



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**MTL 75BFMII 3251-02-06**  
 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>DC0026670</b>	DC0026456	---
Sample Date		Client Info		<b>13 Mar 2024</b>	22 Mar 2023	---
Machine Age	yrs	Client Info		<b>0</b>	1251	---
Oil Age	yrs	Client Info		<b>1</b>	51	---
Filter Age	yrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>N/A</b>	N/A	---
Sample Status				<b>NORMAL</b>	NORMAL	---

## WEAR

All component wear rates are normal.

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

## CONTAMINATION

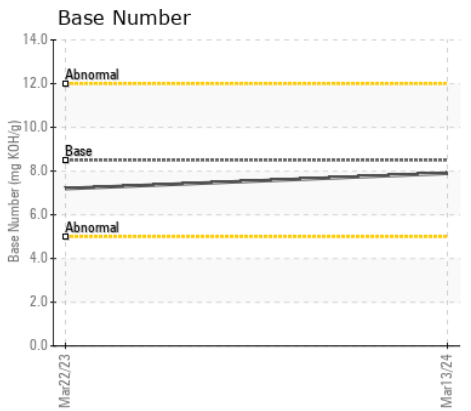
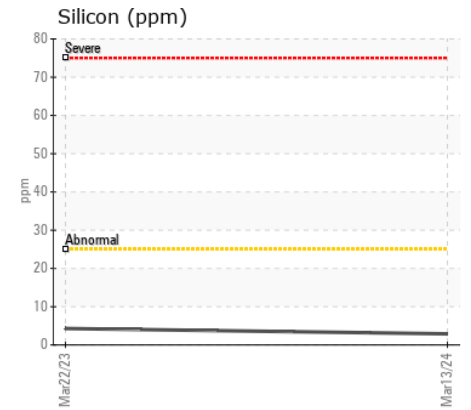
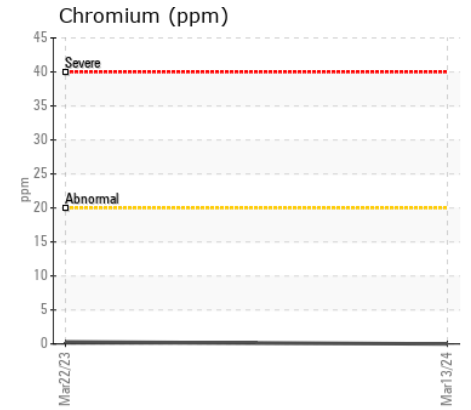
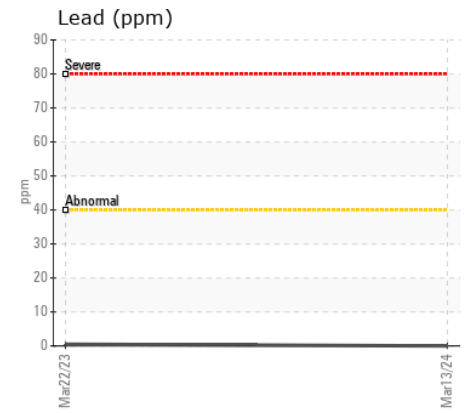
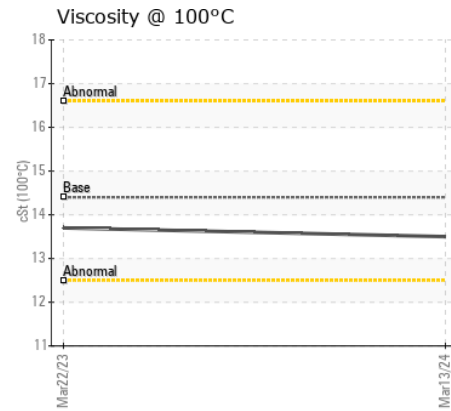
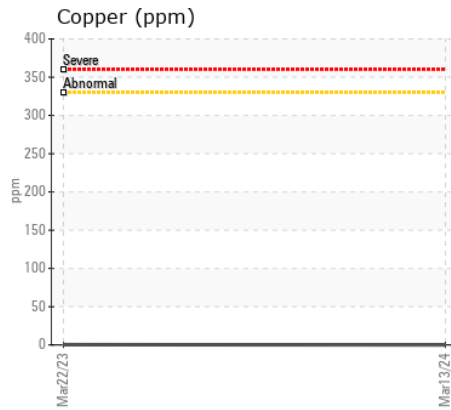
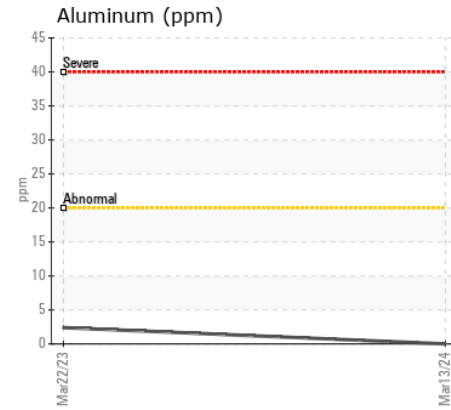
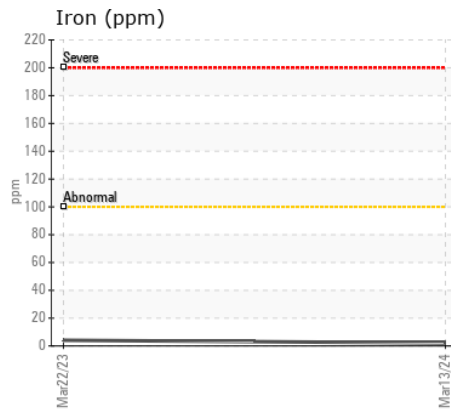
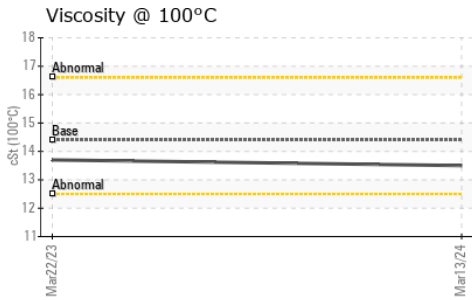
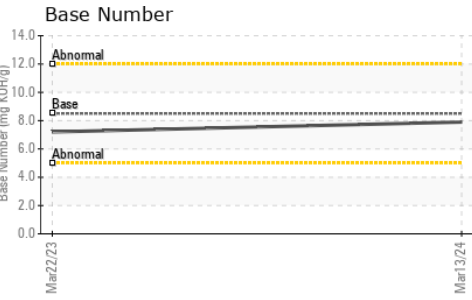
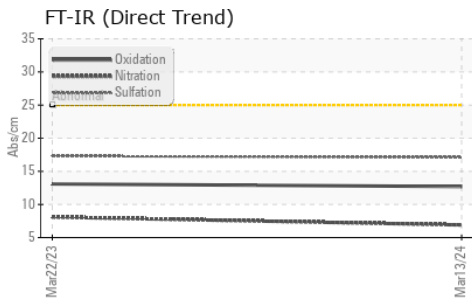
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>3</b>	4	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.9</b>	8.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.1</b>	17.3	---
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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>158	<b>1</b>	1	---
Boron	ppm	ASTM D5185m	250	<b>36</b>	90	---
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	100	<b>27</b>	86	---
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185m	450	<b>277</b>	29	---
Calcium	ppm	ASTM D5185m	3000	<b>2366</b>	2142	---
Phosphorus	ppm	ASTM D5185m	1150	<b>1108</b>	1012	---
Zinc	ppm	ASTM D5185m	1350	<b>1288</b>	1182	---
Sulfur	ppm	ASTM D5185m	4250	<b>4452</b>	3792	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.7</b>	13.1	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.9</b>	7.2	---
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.5</b>	13.7	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : DC0026670  
 Lab Number : 06146962  
 Unique Number : 10977040  
 Test Package : MOB 1 ( Additional Tests: TBN )

Received : 12 Apr 2024  
 Tested : 15 Apr 2024  
 Diagnosed : 15 Apr 2024 - Wes Davis

CRANWORKS INC - SPECIAL PROJECTS  
 11089 LEADBETTER ROAD  
 ASHLAND, VA  
 US 23005  
 Contact: JOSH DIXON  
 jdixon@vacranetworks.com

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)

T:  
F: