



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
3239
Component
Diesel Engine
Fluid
SHELL 15W40 (--- QTS)

RECOMMENDATION

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

WEAR

All component wear rates are normal.

CONTAMINATION

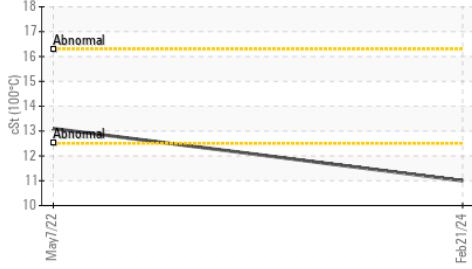
Fuel content negligible. There is no indication of any contamination in the oil.

FLUID CONDITION

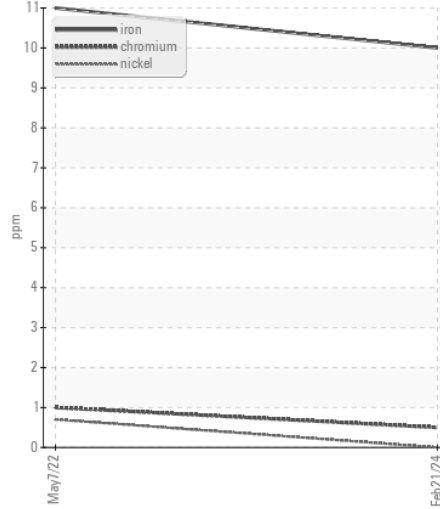
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0886838	WC0678478	---
Sample Date		Client Info		21 Feb 2024	07 May 2022	---
Machine Age	mls	Client Info		461374	264712	---
Oil Age	mls	Client Info		28732	24011	---
Filter Age	mls	Client Info		28732	24011	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ATTENTION	NORMAL	---
Iron	ppm	ASTM D5185m	>100	10	11	---
Chromium	ppm	ASTM D5185m	>20	<1	1	---
Nickel	ppm	ASTM D5185m	>4	0	<1	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	0	<1	---
Aluminum	ppm	ASTM D5185m	>20	3	4	---
Lead	ppm	ASTM D5185m	>40	3	2	---
Copper	ppm	ASTM D5185m	>330	1	1	---
Tin	ppm	ASTM D5185m	>15	1	1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>25	3	4	---
Potassium	ppm	ASTM D5185m	>20	1	3	---
Fuel	%	ASTM D3524	>5	1.6	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.3	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	9.8	15.0	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.3	21.4	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---
Sodium	ppm	ASTM D5185m	>150	<1	<1	---
Boron	ppm	ASTM D5185m		2	55	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		55	56	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		906	312	---
Calcium	ppm	ASTM D5185m		982	1788	---
Phosphorus	ppm	ASTM D5185m		948	923	---
Zinc	ppm	ASTM D5185m		1234	1120	---
Sulfur	ppm	ASTM D5185m		2734	2727	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.6	15.2	---
Base Number (BN)	mg KOH/g	ASTM D2896		6.7	13.8	---
Visc @ 100°C	cSt	ASTM D445		11.0	13.1	---

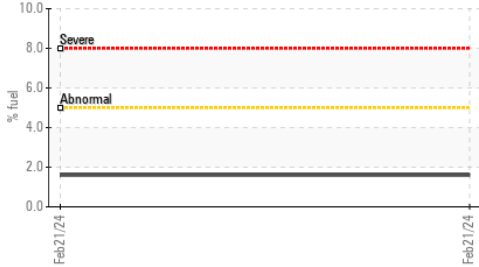
● Viscosity @ 100°C



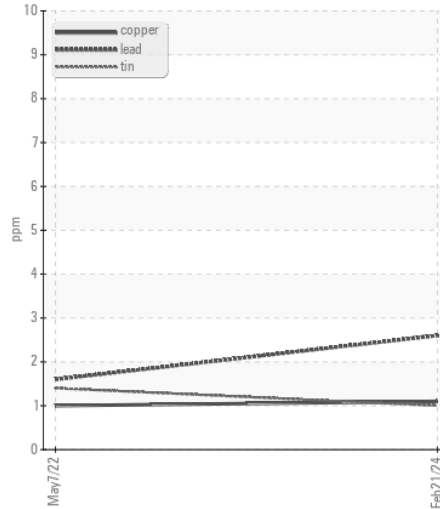
Ferrous Alloys



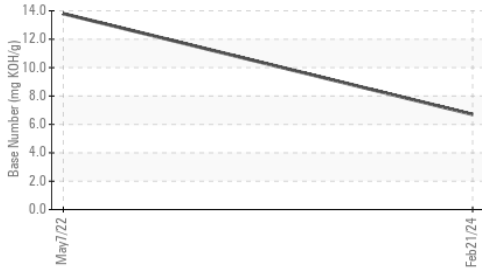
Fuel Dilution



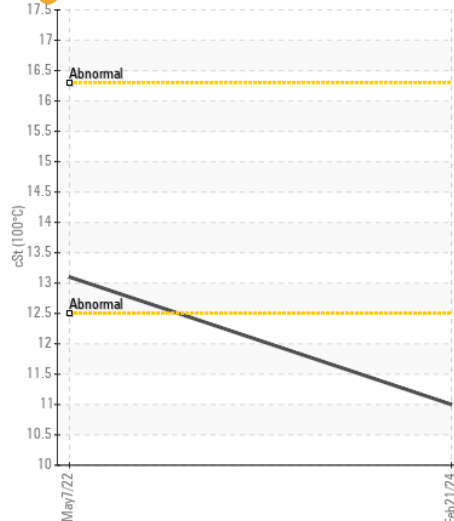
Non-ferrous Metals



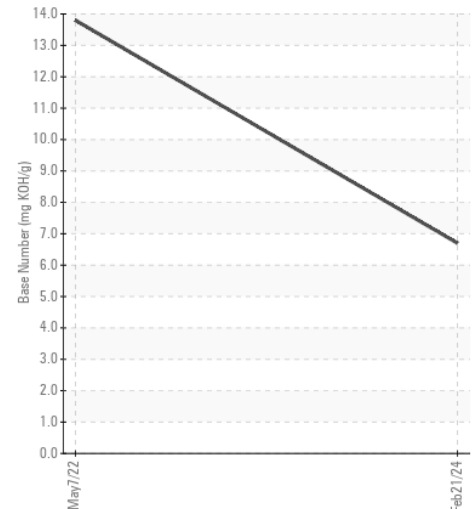
Base Number



● Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0886838 **Received** : 01 Mar 2024
Lab Number : 06105852 **Tested** : 05 Mar 2024
Unique Number : 10909349 **Diagnosed** : 05 Mar 2024 - Don Baldrige
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

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 2801 MIDLAND BLVD.
 FORT SMITH, AR
 US 72904
 Contact: RON BALL
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 T: (479)441-3228
 F:

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)