



OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Area
[62146]
 Machine Id
VOLVO 4635
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 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

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		WC0853700	---	---
Sample Date	Client Info		22 Sep 2023	---	---
Machine Age	kms	Client Info	192951	---	---
Oil Age	kms	Client Info	0	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>6.0	<1.0	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	39	---
Chromium	ppm	ASTM D5185(m)	>20	<1	---
Nickel	ppm	ASTM D5185(m)	>2	▲ 2	---
Titanium	ppm	ASTM D5185(m)		0	---
Silver	ppm	ASTM D5185(m)	>2	<1	---
Aluminum	ppm	ASTM D5185(m)	>25	10	---
Lead	ppm	ASTM D5185(m)	>40	5	---
Copper	ppm	ASTM D5185(m)	>330	110	---
Tin	ppm	ASTM D5185(m)	>15	2	---
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)	2	4	---
Barium	ppm	ASTM D5185(m)	0	<1	---
Molybdenum	ppm	ASTM D5185(m)	50	67	---
Manganese	ppm	ASTM D5185(m)	0	1	---
Magnesium	ppm	ASTM D5185(m)	950	879	---
Calcium	ppm	ASTM D5185(m)	1050	1252	---
Phosphorus	ppm	ASTM D5185(m)	995	812	---
Zinc	ppm	ASTM D5185(m)	1180	1093	---
Sulfur	ppm	ASTM D5185(m)	2600	1961	---
Lithium	ppm	ASTM D5185(m)		<1	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	9	---
Sodium	ppm	ASTM D5185(m)		4	---
Potassium	ppm	ASTM D5185(m)	>20	22	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.7	---
Nitration	Abs/cm	ASTM D7624*	>20	11.1	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.6	---

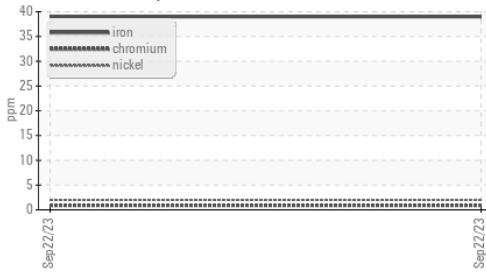
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.1	---



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▲ Ferrous Alloys

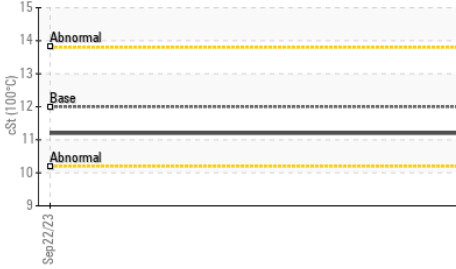


VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	---
Free Water	scalar	Visual*		NEG	---

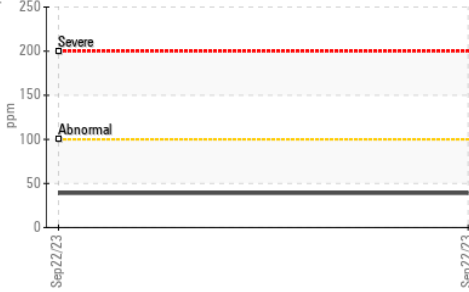
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.2	---

GRAPHS

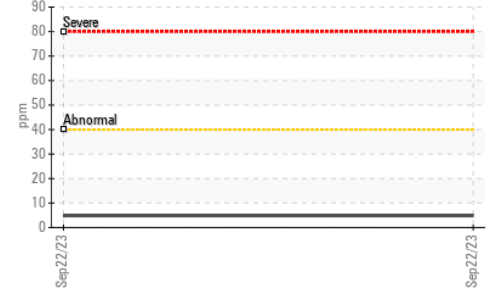
Viscosity @ 100°C



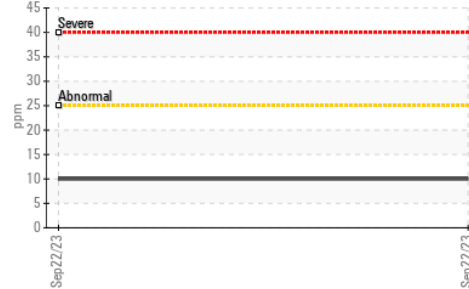
Iron (ppm)



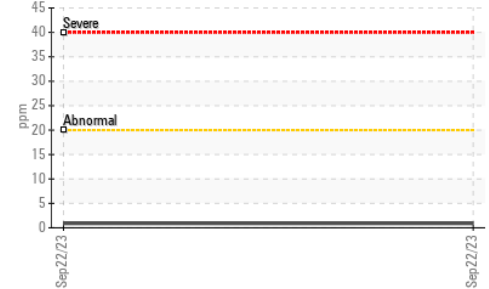
Lead (ppm)



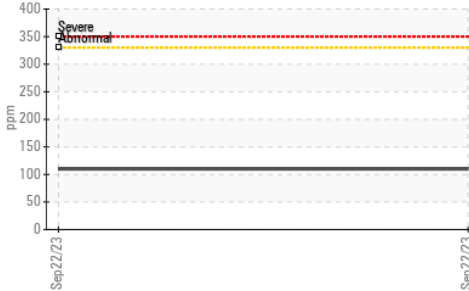
Aluminum (ppm)



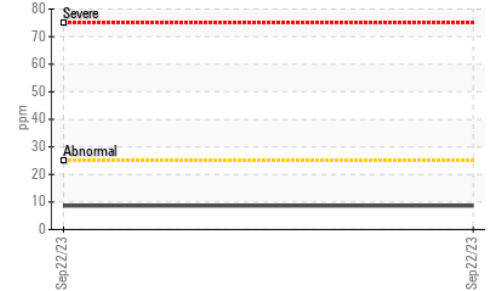
Chromium (ppm)



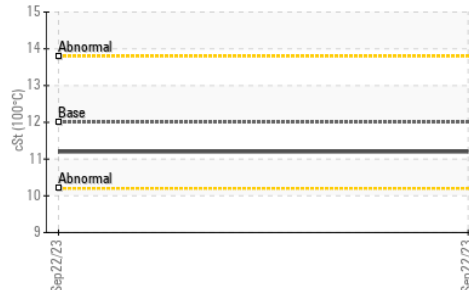
Copper (ppm)



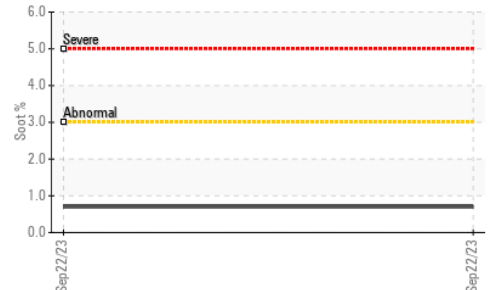
Silicon (ppm)



Viscosity @ 100°C



Soot %



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 PERFORMANCE EQUIPMENT - VISION TRUCK
Sample No. : WC0853700 **Received** : 03 Oct 2023 **415 EVANS AVENUE**
Lab Number : 02586329 **Diagnosed** : 03 Oct 2023 **ETOBICOKE, ON**
Unique Number : 5655395 **Diagnostician** : Kevin Marson **CA M8W 0B3**
Test Package : MOB 1 **Contact: Service**

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.

etobservice@visiontruckgroup.com

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