



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
KLEEMANN MC110i EVO2 K117-0102
 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		JR0210124	JR0187798	---
Sample Date		Client Info		11 Apr 2024	13 Oct 2023	---
Machine Age	hrs	Client Info		1478	1009	---
Oil Age	hrs	Client Info		478	500	---
Filter Age	hrs	Client Info		478	500	---
Oil Changed		Client Info		N/A	Changed	---
Filter Changed		Client Info		N/A	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	4	6	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>4	0	<1	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	7	4	---
Lead	ppm	ASTM D5185m	>40	2	4	---
Copper	ppm	ASTM D5185m	>330	2	72	---
Tin	ppm	ASTM D5185m	>15	<1	1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

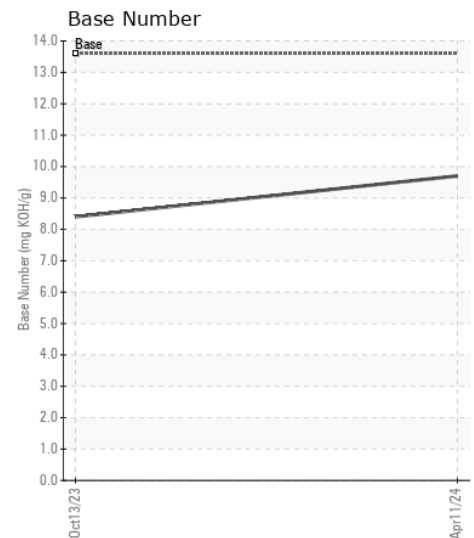
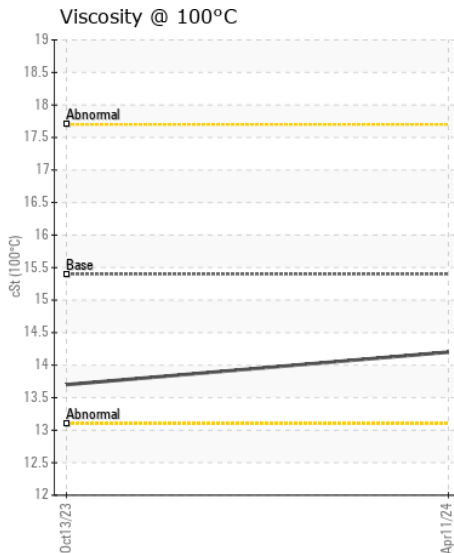
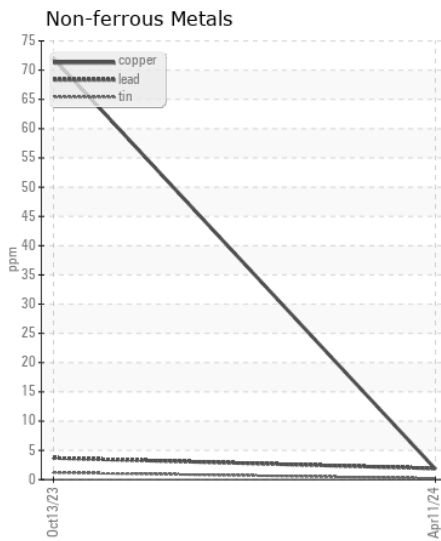
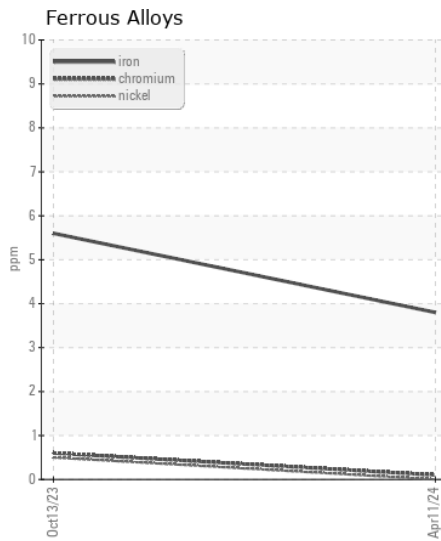
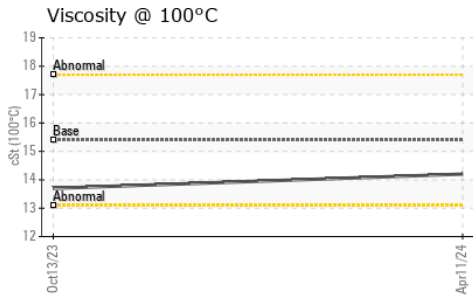
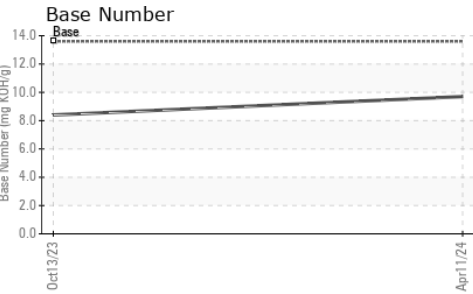
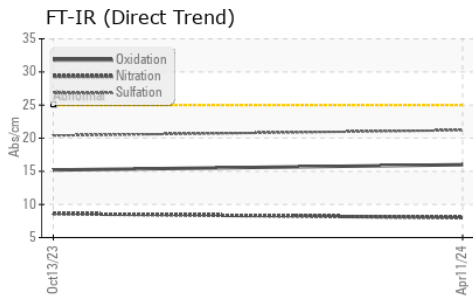
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	7	8	---
Potassium	ppm	ASTM D5185m	>20	8	7	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0	---
Nitration	Abs/cm	*ASTM D7624	>20	8.0	8.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.2	20.4	---
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	>0.2	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		<1	0	---
Boron	ppm	ASTM D5185m		314	198	---
Barium	ppm	ASTM D5185m		0	10	---
Molybdenum	ppm	ASTM D5185m		263	168	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		904	516	---
Calcium	ppm	ASTM D5185m		1549	1817	---
Phosphorus	ppm	ASTM D5185m		1026	895	---
Zinc	ppm	ASTM D5185m		1189	1024	---
Sulfur	ppm	ASTM D5185m		3814	3062	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.0	15.2	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	9.7	8.4	---
Visc @ 100°C	cSt	ASTM D445	15.4	14.2	13.7	---



Certificate L2367

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

Sample No. : JR0210124

Lab Number : 06149275

Unique Number : 10979353

Test Package : CONST (Additional Tests: TBN)

Received : 15 Apr 2024

Tested : 16 Apr 2024

Diagnosed : 16 Apr 2024 - Wes Davis

JRE - STEPHENSON

245 YARDMASTER COURT

STEPHENSON, VA

US 22656-1761

Contact: PHIL DAUGHERTY

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T: x:

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)

F: (540)693-2588