James River Equipment

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 748L-II 1DW748LBVNF714029
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

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

WEAR

The copper level is abnormal. Exhaust valve wear is indicated. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core).

CONTAMINATION

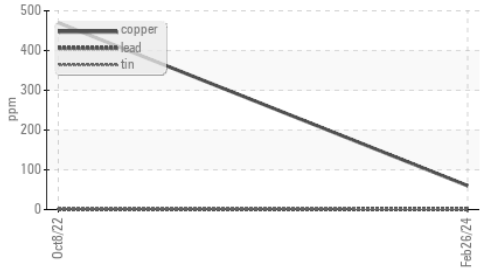
There is no indication of any contamination in the oil.

FLUID CONDITION

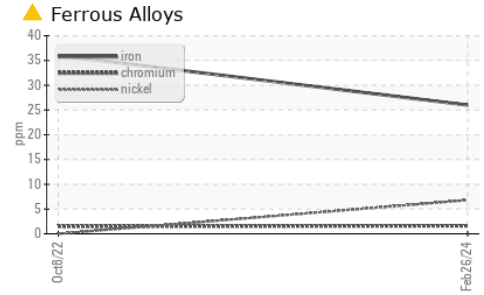
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0205155	JR0148802	---
Sample Date		Client Info		26 Feb 2024	08 Oct 2022	---
Machine Age	hrs	Client Info		1569	809	---
Oil Age	hrs	Client Info		0	809	---
Filter Age	hrs	Client Info		0	809	---
Oil Changed		Client Info		N/A	Changed	---
Filter Changed		Client Info		N/A	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---
Iron	ppm	ASTM D5185m	>51	26	36	---
Chromium	ppm	ASTM D5185m	>11	2	2	---
Nickel	ppm	ASTM D5185m	>5	▲ 7	0	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>31	6	6	---
Lead	ppm	ASTM D5185m	>26	0	<1	---
Copper	ppm	ASTM D5185m	>26	▲ 60	▲ 470	---
Tin	ppm	ASTM D5185m	>4	1	2	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>22	11	10	---
Potassium	ppm	ASTM D5185m	>20	12	16	---
Fuel		WC Method	>2.1	<1.0	0.5	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.6	0.7	---
Nitration	Abs/cm	*ASTM D7624	>20	9.6	10.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.6	24.3	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.21	NEG	NEG	---
Sodium	ppm	ASTM D5185m	>31	2	2	---
Boron	ppm	ASTM D5185m		128	116	---
Barium	ppm	ASTM D5185m		2	5	---
Molybdenum	ppm	ASTM D5185m		238	255	---
Manganese	ppm	ASTM D5185m		2	5	---
Magnesium	ppm	ASTM D5185m		724	710	---
Calcium	ppm	ASTM D5185m		1301	1546	---
Phosphorus	ppm	ASTM D5185m		841	882	---
Zinc	ppm	ASTM D5185m		971	1056	---
Sulfur	ppm	ASTM D5185m		2702	3339	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.4	18.4	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.0	9.5	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.2	10.6	---

