



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id  
**TAKEUCHI TL10V2 410007383**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ML0000830</b>	ML0000502	---
Sample Date		Client Info		<b>21 Feb 2024</b>	10 Jan 2024	---
Machine Age	hrs	Client Info		<b>148</b>	30	---
Oil Age	hrs	Client Info		<b>118</b>	0	---
Filter Age	hrs	Client Info		<b>118</b>	0	---
Oil Changed		Client Info		<b>Not Changd</b>	N/A	---
Filter Changed		Client Info		<b>N/A</b>	N/A	---
Sample Status				<b>ATTENTION</b>	ATTENTION	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>8</b>	6	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	2	---
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m	>330	<b>15</b>	21	---
Tin	ppm	ASTM D5185m	>15	<b>0</b>	1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

**CONTAMINATION**

There is no indication of any contamination in the oil.

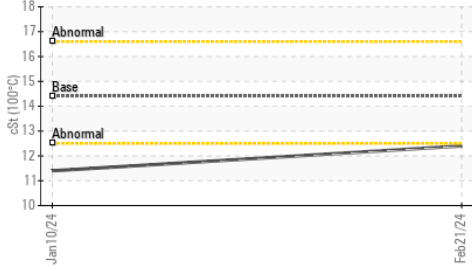
Silicon	ppm	ASTM D5185m	>25	<b>8</b>	12	---
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	<1	---
Fuel	%	ASTM D3524	>5	<b>&lt;1.0</b>	0.3	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.1</b>	5.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.9</b>	16.4	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	---

**FLUID CONDITION**

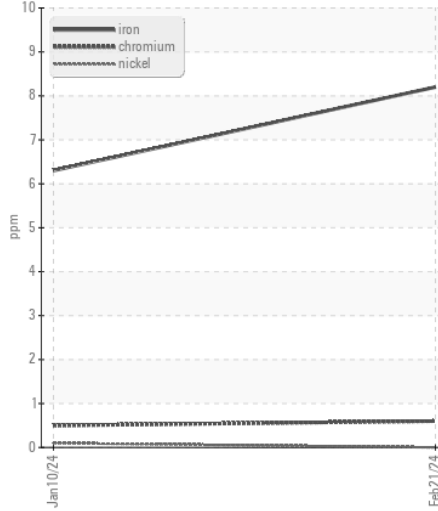
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>158	<b>9</b>	11	---
Boron	ppm	ASTM D5185m	250	<b>57</b>	15	---
Barium	ppm	ASTM D5185m	10	<b>&lt;1</b>	2	---
Molybdenum	ppm	ASTM D5185m	100	<b>8</b>	10	---
Manganese	ppm	ASTM D5185m		<b>2</b>	2	---
Magnesium	ppm	ASTM D5185m	450	<b>80</b>	75	---
Calcium	ppm	ASTM D5185m	3000	<b>2323</b>	2201	---
Phosphorus	ppm	ASTM D5185m	1150	<b>912</b>	994	---
Zinc	ppm	ASTM D5185m	1350	<b>1116</b>	1069	---
Sulfur	ppm	ASTM D5185m	4250	<b>3616</b>	3808	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.0</b>	10.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>8.0</b>	8.5	---
Visc @ 100°C	cSt	ASTM D445	14.4	<b>▲ 12.4</b>	▲ 11.4	---

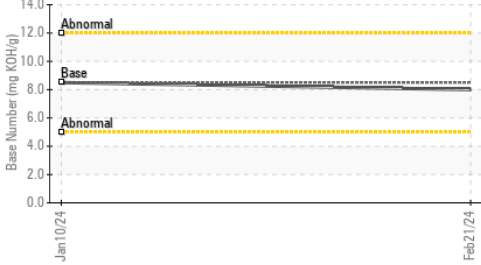
▲ Viscosity @ 100°C



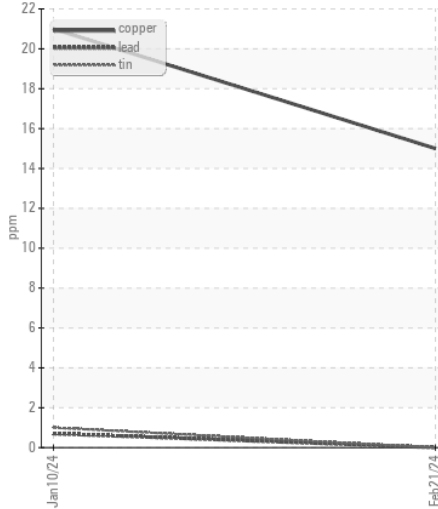
Ferrous Alloys



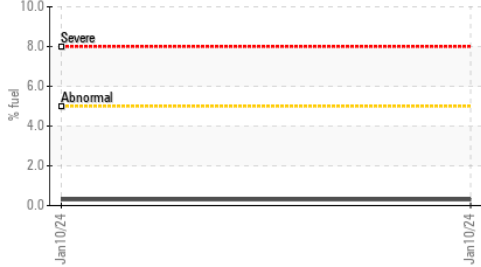
Base Number



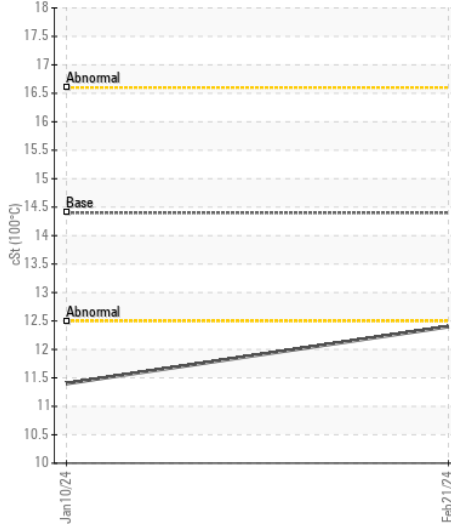
Non-ferrous Metals



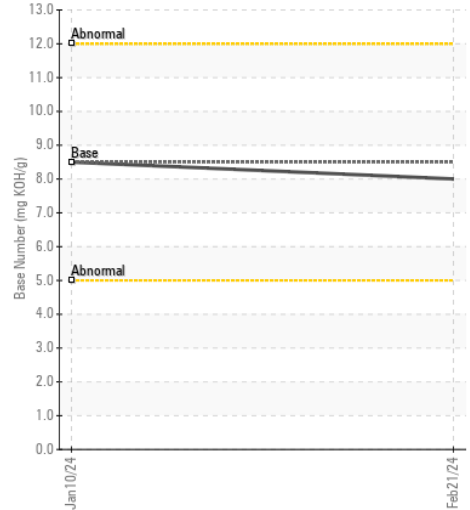
Fuel Dilution



▲ Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : ML0000830

Lab Number : 06098927

Unique Number : 10897157

Test Package : CONST ( Additional Tests: FuelDilution, TBN )

Received : 23 Feb 2024

Tested : 26 Feb 2024

Diagnosed : 26 Feb 2024 - Don Baldrige

MCCLEUNG-LOGAN EQUIPMENT CO - RICHMOND

1345 MOUNTAIN ROAD

GLEN ALLEN, VA

US 23060

Contact: KYLE RATLIFFE

KRATLIFFE@MCCLEUNG-LOGAN.COM

T:

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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