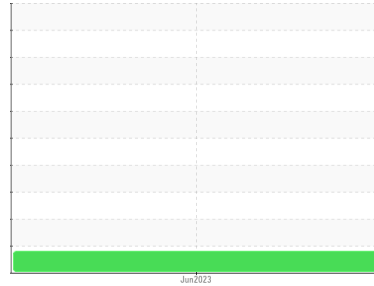


PROBLEM SUMMARY

Sample Rating Trend



WEAR



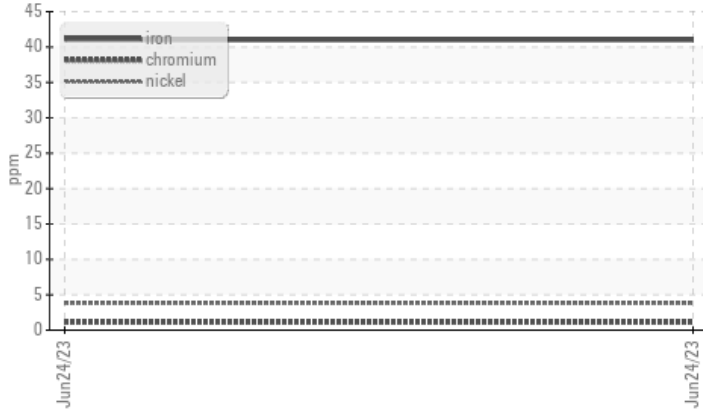
Machine Id
VOLVO VNL 066 (S/N 4V4NC9EH5LN230726)

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



RECOMMENDATION

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status	ABNORMAL	---	---
Nickel	ppm	ASTM D5185m	>2
	▲ 4	---	---

Customer Id: TVAPLAIL
Sample No.: PCA0097516
Lab Number: 05887367
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
Sean Felton +1 919-379-4092
sfelton@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

Machine Id
VOLVO VNL 066 (S/N 4V4NC9EH5LN230726)
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)



DIAGNOSIS

Recommendation
 The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear
 Exhaust valve wear is indicated. All other component wear rates are normal.

Contamination
 There is no indication of any contamination in the oil.

Fluid Condition
 The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history 1	history 2
Sample Number	Client Info		PCA0097516	---	---
Sample Date	Client Info		24 Jun 2023	---	---
Machine Age	mls	Client Info	548000	---	---
Oil Age	mls	Client Info	0	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history 1	history 2
Fuel	WC Method	>6.0	<1.0	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >100	41	---	---
Chromium	ppm	ASTM D5185m >20	1	---	---
Nickel	ppm	ASTM D5185m >2	▲ 4	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m >2	<1	---	---
Aluminum	ppm	ASTM D5185m >25	<1	---	---
Lead	ppm	ASTM D5185m >40	6	---	---
Copper	ppm	ASTM D5185m >330	21	---	---
Tin	ppm	ASTM D5185m >15	2	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m 2	0	---	---
Barium	ppm	ASTM D5185m 0	0	---	---
Molybdenum	ppm	ASTM D5185m 50	67	---	---
Manganese	ppm	ASTM D5185m 0	<1	---	---
Magnesium	ppm	ASTM D5185m 950	996	---	---
Calcium	ppm	ASTM D5185m 1050	1151	---	---
Phosphorus	ppm	ASTM D5185m 995	1030	---	---
Zinc	ppm	ASTM D5185m 1180	1347	---	---
Sulfur	ppm	ASTM D5185m 2600	2947	---	---

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	6	---	---
Sodium	ppm	ASTM D5185m	2	---	---
Potassium	ppm	ASTM D5185m >20	2	---	---

INFRA-RED

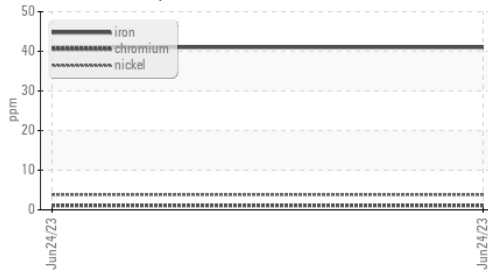
	method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844 >3	0.6	---	---
Nitration	Abs/cm	*ASTM D7624 >20	12.1	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	24.9	---	---

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414 >25	23.2	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	5.3	---	---

OIL ANALYSIS REPORT

▲ Ferrous Alloys



VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

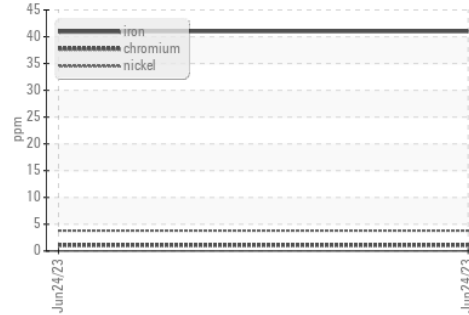
Base Number



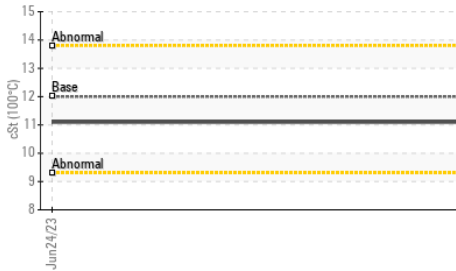
FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	12.00	11.1	---

GRAPHS

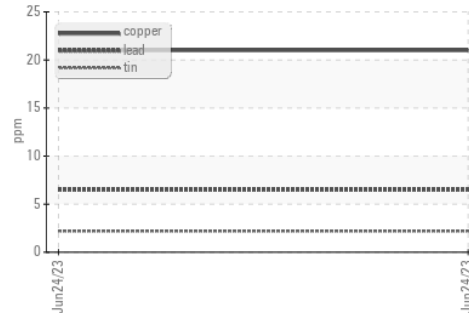
▲ Ferrous Alloys



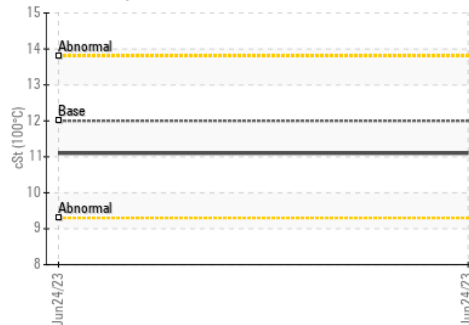
Viscosity @ 100°C



Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0097516 **Received** : 29 Jun 2023
Lab Number : **05887367** **Diagnosed** : 05 Jul 2023
Unique Number : 10537850 **Diagnostician** : Sean Felton
Test Package : FLEET

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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