

PROBLEM SUMMARY

Sample Rating Trend

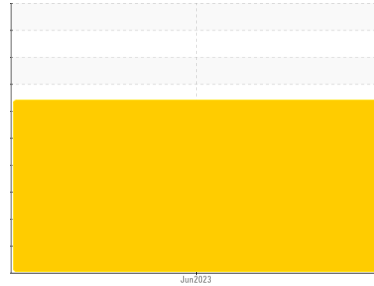
DIRT



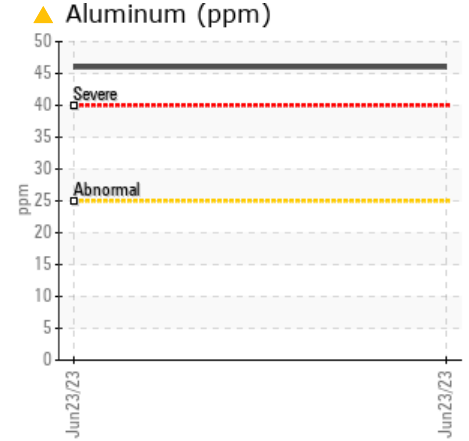
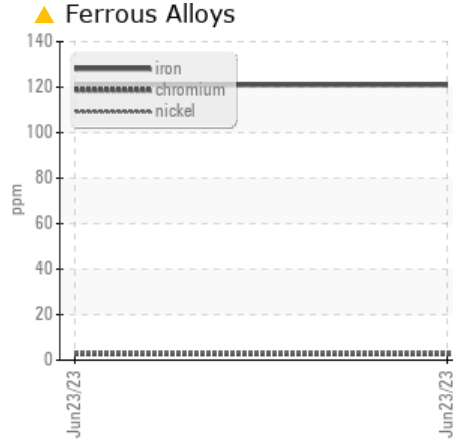
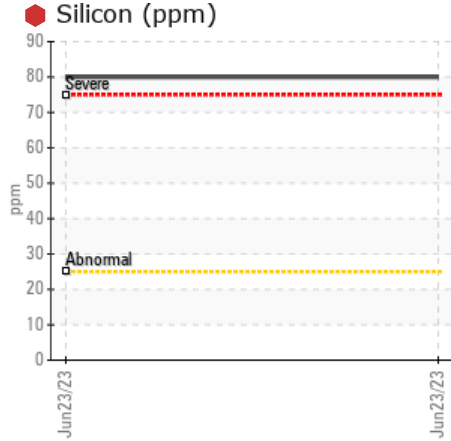
Machine Id
VOLVO VNL 760 255

Component
Diesel Engine

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



COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185m	>100	▲ 121	---	---
Aluminum	ppm	ASTM D5185m	>25	▲ 46	---	---
Silicon	ppm	ASTM D5185m	>25	● 80	---	---

Customer Id: ATRPIN
Sample No.: PCA0100643
Lab Number: 05885396
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
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jhester@wearcheckusa.com

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

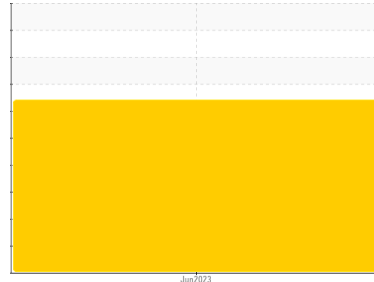
RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check the air filter, air induction system, and any areas where dirt may enter the component.

HISTORICAL DIAGNOSIS



Machine Id
VOLVO VNL 760 255
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)



DIAGNOSIS

Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

Cylinder, crank, or cam shaft wear is indicated.

Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history 1	history 2
Sample Number	Client Info		PCA0100643	---	---
Sample Date	Client Info		23 Jun 2023	---	---
Machine Age	hrs	Client Info	46921	---	---
Oil Age	hrs	Client Info	46921	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			SEVERE	---	---

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >100	▲ 121	---	---
Chromium	ppm	ASTM D5185m >20	3	---	---
Nickel	ppm	ASTM D5185m >2	3	---	---
Titanium	ppm	ASTM D5185m	<1	---	---
Silver	ppm	ASTM D5185m >2	4	---	---
Aluminum	ppm	ASTM D5185m >25	▲ 46	---	---
Lead	ppm	ASTM D5185m >40	2	---	---
Copper	ppm	ASTM D5185m >330	68	---	---
Tin	ppm	ASTM D5185m >15	7	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	<1	---	---

ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m 2	25	---	---
Barium	ppm	ASTM D5185m 0	2	---	---
Molybdenum	ppm	ASTM D5185m 50	127	---	---
Manganese	ppm	ASTM D5185m 0	6	---	---
Magnesium	ppm	ASTM D5185m 950	689	---	---
Calcium	ppm	ASTM D5185m 1050	1592	---	---
Phosphorus	ppm	ASTM D5185m 995	685	---	---
Zinc	ppm	ASTM D5185m 1180	865	---	---
Sulfur	ppm	ASTM D5185m 2600	2537	---	---

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	◆ 80	---	---
Sodium	ppm	ASTM D5185m	8	---	---
Potassium	ppm	ASTM D5185m >20	116	---	---
Glycol	%	*ASTM D2982	NEG	---	---

