



# OIL ANALYSIS REPORT

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

Machine Id  
**RO 90882**  
Component  
**Front Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (32 QTS)**

## RECOMMENDATION

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

## WEAR

The aluminum level is abnormal. All other metal levels are typical for a new component breaking in.

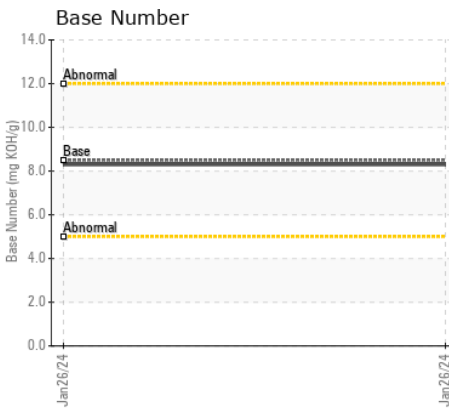
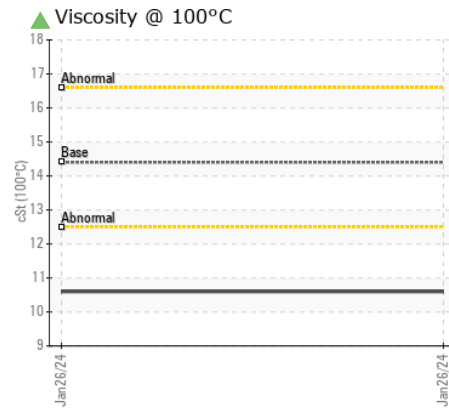
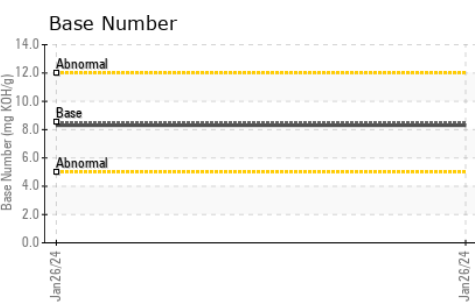
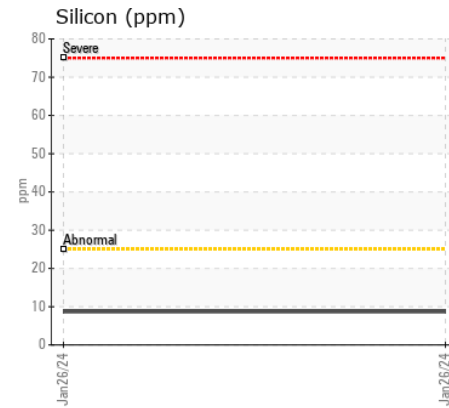
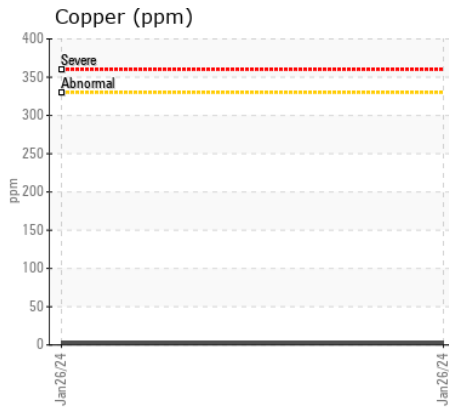
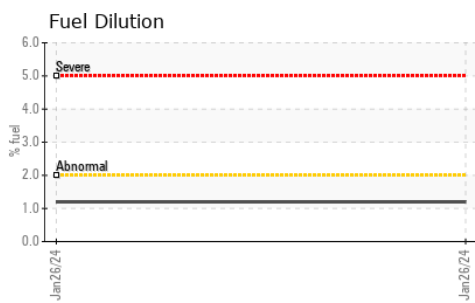
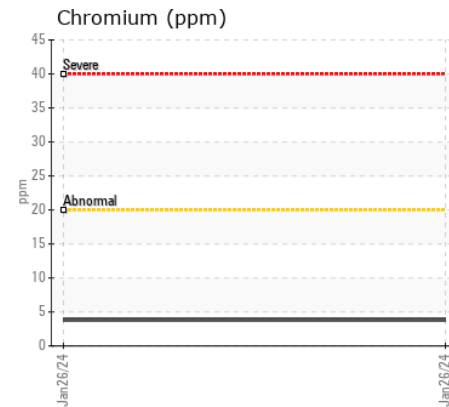
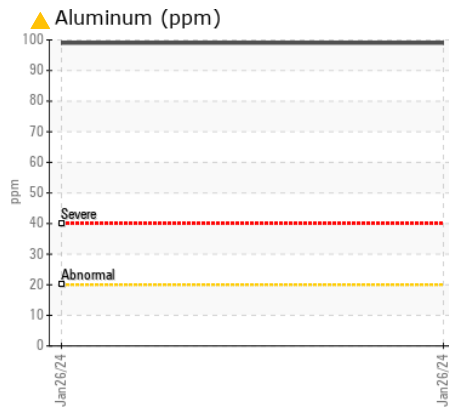
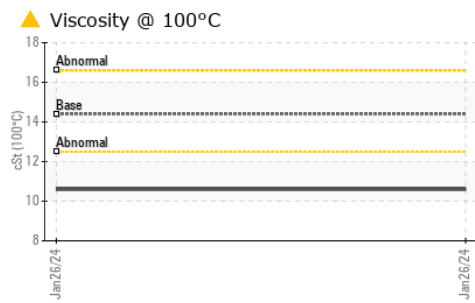
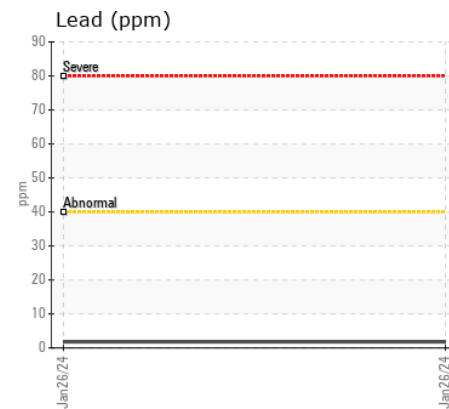
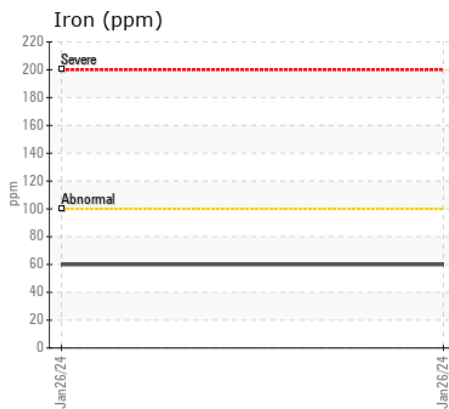
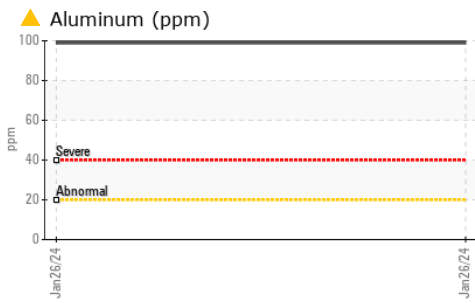
## CONTAMINATION

