



OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area

MINING [ME-135]

Machine Id

ME-135 KOMATSU WA500-8 A97799

Component

Diesel Engine

Fluid

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

DIAGNOSIS

▲ Recommendation

Oil and filter 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

The lead level is abnormal. 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 acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0950097	---	---
Sample Date	Client Info		19 Jun 2024	---	---
Machine Age	hrs	Client Info	6438	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	---	---
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		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	4	---
Lead	ppm	ASTM D5185m	>40	▲ 65	---
Copper	ppm	ASTM D5185m	>330	3	---
Tin	ppm	ASTM D5185m	>15	2	---
Vanadium	ppm	ASTM D5185m		<1	---
Cadmium	ppm	ASTM D5185m		<1	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		24	---
Barium	ppm	ASTM D5185m		2	---
Molybdenum	ppm	ASTM D5185m		160	---
Manganese	ppm	ASTM D5185m		<1	---
Magnesium	ppm	ASTM D5185m		818	---
Calcium	ppm	ASTM D5185m	2840	1500	---
Phosphorus	ppm	ASTM D5185m	1150	846	---
Zinc	ppm	ASTM D5185m	1270	1033	---
Sulfur	ppm	ASTM D5185m	2829	3224	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	8	---
Sodium	ppm	ASTM D5185m		4	---
Potassium	ppm	ASTM D5185m	>20	2	---

INFRA-RED

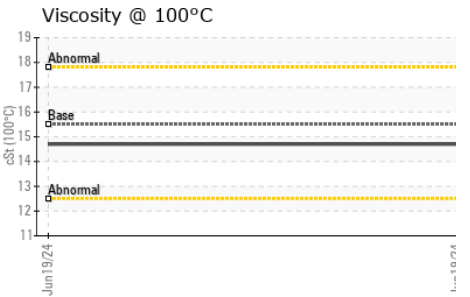
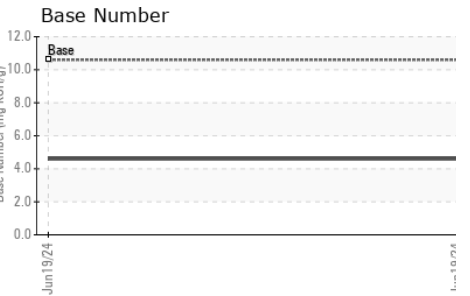
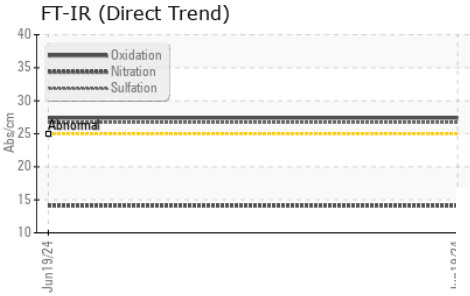
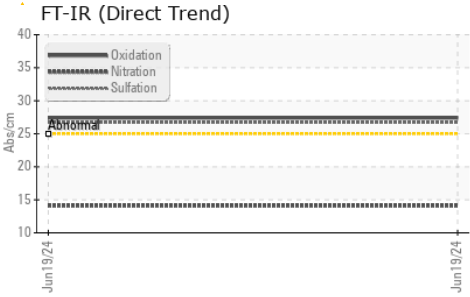
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.9	---
Nitration	Abs/cm	*ASTM D7624	>20	14.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.7	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	27.4	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.6	4.6	---



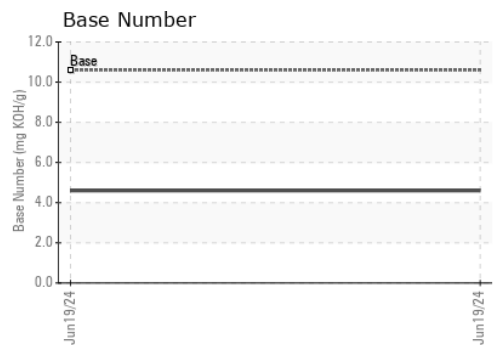
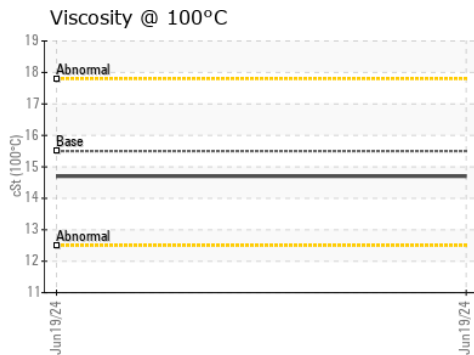
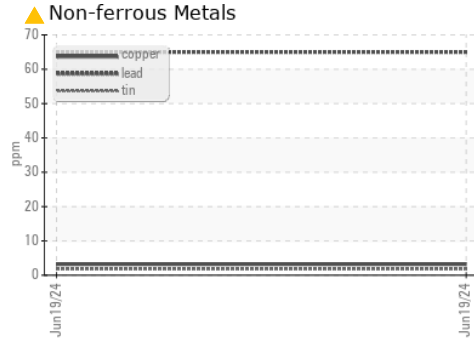
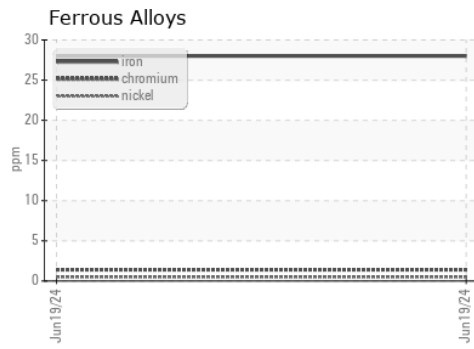
OIL ANALYSIS REPORT



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	14.7	---	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0950097 **Received** : 24 Jun 2024
Lab Number : 06217833 **Tested** : 25 Jun 2024
Unique Number : 11096030 **Diagnosed** : 25 Jun 2024 - Don Baldrige
Test Package : CONST (Additional Tests: TBN)

COVIA - CRANE - 203
 10750 FM 1233
 CRANE, TX
 US 79731
 Contact: Jeremy Moore
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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)