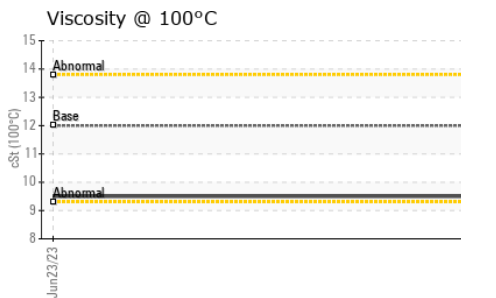
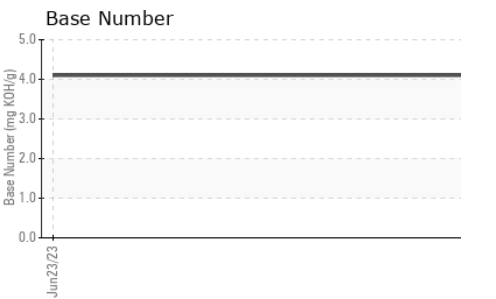
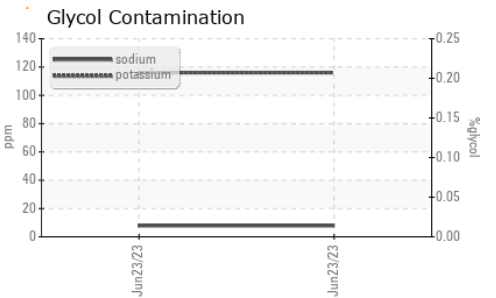
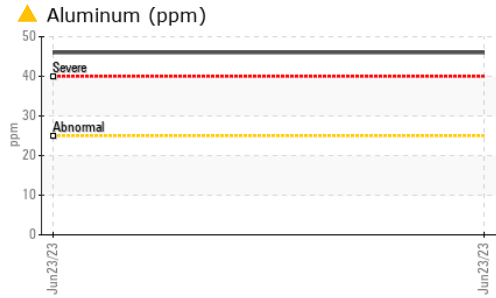
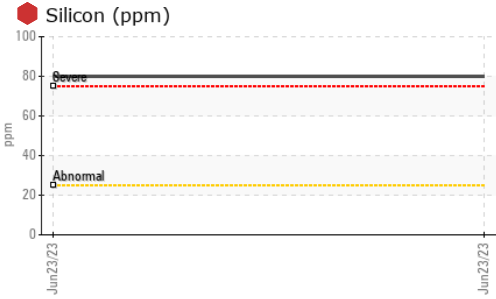
INFRA-RED

	method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844 >3	0.8	---	---
Nitration	Abs/cm	*ASTM D7624 >20	15.0	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	28.4	---	---

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414 >25	33.1	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	4.1	---	---

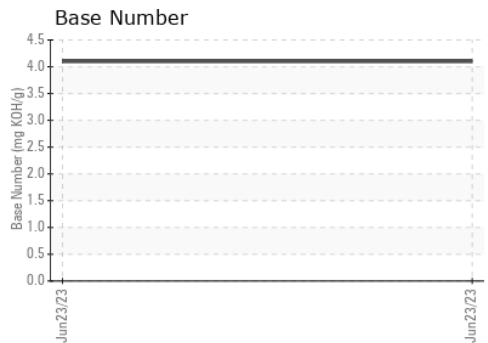
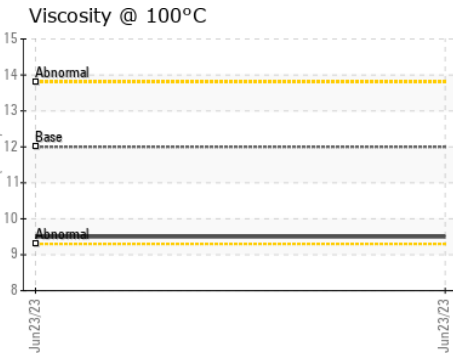
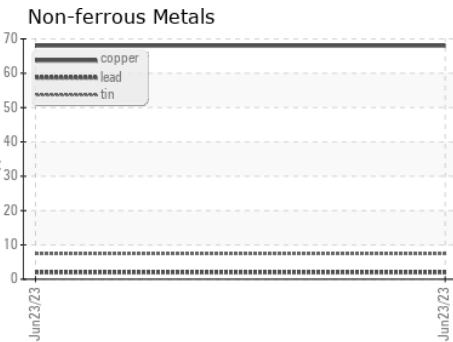
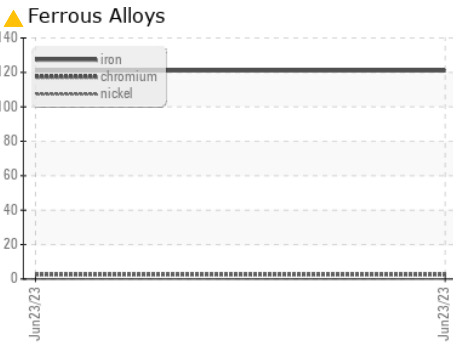
OIL ANALYSIS REPORT



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	---

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	12.00	9.5	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0100643 **Received** : 28 Jun 2023
Lab Number : 05885396 **Diagnosed** : 03 Jul 2023
Unique Number : 10535879 **Diagnostician** : Jonathan Hester
Test Package : FLEET (Additional Tests: GLYCOL)

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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