



VOLVO PENTA

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	ABNORMAL

Area
ROBB KENYON [DANIEL/502471]

Machine Id
CUMMINS G14071549

Component
Genset

Fluid
CUMMINS CUMMINS BLUE 2000 15W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA059145	---	---
Sample Date		Client Info		20 Oct 2023	---	---
Machine Age	hrs	Client Info		329	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	2	---	---
Chromium	ppm	ASTM D5185m	>4	0	---	---
Nickel	ppm	ASTM D5185m	>2	0	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>5	0	---	---
Aluminum	ppm	ASTM D5185m	>12	1	---	---
Lead	ppm	ASTM D5185m	>17	0	---	---
Copper	ppm	ASTM D5185m	>70	1	---	---
Tin	ppm	ASTM D5185m	>15	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

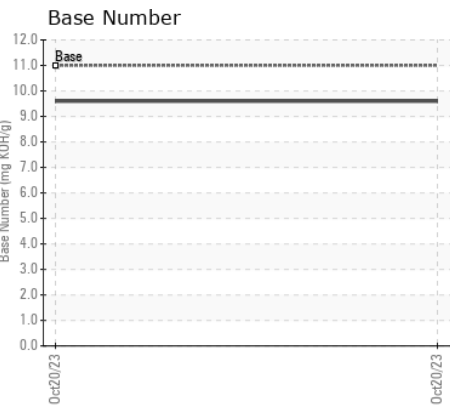
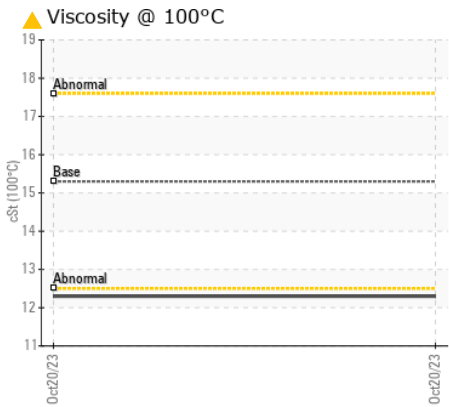
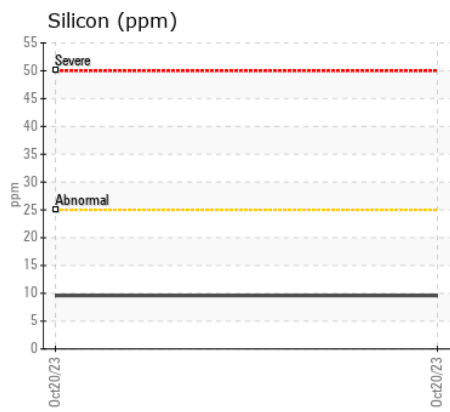
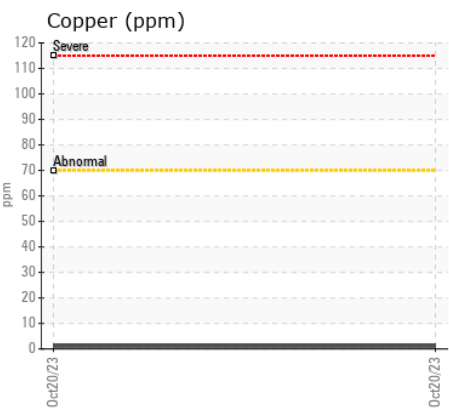
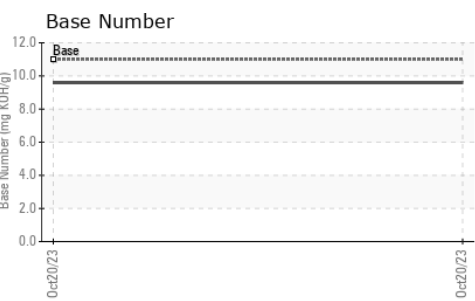
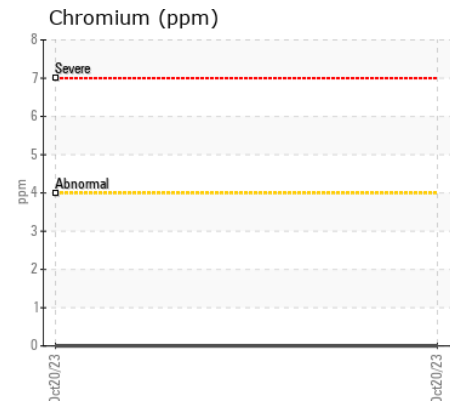
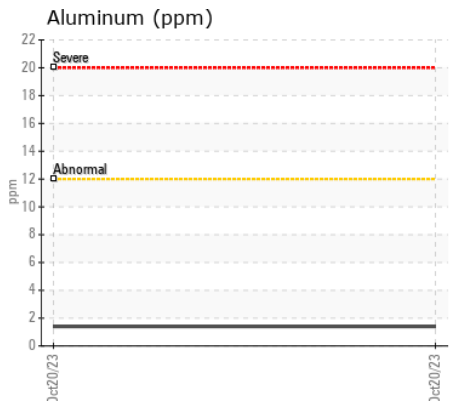
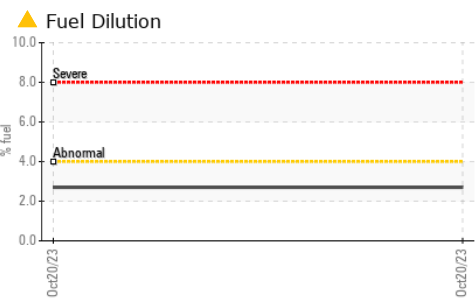
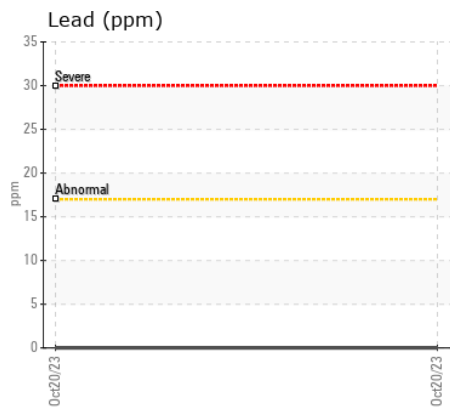
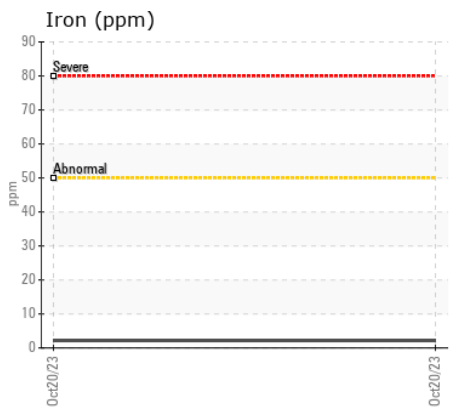
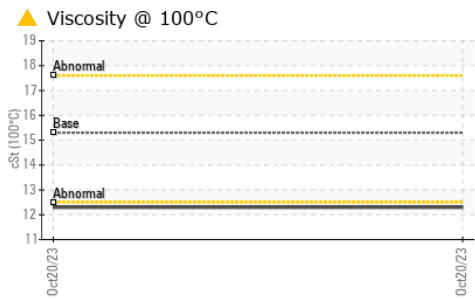
Light fuel dilution occurring.

Silicon	ppm	ASTM D5185m	>25	10	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---
Fuel	%	ASTM D3524	>4.0	▲ 2.7	---	---
Water		WC Method	>0.1	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844		0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	5.4	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.3	---	---
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	---	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity.

Sodium	ppm	ASTM D5185m		4	---	---
Boron	ppm	ASTM D5185m	1.7	61	---	---
Barium	ppm	ASTM D5185m	0.1	0	---	---
Molybdenum	ppm	ASTM D5185m	0.0	66	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m	12	914	---	---
Calcium	ppm	ASTM D5185m	2946	1086	---	---
Phosphorus	ppm	ASTM D5185m	1002	788	---	---
Zinc	ppm	ASTM D5185m	1288	1154	---	---
Sulfur	ppm	ASTM D5185m	5265	3052	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.1	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	9.6	---	---
Visc @ 100°C	cSt	ASTM D445	15.3	▲ 12.3	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VPA059145
Lab Number : 05988893
Unique Number : 10711555
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

Received : 25 Oct 2023
Tested : 27 Oct 2023
Diagnosed : 27 Oct 2023 - Sean Felton

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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)