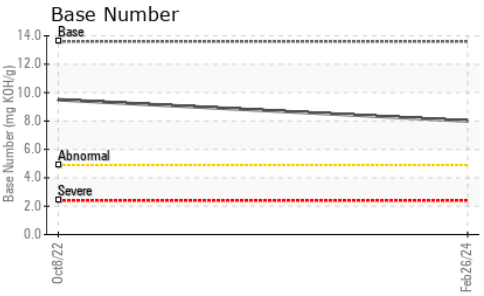
Non-ferrous Metals



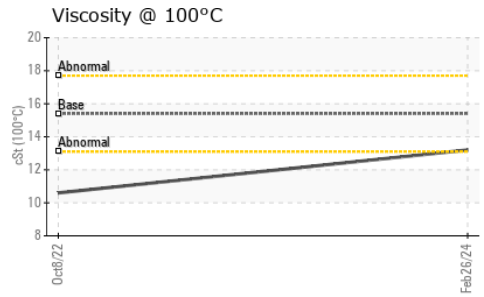
Ferrous Alloys



Base Number



Viscosity @ 100°C



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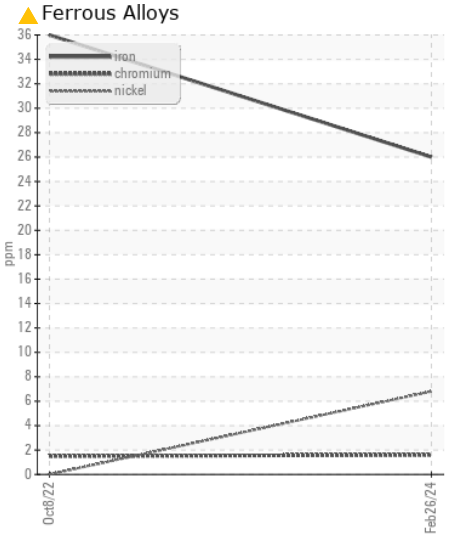

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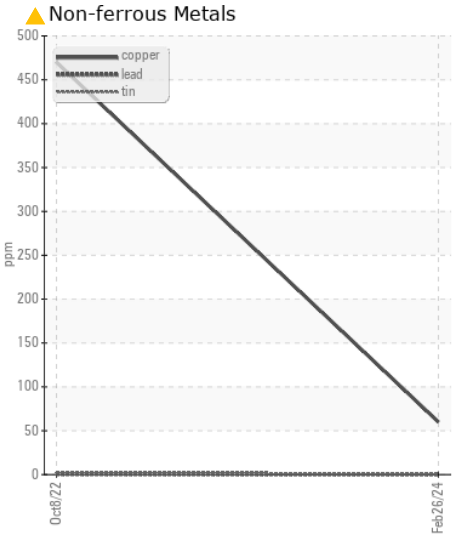
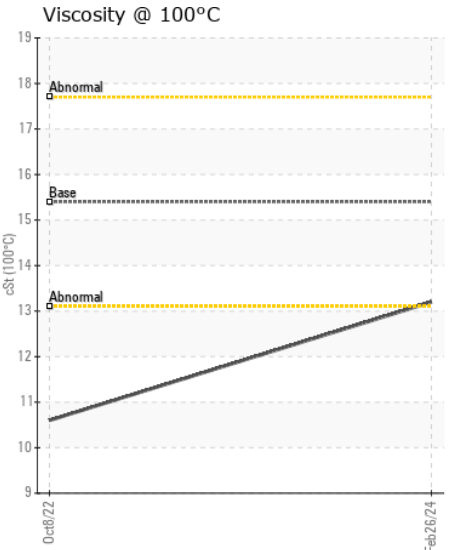


Viscosity @ 100°C



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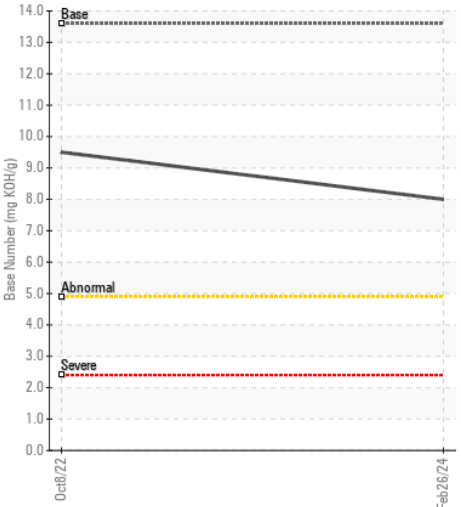

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0205155 **Received** : 27 Feb 2024
Lab Number : 06102291 **Tested** : 28 Feb 2024
Unique Number : 10900521 **Diagnosed** : 29 Feb 2024 - Sean Felton
Test Package : CONST (Additional Tests: TBN)

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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