



# OIL ANALYSIS REPORT

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

Machine Id  
**2NU4891**  
Component  
**Diesel Engine**  
Fluid  
**{not provided} (--- QTS)**

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0865379</b>	---	---
Sample Date		Client Info		<b>27 Feb 2024</b>	---	---
Machine Age	hrs	Client Info		<b>317</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>N/A</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>ABNORMAL</b>	---	---

## WEAR

Piston, ring and cylinder wear is indicated.

Iron	ppm	ASTM D5185m	>100	<b>▲ 122</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	---	---
Nickel	ppm	ASTM D5185m	>4	<b>1</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>20	<b>▲ 44</b>	---	---
Lead	ppm	ASTM D5185m	>40	<b>2</b>	---	---
Copper	ppm	ASTM D5185m	>330	<b>2</b>	---	---
Tin	ppm	ASTM D5185m	>15	<b>19</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

## CONTAMINATION

There is no indication of any contamination in the oil.

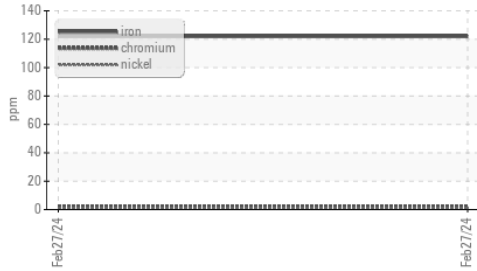
Silicon	ppm	ASTM D5185m	>25	<b>27</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	---	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.6</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.3</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	---	---

## FLUID CONDITION

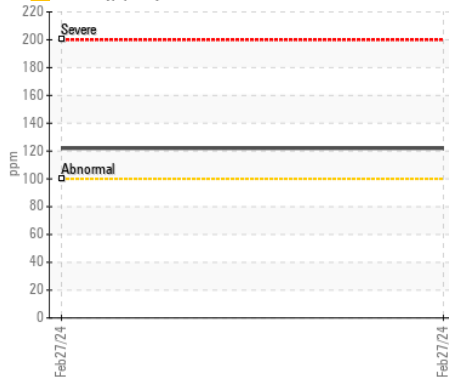
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>1</b>	---	---
Boron	ppm	ASTM D5185m		<b>118</b>	---	---
Barium	ppm	ASTM D5185m		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>64</b>	---	---
Manganese	ppm	ASTM D5185m		<b>2</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>665</b>	---	---
Calcium	ppm	ASTM D5185m		<b>1962</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>1164</b>	---	---
Zinc	ppm	ASTM D5185m		<b>1722</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>3655</b>	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.0</b>	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.42</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>10.53</b>	---	---
Visc @ 100°C	cSt	ASTM D445		<b>14.1</b>	---	---

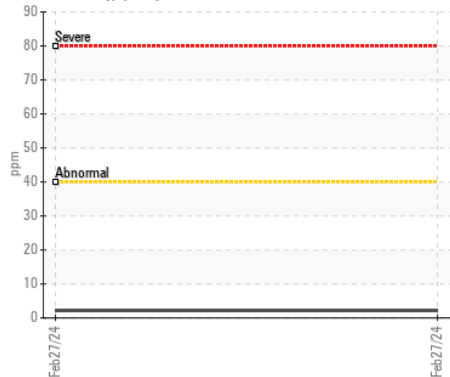
▲ Ferrous Alloys



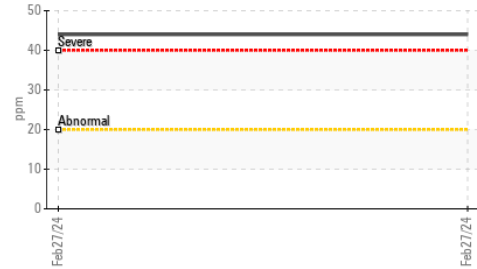
▲ Iron (ppm)



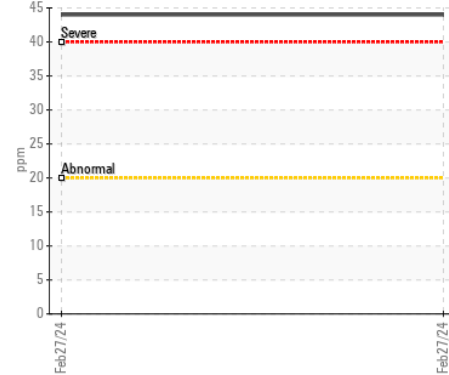
▲ Lead (ppm)



