MOB I VOLVO PENTA

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Area
VALA RAD
Machine Id
KOHLER 2022076
Component
Genset
Fluid
SAE 30W (4 QTS)

RECOMMENDATION

We suspect abnormal metal contamination may be due to sampling method. We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

WEAR

Moderate concentration of visible metal present. All component wear rates are normal.

CONTAMINATION

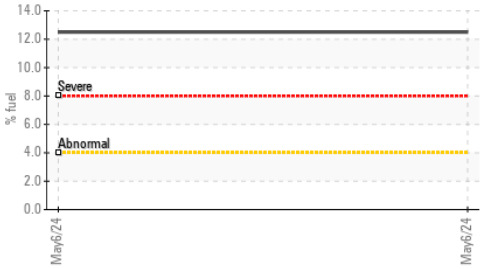
There is a high amount of fuel present in the oil.

FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. 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.

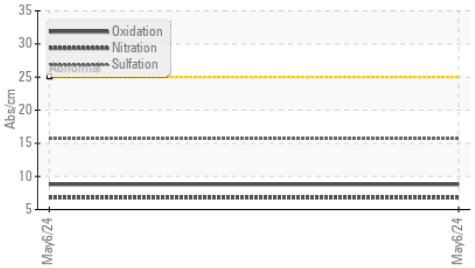
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA062015	---	---
Sample Date		Client Info		06 May 2024	---	---
Machine Age	hrs	Client Info		15	---	---
Oil Age	hrs	Client Info		5	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185m	>50	22	---	---
Chromium	ppm	ASTM D5185m	>4	<1	---	---
Nickel	ppm	ASTM D5185m	>2	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>5	0	---	---
Aluminum	ppm	ASTM D5185m	>12	5	---	---
Lead	ppm	ASTM D5185m	>17	2	---	---
Copper	ppm	ASTM D5185m	>70	34	---	---
Tin	ppm	ASTM D5185m	>15	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	▲ MODER	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>25	32	---	---
Potassium	ppm	ASTM D5185m	>20	4	---	---
Fuel	%	ASTM D3524	>4.0	▲ 12.5	---	---
Water		WC Method	>0.1	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844		0	---	---
Nitration	Abs/cm	*ASTM D7624	>20	6.8	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.7	---	---
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	>0.1	NEG	---	---
Sodium	ppm	ASTM D5185m		19	---	---
Boron	ppm	ASTM D5185m		9	---	---
Barium	ppm	ASTM D5185m		8	---	---
Molybdenum	ppm	ASTM D5185m		6	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		11	---	---
Calcium	ppm	ASTM D5185m		1910	---	---
Phosphorus	ppm	ASTM D5185m		970	---	---
Zinc	ppm	ASTM D5185m		1181	---	---
Sulfur	ppm	ASTM D5185m		6945	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	8.8	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.1	---	---
Visc @ 100°C	cSt	ASTM D445	11.5	▲ 8.8	---	---

Fuel Dilution

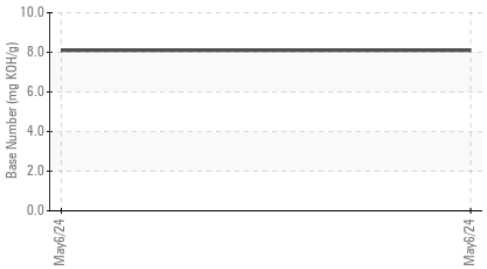


Viscosity @ 100°C

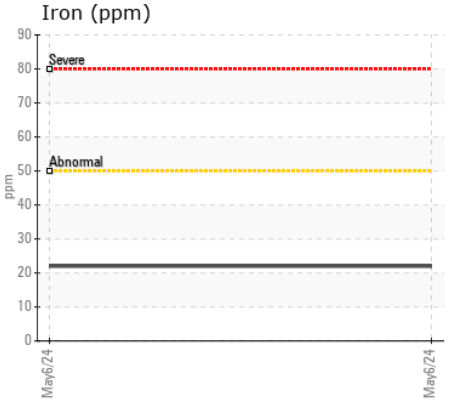
FT-IR (Direct Trend)



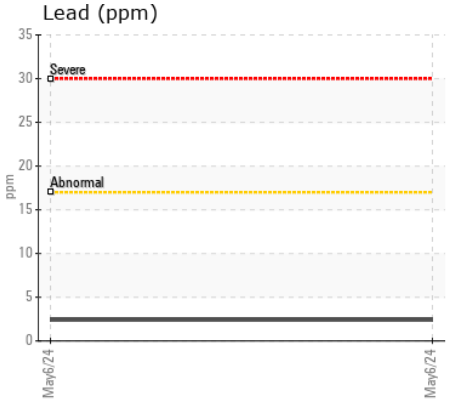
Base Number



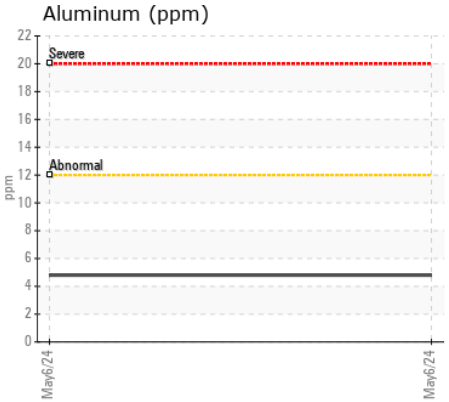
Iron (ppm)



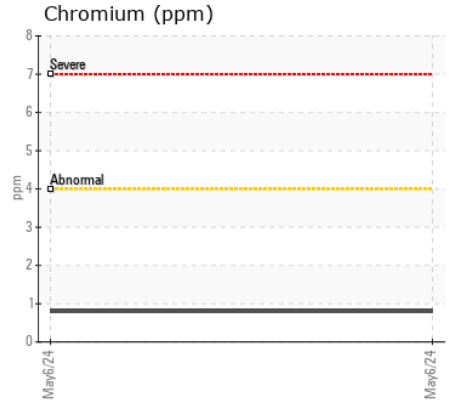
Lead (ppm)



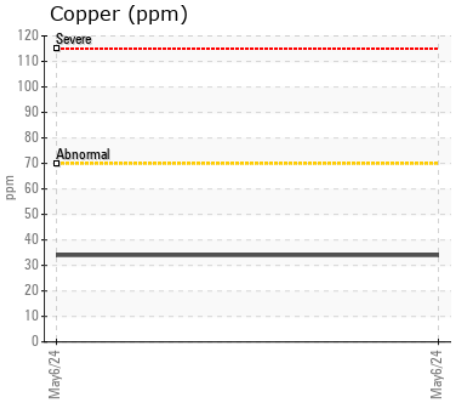
Aluminum (ppm)



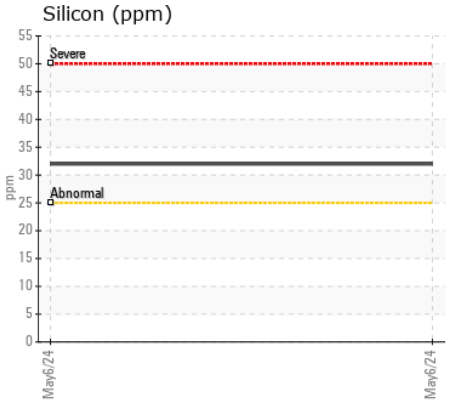
Chromium (ppm)



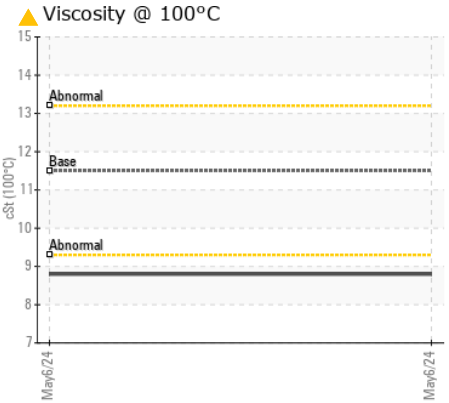
Copper (ppm)



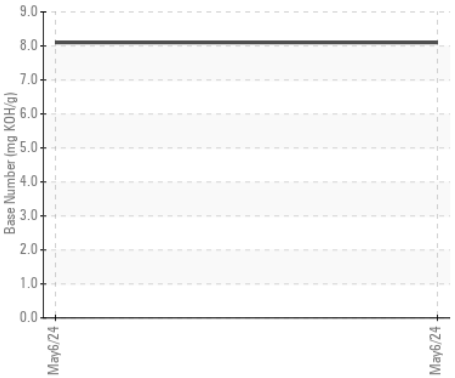
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VPA062015
Lab Number : 06176425
Unique Number : 11022478
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

Received : 10 May 2024
Tested : 16 May 2024
Diagnosed : 16 May 2024 - Jonathan Hester

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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