



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 650K 1T0650KKPNF414116
 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		JR0212765	JR0195416	---
Sample Date		Client Info		21 May 2024	11 Jan 2024	---
Machine Age	hrs	Client Info		990	427	---
Oil Age	hrs	Client Info		563	427	---
Filter Age	hrs	Client Info		563	427	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>51	26	54	---
Chromium	ppm	ASTM D5185m	>11	<1	1	---
Nickel	ppm	ASTM D5185m	>5	<1	<1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>31	7	11	---
Lead	ppm	ASTM D5185m	>26	11	7	---
Copper	ppm	ASTM D5185m	>26	9	31	---
Tin	ppm	ASTM D5185m	>4	2	3	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

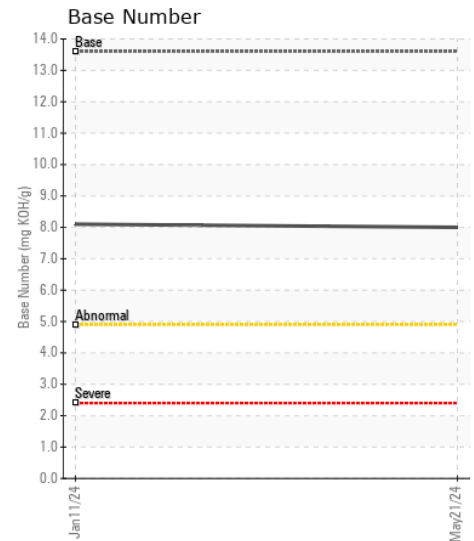
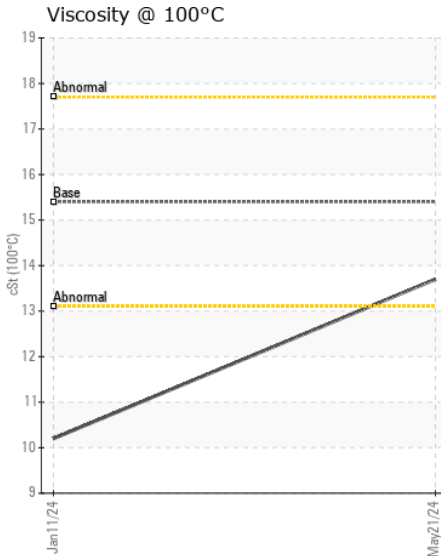
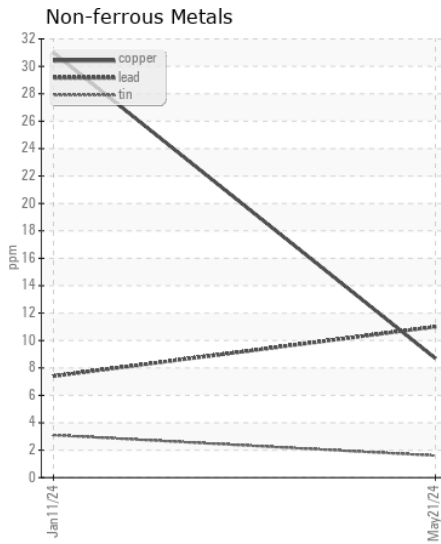
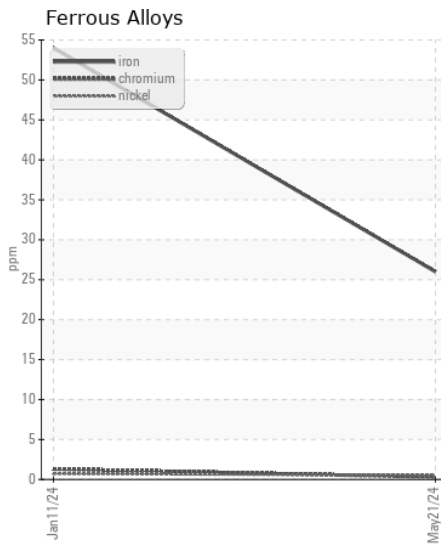
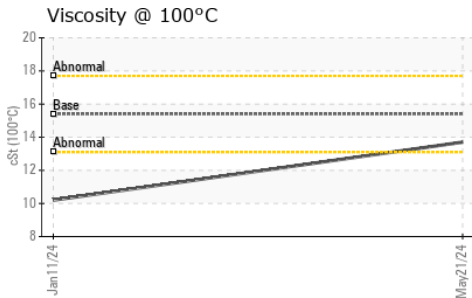
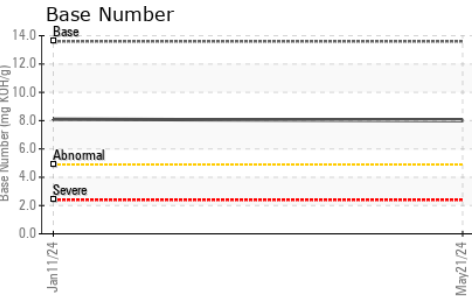
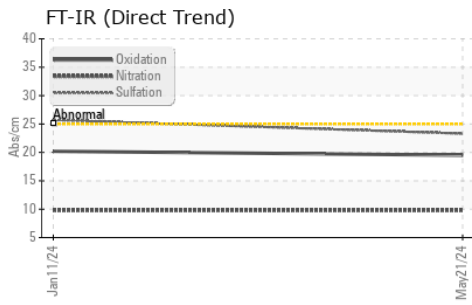
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	7	11	---
Potassium	ppm	ASTM D5185m	>20	2	3	---
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	0.5	0.5	---
Nitration	Abs/cm	*ASTM D7624	>20	9.8	9.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.3	25.7	---
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	7	---
Boron	ppm	ASTM D5185m		123	164	---
Barium	ppm	ASTM D5185m		0	7	---
Molybdenum	ppm	ASTM D5185m		230	274	---
Manganese	ppm	ASTM D5185m		2	7	---
Magnesium	ppm	ASTM D5185m		941	819	---
Calcium	ppm	ASTM D5185m		1457	1408	---
Phosphorus	ppm	ASTM D5185m		986	932	---
Zinc	ppm	ASTM D5185m		1249	1111	---
Sulfur	ppm	ASTM D5185m		3545	2845	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.5	20.2	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.0	8.1	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.7	▲ 10.2	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0212765
Lab Number : 06188971
Unique Number : 11045723
Test Package : CONST (Additional Tests: TBN)

Received : 23 May 2024
Tested : 24 May 2024
Diagnosed : 28 May 2024 - Sean Felton

JRE - GARNER
 4161 AUBURN CHURCH RD
 GARNER, NC
 US 27529

Contact: RALEIGH SHOP
 sean.betts@jamesriverequipment.com; catherine.anastasio@wearcheck.com

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)

T: (919)614-2260
 F: (919)779-5432