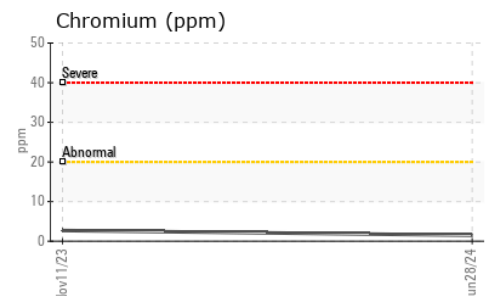
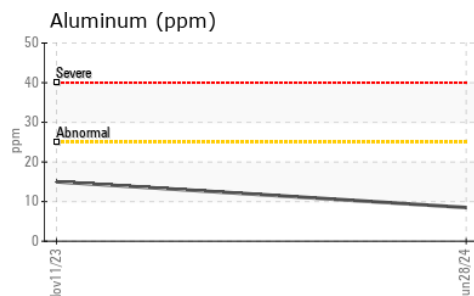
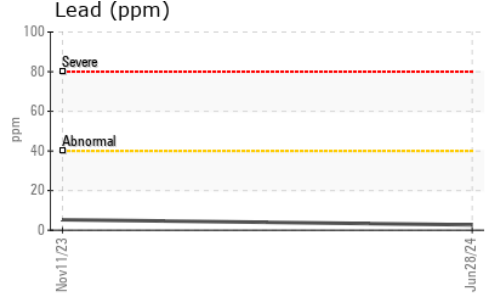
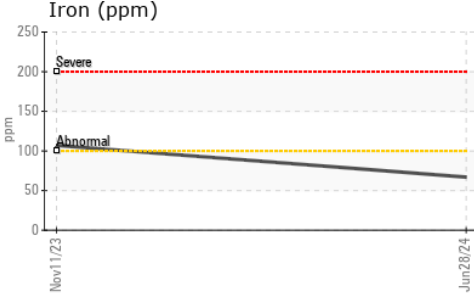


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	22.3	25.8	---

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---
Free Water	scalar	Visual*		NEG	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	11.4	11.4	11.4	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0948221 **Received** : 03 Jul 2024
Lab Number : **02645219** **Tested** : 04 Jul 2024
Unique Number : 5802758 **Diagnosed** : 04 Jul 2024 - Kevin Marson
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.