



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**INTERNATIONAL 53**  
 Component  
**Front Diesel Engine**  
 Fluid  
**SERVICE PRO 15W40 SYN BLEND (8 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>RW0005397</b>	RW0004771	RW0004769
Sample Date		Client Info		<b>20 Jun 2024</b>	27 Mar 2024	28 Dec 2023
Machine Age	mls	Client Info		<b>332342</b>	321429	311048
Oil Age	mls	Client Info		<b>10932</b>	10373	9452
Filter Age	mls	Client Info		<b>10932</b>	10373	9452
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ATTENTION	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	<b>25</b>	34	34
Chromium	ppm	ASTM D5185m	>15	<b>0</b>	<1	2
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>&lt;1</b>	3	2
Lead	ppm	ASTM D5185m	>70	<b>&lt;1</b>	2	1
Copper	ppm	ASTM D5185m	>175	<b>2</b>	6	32
Tin	ppm	ASTM D5185m	>5	<b>0</b>	1	1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

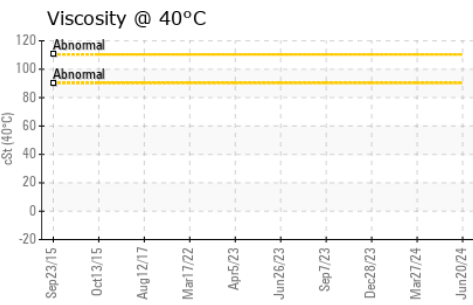
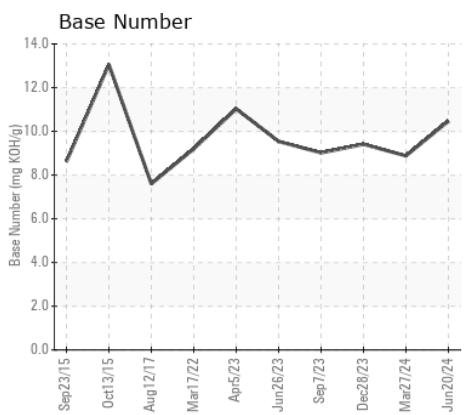
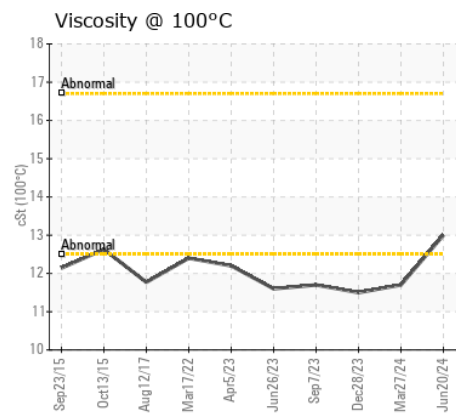
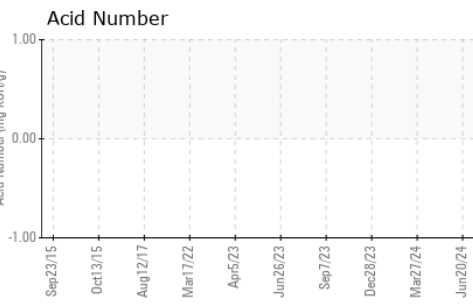
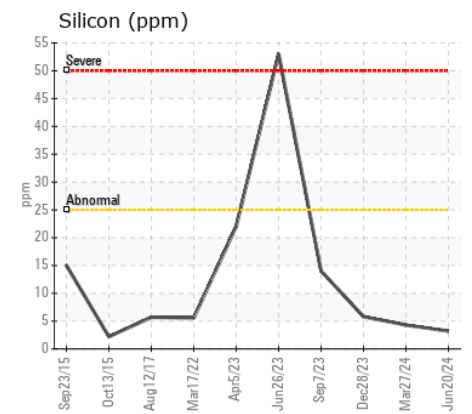
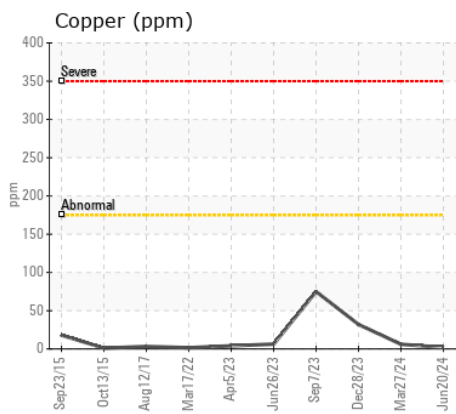
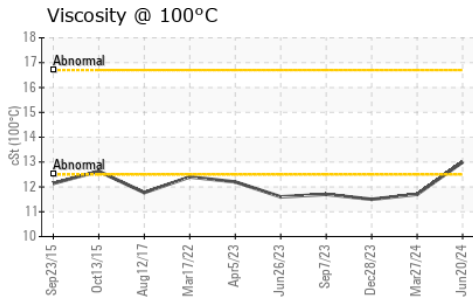
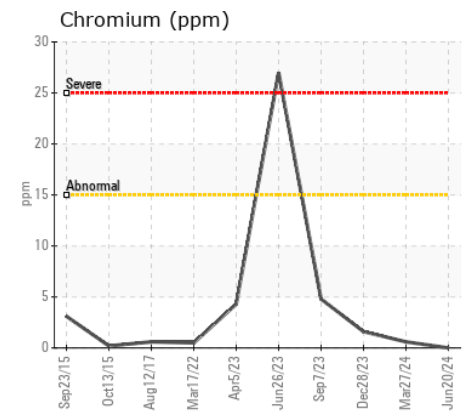
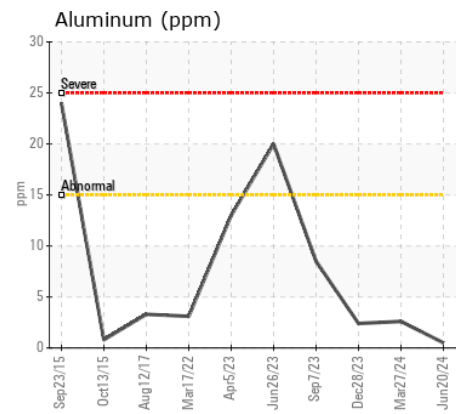
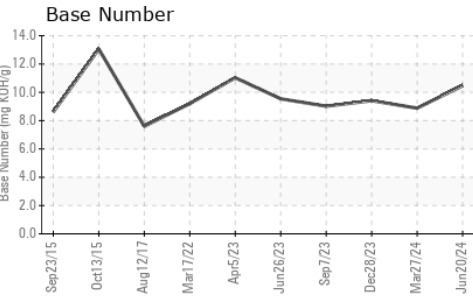
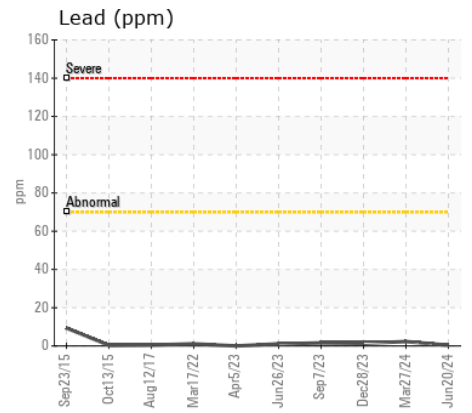
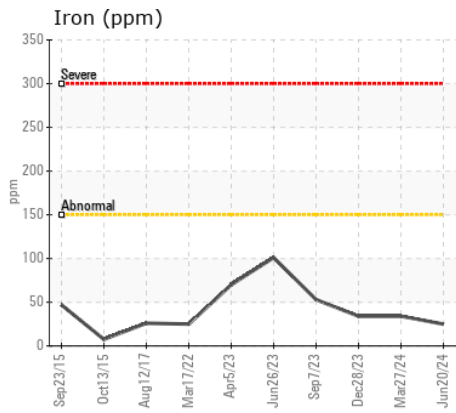
