

OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id
TAKEUCHI TL12 412107588

Component
Diesel Engine

Fluid
VALVOLINE 15W40 (--- GAL)

DIAGNOSIS

▲ Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

▲ Contamination

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

● Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		ML0000547	---	---
Sample Date	Client Info		18 Mar 2024	---	---
Machine Age	hrs	Client Info	55	---	---
Oil Age	hrs	Client Info	55	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	---	---

WEAR METALS

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

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 39	165	---	---
Barium	ppm	ASTM D5185m 1	2	---	---
Molybdenum	ppm	ASTM D5185m 49	150	---	---
Manganese	ppm	ASTM D5185m 1	2	---	---
Magnesium	ppm	ASTM D5185m 616	30	---	---
Calcium	ppm	ASTM D5185m 1554	2722	---	---
Phosphorus	ppm	ASTM D5185m 899	450	---	---
Zinc	ppm	ASTM D5185m 1069	559	---	---
Sulfur	ppm	ASTM D5185m 2624	3609	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	23	---	---
Sodium	ppm	ASTM D5185m	3	---	---
Potassium	ppm	ASTM D5185m >20	▲ 162	---	---
Fuel	%	ASTM D3524 >5	0.0	---	---
Glycol	%	*ASTM D2982	NEG	---	---

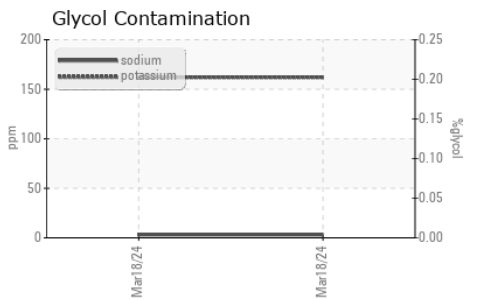
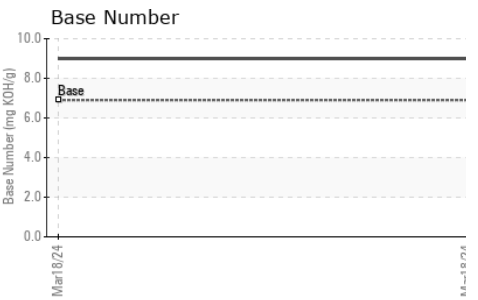
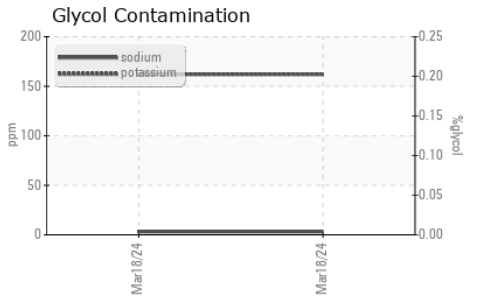
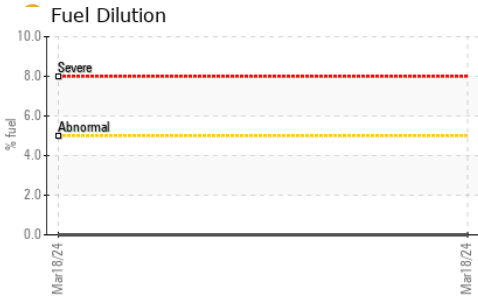
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624 >20	5.9	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	14.1	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	7.2	---	---
Base Number (BN)	mg KOH/g	ASTM D2896 6.9	9.0	---	---

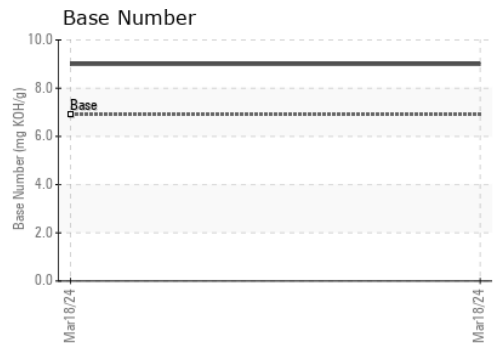
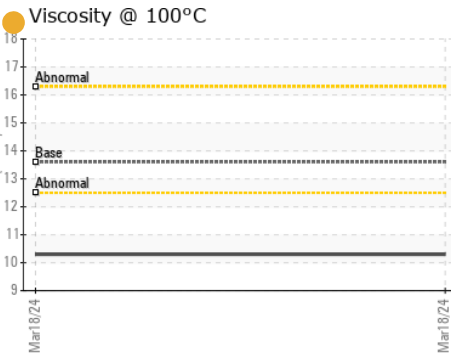
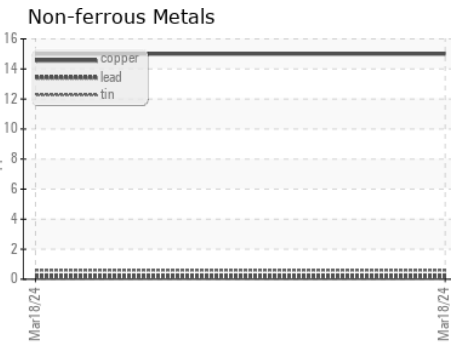
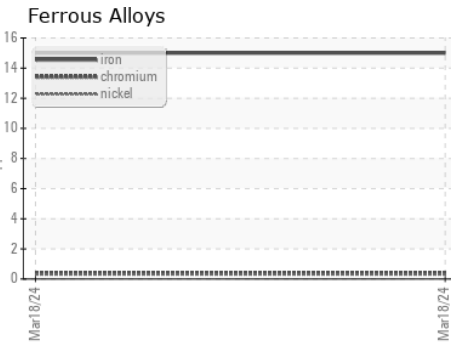
OIL ANALYSIS REPORT



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	13.6	● 10.3	---	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0000547 **Received** : 19 Mar 2024
Lab Number : 06122184 **Tested** : 26 Mar 2024
Unique Number : 10936335 **Diagnosed** : 26 Mar 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: FuelDilution, Glycol, PercentFuel, TBN)

McCLUNG-LOGAN EQUIPMENT CO - FREDERICKSBURG
 358 KINGS HWY
 FREDERICKSBURG, VA
 US 22405
 Contact: TIM LAMBERT
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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)

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F: