



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION

Area
[PATTONS PROPERTY]
 Machine Id
TAKEUCHI TB260 126109056
 Component
Diesel Engine
 Fluid
VALVOLINE 15W40 (--- GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0000543	---	---
Sample Date		Client Info		06 Feb 2024	---	---
Machine Age	hrs	Client Info		36	---	---
Oil Age	hrs	Client Info		36	---	---
Filter Age	hrs	Client Info		36	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	10	---	---
Chromium	ppm	ASTM D5185m	>20	<1	---	---
Nickel	ppm	ASTM D5185m	>4	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>3	<1	---	---
Aluminum	ppm	ASTM D5185m	>20	3	---	---
Lead	ppm	ASTM D5185m	>40	<1	---	---
Copper	ppm	ASTM D5185m	>330	12	---	---
Tin	ppm	ASTM D5185m	>15	1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

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

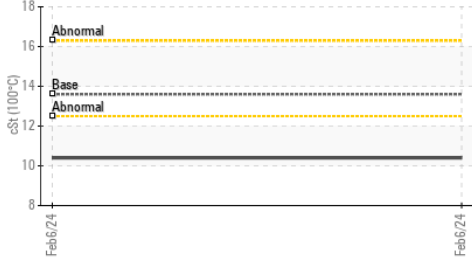
Silicon	ppm	ASTM D5185m	>25	40	---	---
Potassium	ppm	ASTM D5185m	>20	▲ 197	---	---
Fuel	%	ASTM D3524	>5	0.7	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol	%	*ASTM D2982		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	5.8	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.9	---	---
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	---	---

FLUID CONDITION

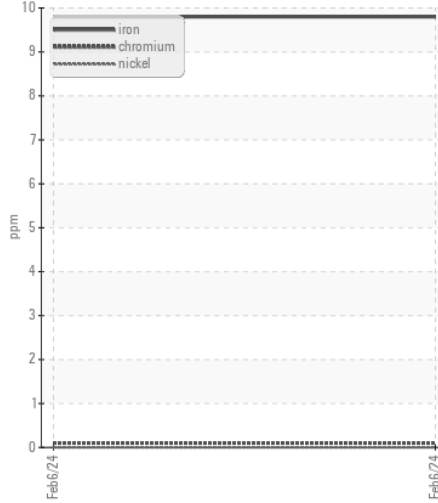
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		13	---	---
Boron	ppm	ASTM D5185m	39	228	---	---
Barium	ppm	ASTM D5185m	1	5	---	---
Molybdenum	ppm	ASTM D5185m	49	164	---	---
Manganese	ppm	ASTM D5185m	1	<1	---	---
Magnesium	ppm	ASTM D5185m	616	19	---	---
Calcium	ppm	ASTM D5185m	1554	2064	---	---
Phosphorus	ppm	ASTM D5185m	899	651	---	---
Zinc	ppm	ASTM D5185m	1069	755	---	---
Sulfur	ppm	ASTM D5185m	2624	2810	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.8	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	6.9	7.2	---	---
Visc @ 100°C	cSt	ASTM D445	13.6	▲ 10.4	---	---

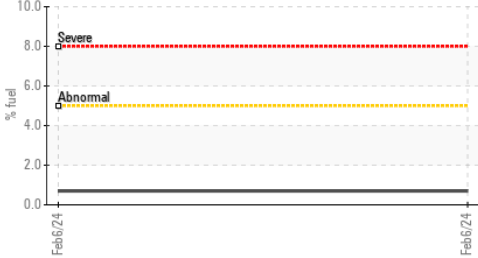
▲ Viscosity @ 100°C



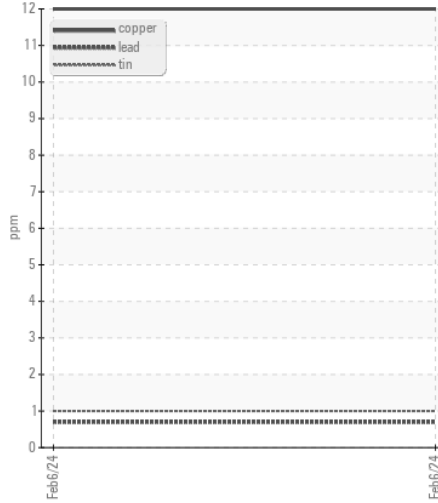
Ferrous Alloys



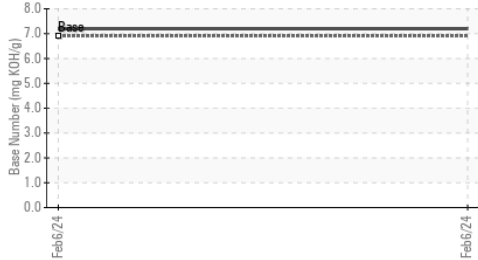
Fuel Dilution



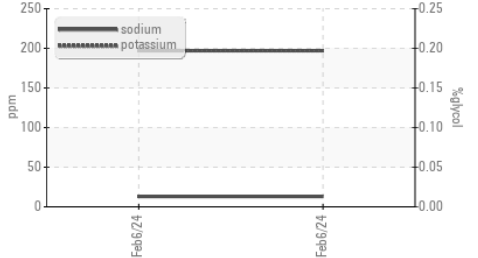
Non-ferrous Metals



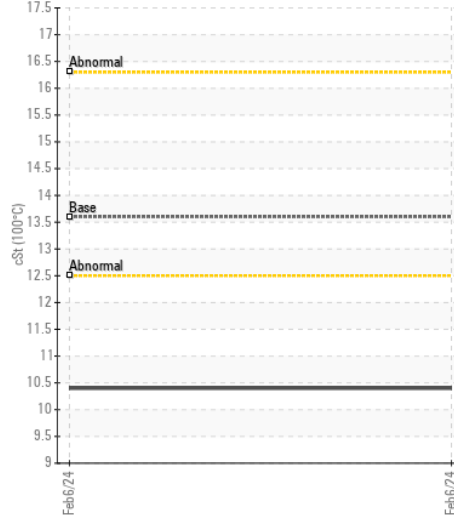
Base Number



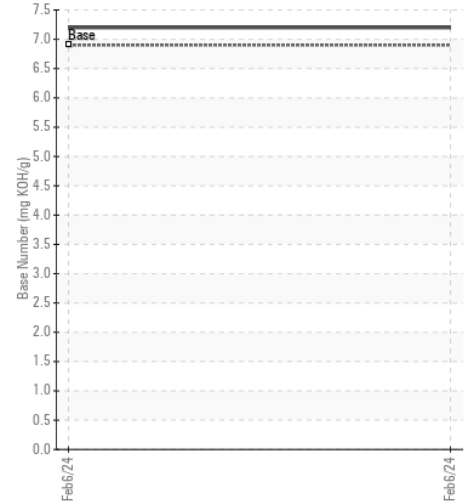
Glycol Contamination



▲ Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0000543
Lab Number : 06082931
Unique Number : 10870376
Test Package : CONST (Additional Tests: FuelDilution, Glycol, PercentFuel, TBN)

Received : 07 Feb 2024
Tested : 09 Feb 2024
Diagnosed : 09 Feb 2024 - Jonathan Hester

MCCLOG-LOGAN EQUIPMENT CO - FREDERICKSBURG
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 US 22405
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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)