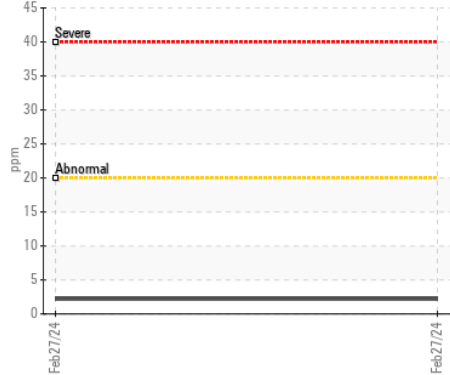
▲ Aluminum (ppm)



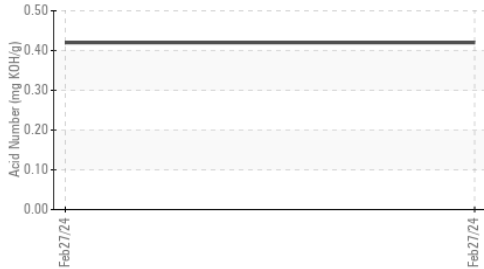
▲ Aluminum (ppm)



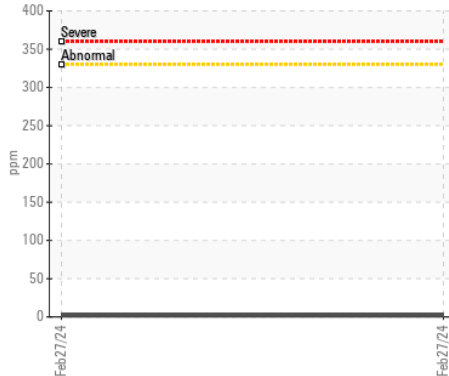
▲ Chromium (ppm)



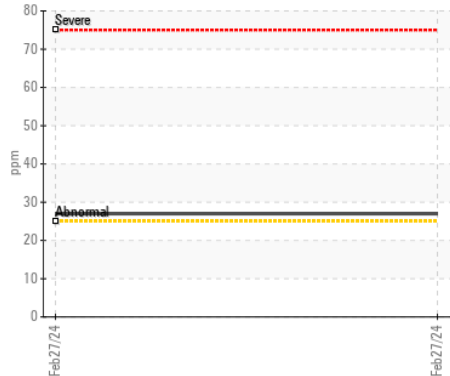
▲ Acid Number



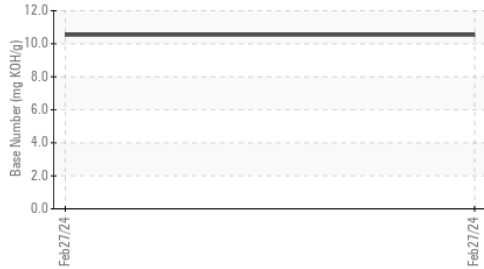
▲ Copper (ppm)



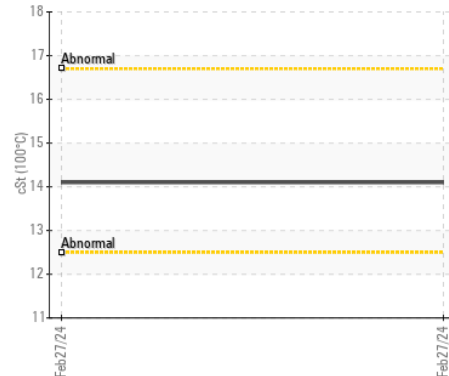
▲ Silicon (ppm)



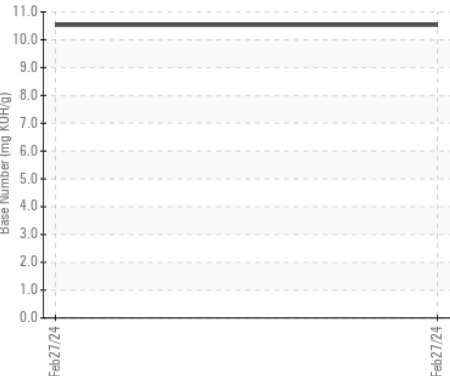
▲ Base Number



▲ Viscosity @ 100°C



▲ Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0865379  
**Lab Number** : 06103806  
**Unique Number** : 10902036  
**Test Package** : MOB 2  
**Received** : 28 Feb 2024  
**Tested** : 29 Feb 2024  
**Diagnosed** : 04 Mar 2024 - Jonathan Hester

**Engine Power Source**  
 PO BOX 29732  
 ROCK HILL, SC  
 US 29732  
 Contact: Doug Plyler  
 doug.plyler@enginepowersource.com  
 T: (704)944-1943  
 F: (704)944-1963

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)