



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 650K-II 1T0650KKHMF398685
 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		JR0212206	JR0148505	---
Sample Date		Client Info		23 May 2024	26 Oct 2022	---
Machine Age	hrs	Client Info		959	447	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ATTENTION	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>51	24	36	---
Chromium	ppm	ASTM D5185m	>11	<1	2	---
Nickel	ppm	ASTM D5185m	>5	0	0	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	<1	0	---
Aluminum	ppm	ASTM D5185m	>31	6	9	---
Lead	ppm	ASTM D5185m	>26	6	8	---
Copper	ppm	ASTM D5185m	>26	6	32	---
Tin	ppm	ASTM D5185m	>4	2	3	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
White Metal	scalar	*Visual	NONE	LIGHT	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

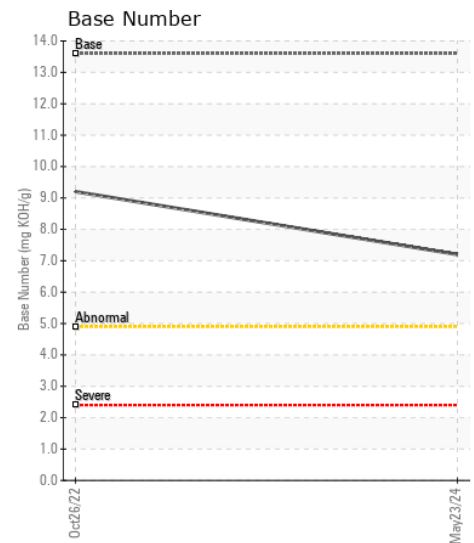
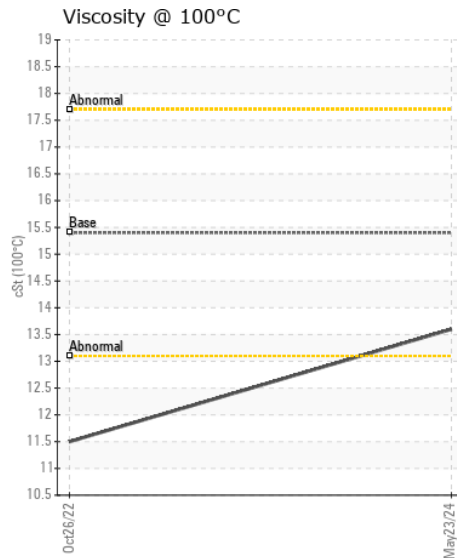
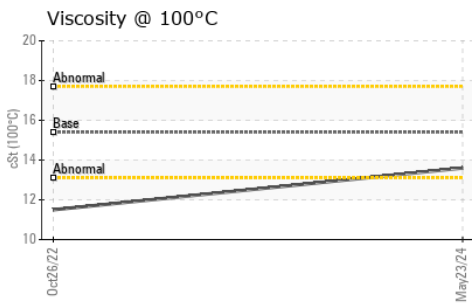
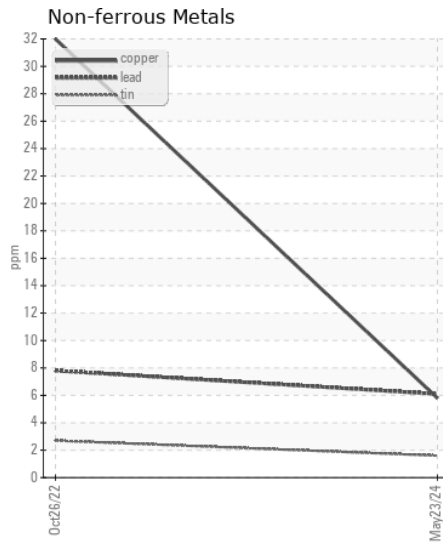
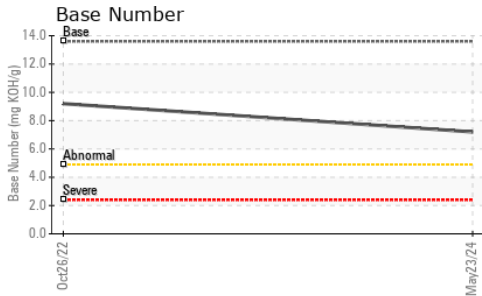
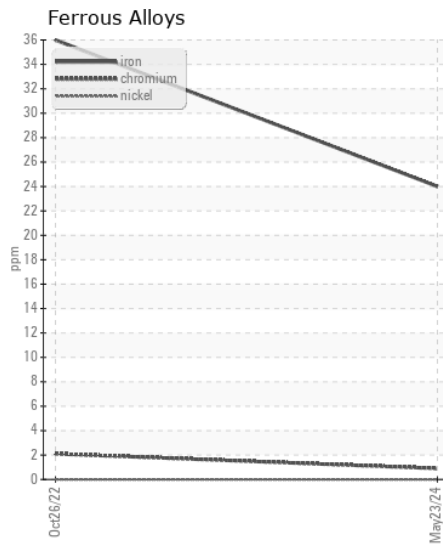
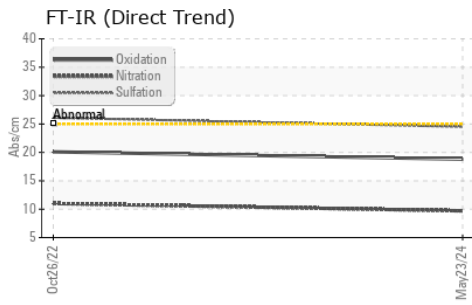
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	7	8	---
Potassium	ppm	ASTM D5185m	>20	4	2	---
Fuel		WC Method	>2.1	<1.0	0.8	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.5	0.5	---
Nitration	Abs/cm	*ASTM D7624	>20	9.7	11.0	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.5	26.1	---
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	4	3	---
Boron	ppm	ASTM D5185m		149	98	---
Barium	ppm	ASTM D5185m		<1	0	---
Molybdenum	ppm	ASTM D5185m		188	193	---
Manganese	ppm	ASTM D5185m		1	4	---
Magnesium	ppm	ASTM D5185m		614	625	---
Calcium	ppm	ASTM D5185m		1746	1811	---
Phosphorus	ppm	ASTM D5185m		981	907	---
Zinc	ppm	ASTM D5185m		1117	1198	---
Sulfur	ppm	ASTM D5185m		3494	3522	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.8	20.1	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.2	9.2	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.6	11.5	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0212206 **Received** : 29 May 2024
Lab Number : 06194762 **Tested** : 30 May 2024
Unique Number : 11056885 **Diagnosed** : 30 May 2024 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

JRE - ASHLAND
 11047 LEADBETTER RD
 ASHLAND, VA
 US 23005
 Contact: DAVID ZIEG
 dzieg@jamesriverequipment.com
 T: (804)798-6001
 F: (804)798-0292

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)