



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**INTERNATIONAL 330**  
Component  
**Diesel Engine**  
Fluid  
**SERVICE PRO 15W40 SYN BLEND (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>RW0005403</b>	RW0004768	RW0004527
Sample Date		Client Info		<b>17 Apr 2024</b>	26 Dec 2023	17 Oct 2023
Machine Age	mls	Client Info		<b>376783</b>	363159	350121
Oil Age	mls	Client Info		<b>13624</b>	13038	14962
Filter Age	mls	Client Info		<b>13624</b>	13038	14962
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	<b>23</b>	18	17
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	1	1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	5	6
Lead	ppm	ASTM D5185m	>150	<b>3</b>	5	11
Copper	ppm	ASTM D5185m	>90	<b>0</b>	1	2
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

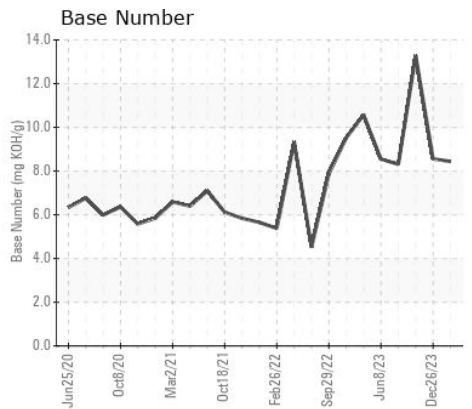
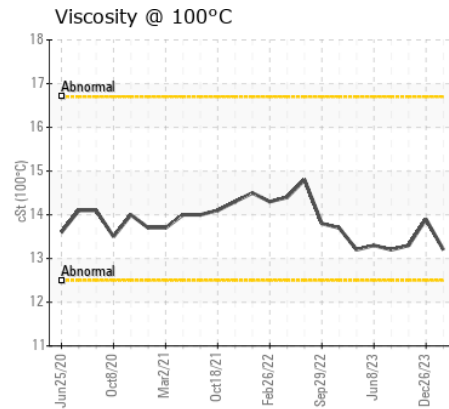
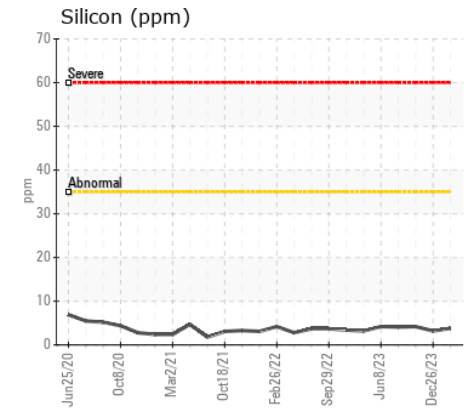
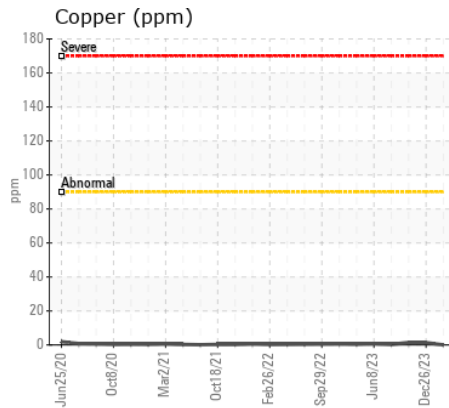
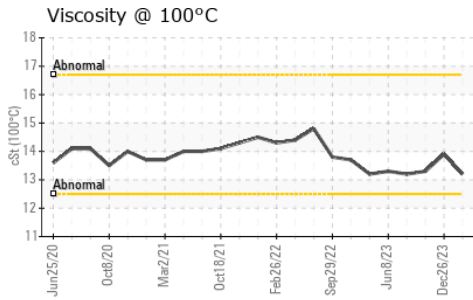
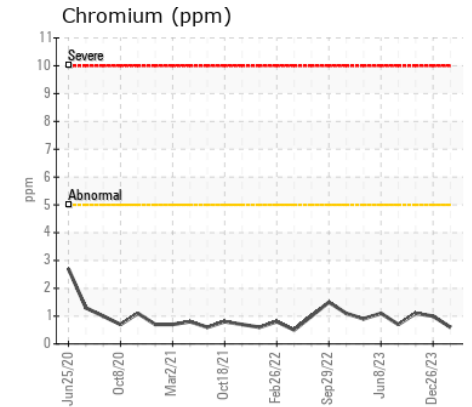
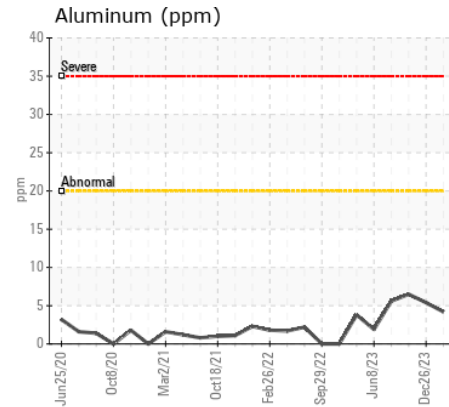
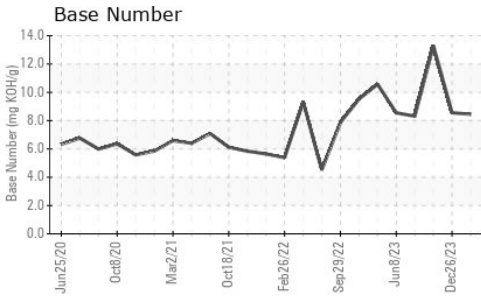
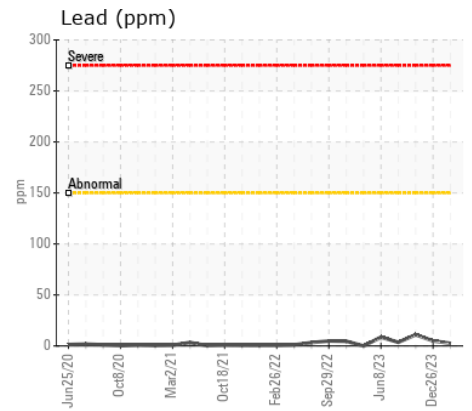
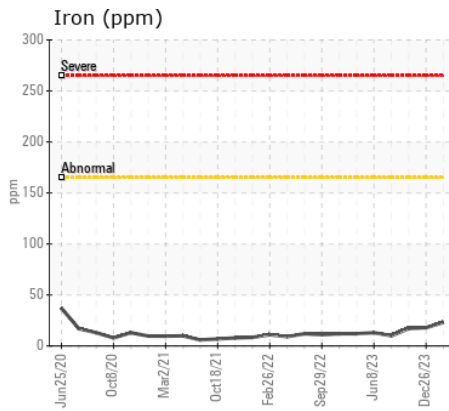
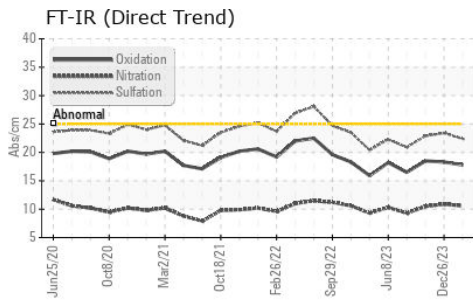
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>35	<b>4</b>	3	4
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	6	13
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>7.5	<b>0.9</b>	1.2	0.9
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.6</b>	10.9	10.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.4</b>	23.4	22.9
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	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		<b>3</b>	3	1
Boron	ppm	ASTM D5185m		<b>10</b>	22	10
Barium	ppm	ASTM D5185m		<b>0</b>	0	10
Molybdenum	ppm	ASTM D5185m		<b>63</b>	55	70
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>938</b>	869	948
Calcium	ppm	ASTM D5185m		<b>1223</b>	1300	1305
Phosphorus	ppm	ASTM D5185m		<b>1124</b>	1105	1190
Zinc	ppm	ASTM D5185m		<b>1301</b>	1343	1363
Sulfur	ppm	ASTM D5185m		<b>3490</b>	3118	3887
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.8</b>	18.3	18.5
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.44</b>	8.56	13.28
Visc @ 100°C	cSt	ASTM D445		<b>13.2</b>	13.9	13.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RW0005403  
**Lab Number** : 06157104  
**Unique Number** : 10992527  
**Test Package** : MOB 2

**Received** : 22 Apr 2024  
**Tested** : 23 Apr 2024  
**Diagnosed** : 23 Apr 2024 - Wes Davis

**MICHIGAN WOOD CARRIERS**  
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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)