



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 544 P 1DW544PACPLZ16916

Component
Diesel Engine

Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0202229	JR0191179	---
Sample Date		Client Info		08 Feb 2024	10 Nov 2023	---
Machine Age	hrs	Client Info		922	690	---
Oil Age	hrs	Client Info		232	690	---
Filter Age	hrs	Client Info		232	690	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	10	31	---
Chromium	ppm	ASTM D5185m	>11	<1	<1	---
Nickel	ppm	ASTM D5185m	>5	1	2	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>31	3	4	---
Lead	ppm	ASTM D5185m	>26	<1	<1	---
Copper	ppm	ASTM D5185m	>26	45	▲ 427	---
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	---

CONTAMINATION

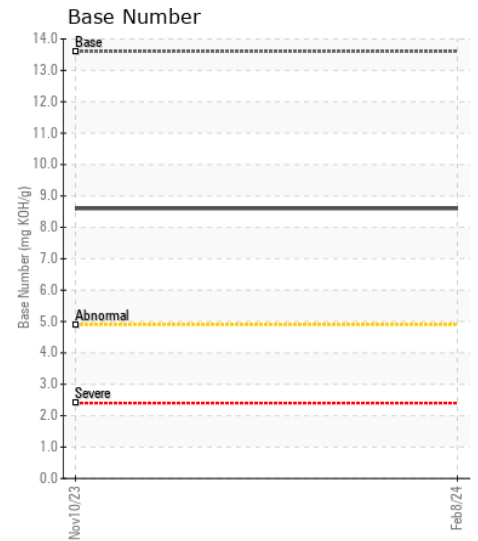
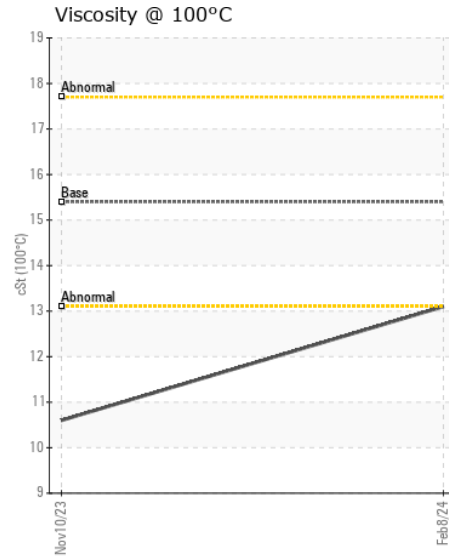
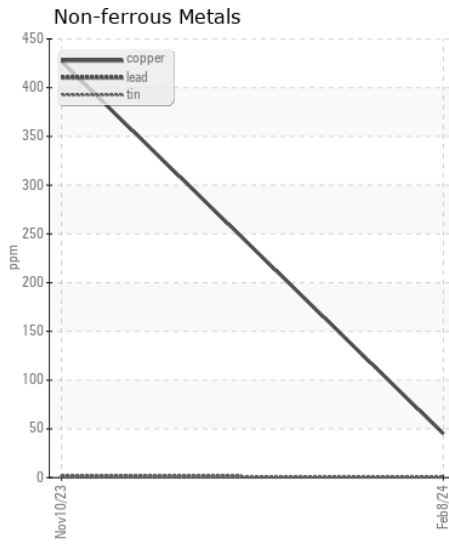
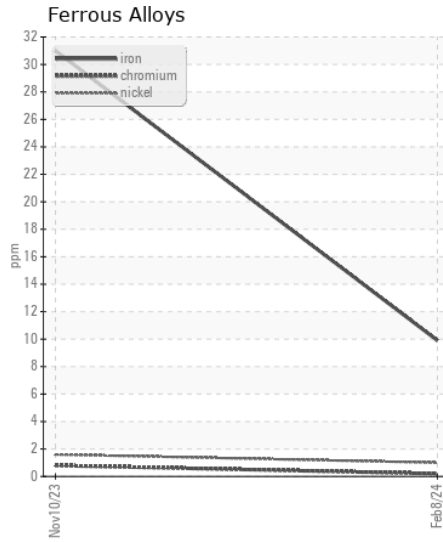
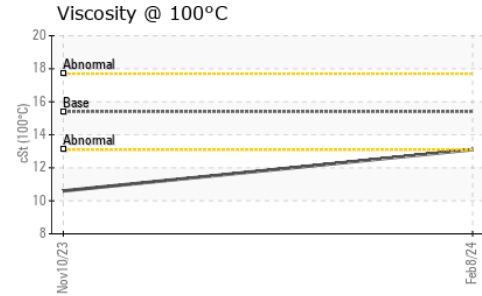
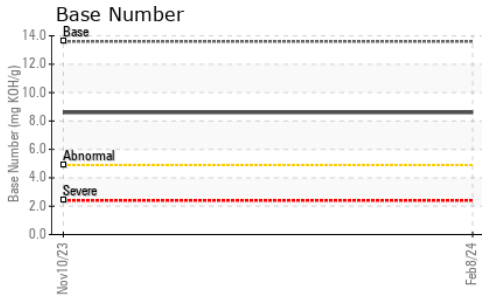
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	7	11	---
Potassium	ppm	ASTM D5185m	>20	2	2	---
Fuel		WC Method	>2.1	<1.0	0.4	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	7.8	9.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.1	23.6	---
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	---

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	>31	0	4	---
Boron	ppm	ASTM D5185m		288	190	---
Barium	ppm	ASTM D5185m		15	0	---
Molybdenum	ppm	ASTM D5185m		250	247	---
Manganese	ppm	ASTM D5185m		1	4	---
Magnesium	ppm	ASTM D5185m		764	857	---
Calcium	ppm	ASTM D5185m		1330	1378	---
Phosphorus	ppm	ASTM D5185m		960	892	---
Zinc	ppm	ASTM D5185m		1033	1092	---
Sulfur	ppm	ASTM D5185m		3418	2779	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.4	18.7	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.6	8.6	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.1	10.6	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0202229

Lab Number : 06085700

Unique Number : 10873145

Test Package : CONST (Additional Tests: TBN)

Received : 12 Feb 2024

Tested : 12 Feb 2024

Diagnosed : 13 Feb 2024 - Jonathan Hester

JRE - GARNER

4161 AUBURN CHURCH RD

GARNER, NC

US 27529

Contact: RALEIGH SHOP

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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)