



OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Area

MINING

Machine Id

ME-304 KOMATSU PC490 A84012

Component

Diesel Engine

Fluid

SHELL RIMULA SUPER SAE 15W40 (--- GAL)

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

▲ Contamination

Sodium and/or potassium levels are high. Test for glycol is negative.

▲ 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	history1	history2
Sample Number	Client Info		WC0938507	---	---
Sample Date	Client Info		20 May 2024	---	---
Machine Age	hrs	Client Info	12863	---	---
Oil Age	hrs	Client Info	241	---	---
Oil Changed	Client Info		Not Chngd	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	---	---
Water	WC Method	>0.2	NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	28	---	---
Chromium	ppm	ASTM D5185m >20	<1	---	---
Nickel	ppm	ASTM D5185m >4	<1	---	---
Titanium	ppm	ASTM D5185m	<1	---	---
Silver	ppm	ASTM D5185m >3	<1	---	---
Aluminum	ppm	ASTM D5185m >20	2	---	---
Lead	ppm	ASTM D5185m >40	2	---	---
Copper	ppm	ASTM D5185m >330	7	---	---
Tin	ppm	ASTM D5185m >15	2	---	---
Vanadium	ppm	ASTM D5185m	<1	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	130	---	---
Barium	ppm	ASTM D5185m	0	---	---
Molybdenum	ppm	ASTM D5185m	6	---	---
Manganese	ppm	ASTM D5185m	<1	---	---
Magnesium	ppm	ASTM D5185m	14	---	---
Calcium	ppm	ASTM D5185m 2840	2177	---	---
Phosphorus	ppm	ASTM D5185m 1150	1095	---	---
Zinc	ppm	ASTM D5185m 1270	1199	---	---
Sulfur	ppm	ASTM D5185m 2829	4024	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	6	---	---
Sodium	ppm	ASTM D5185m	▲ 54	---	---
Potassium	ppm	ASTM D5185m >20	▲ 77	---	---
Glycol	%	*ASTM D2982	NEG	---	---

INFRA-RED

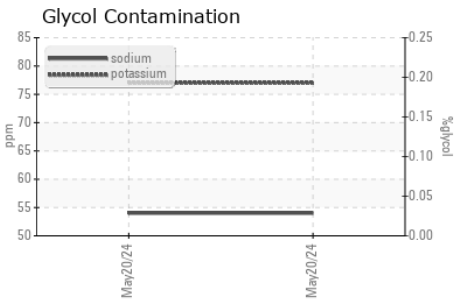
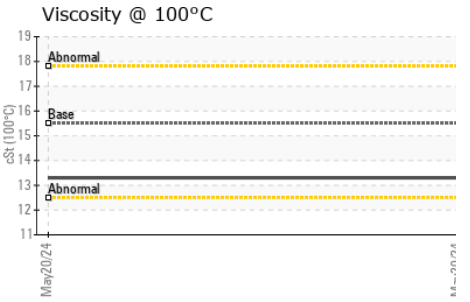
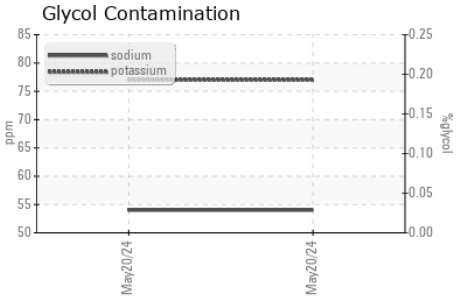
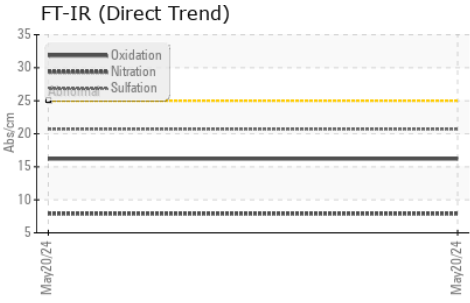
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.5	---	---
Nitration	Abs/cm	*ASTM D7624 >20	7.9	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.7	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	16.2	---	---
Base Number (BN)	mg KOH/g	ASTM D2896 10.6	7.5	---	---



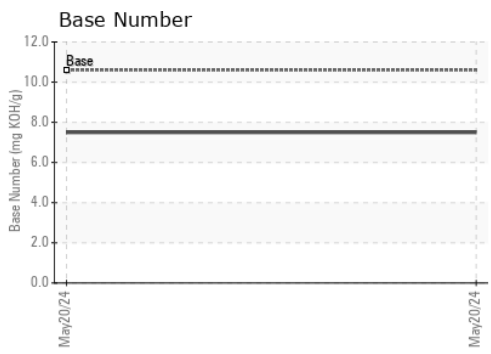
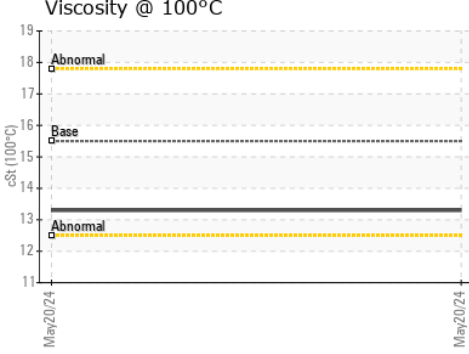
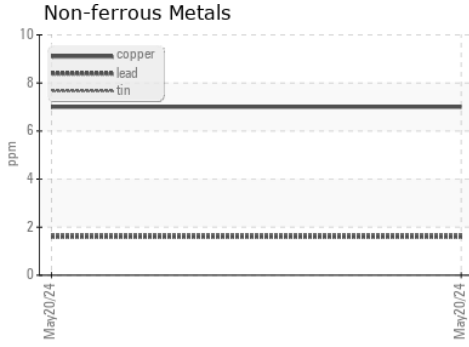
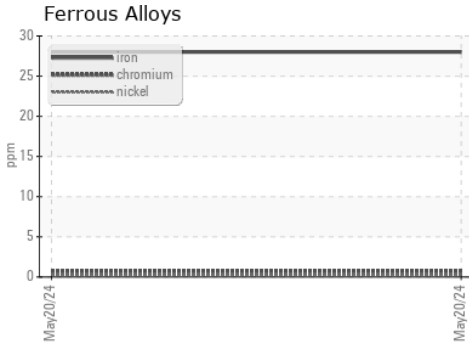
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
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	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.5	13.3	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0938507 **Received** : 20 May 2024
Lab Number : 06185605 **Tested** : 23 May 2024
Unique Number : 11036931 **Diagnosed** : 23 May 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: Glycol, TBN)

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 TROUP, TX
 US 75789
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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)