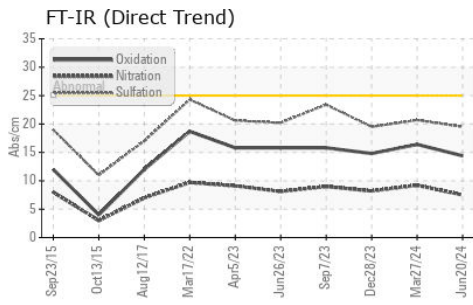
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>3</b>	4	6
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	▲ 2.7	▲ 2.4
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.9	0.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.5</b>	9.2	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.5</b>	20.7	19.5
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>4</b>	6	6
Boron	ppm	ASTM D5185m		<b>8</b>	6	4
Barium	ppm	ASTM D5185m		<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m		<b>66</b>	63	59
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>970</b>	935	868
Calcium	ppm	ASTM D5185m		<b>1228</b>	1122	1114
Phosphorus	ppm	ASTM D5185m		<b>1086</b>	1073	1006
Zinc	ppm	ASTM D5185m		<b>1300</b>	1245	1149
Sulfur	ppm	ASTM D5185m		<b>3702</b>	3386	2822
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.4</b>	16.4	14.8
Base Number (BN)	mg KOH/g	ASTM D2896		<b>10.47</b>	8.88	9.41
Visc @ 100°C	cSt	ASTM D445		<b>13.0</b>	● 11.7	▲ 11.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RW0005397 **Received** : 01 Jul 2024  
**Lab Number** : 06225351 **Tested** : 03 Jul 2024  
**Unique Number** : 11103548 **Diagnosed** : 03 Jul 2024 - Don Baldridge  
**Test Package** : MOB 2 ( Additional Tests: KV40, TAN Man )  
 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)

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