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		<b>WC0824050</b>	---	---
Sample Date		Client Info		<b>26 Jan 2024</b>	---	---
Machine Age	mls	Client Info		<b>50440</b>	---	---
Oil Age	mls	Client Info		<b>6000</b>	---	---
Filter Age	mls	Client Info		<b>6000</b>	---	---
Oil Changed		Client Info		<b>N/A</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>ABNORMAL</b>	---	---
Iron	ppm	ASTM D5185m	>100	<b>60</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>4</b>	---	---
Nickel	ppm	ASTM D5185m	>4	<b>2</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>20	<b>▲ 99</b>	---	---
Lead	ppm	ASTM D5185m	>40	<b>2</b>	---	---
Copper	ppm	ASTM D5185m	>330	<b>3</b>	---	---
Tin	ppm	ASTM D5185m	>15	<b>1</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Silicon	ppm	ASTM D5185m	>25	<b>9</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	---	---
Fuel	%	ASTM D3524	>2.0	<b>1.2</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.0</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.6</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>	---	---
Sodium	ppm	ASTM D5185m	>158	<b>2</b>	---	---
Boron	ppm	ASTM D5185m	250	<b>96</b>	---	---
Barium	ppm	ASTM D5185m	10	<b>8</b>	---	---
Molybdenum	ppm	ASTM D5185m	100	<b>77</b>	---	---
Manganese	ppm	ASTM D5185m		<b>1</b>	---	---
Magnesium	ppm	ASTM D5185m	450	<b>576</b>	---	---
Calcium	ppm	ASTM D5185m	3000	<b>1141</b>	---	---
Phosphorus	ppm	ASTM D5185m	1150	<b>846</b>	---	---
Zinc	ppm	ASTM D5185m	1350	<b>952</b>	---	---
Sulfur	ppm	ASTM D5185m	4250	<b>3025</b>	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.0</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>8.3</b>	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	<b>▲ 10.6</b>	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0824050 **Received** : 01 Feb 2024  
**Lab Number** : 06077373 **Tested** : 05 Feb 2024  
**Unique Number** : 10859464 **Diagnosed** : 05 Feb 2024 - Jonathan Hester  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel, TBN )

**ATEL BUS & TRUCK**  
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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)