



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 843L-II 1DW843LBVNF715950

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		JR0177187	JR0145637	---
Sample Date		Client Info		09 May 2024	29 Mar 2023	---
Machine Age	hrs	Client Info		228	523	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	N/A	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>51	21	40	---
Chromium	ppm	ASTM D5185m	>11	<1	2	---
Nickel	ppm	ASTM D5185m	>5	5	8	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>31	6	8	---
Lead	ppm	ASTM D5185m	>26	2	<1	---
Copper	ppm	ASTM D5185m	>26	9	▲ 311	---
Tin	ppm	ASTM D5185m	>4	1	1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

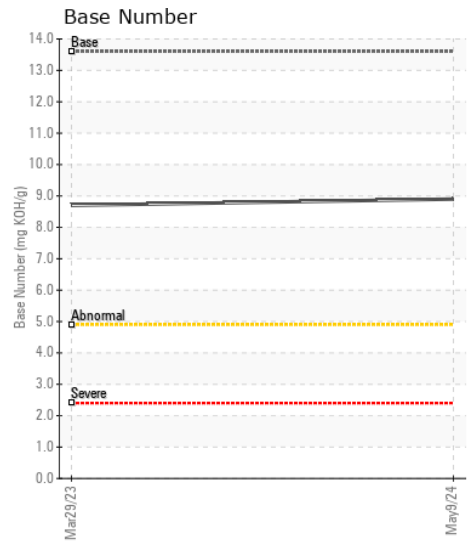
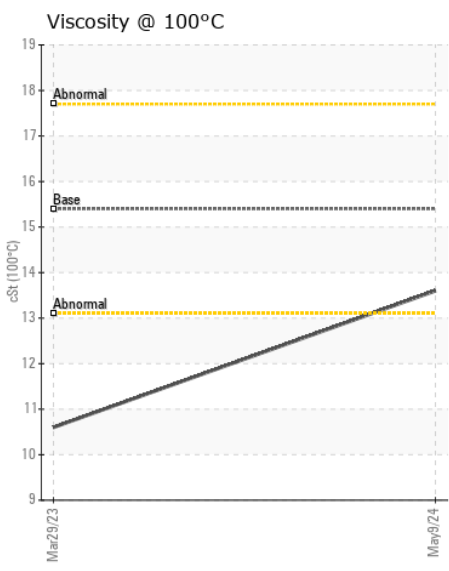
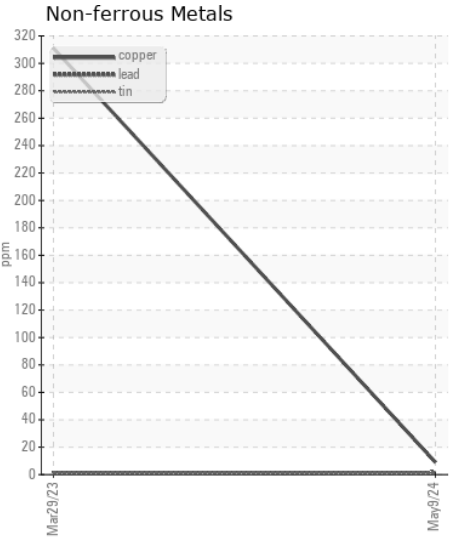
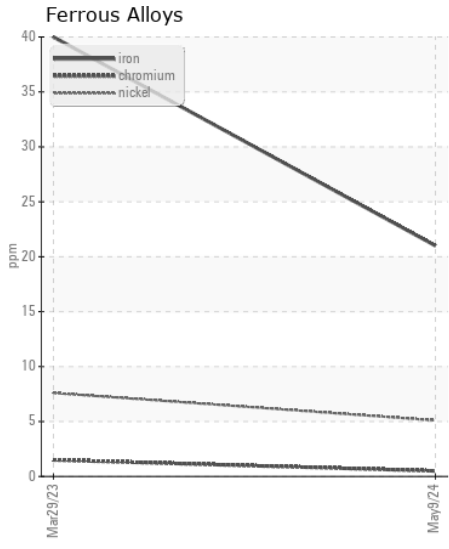
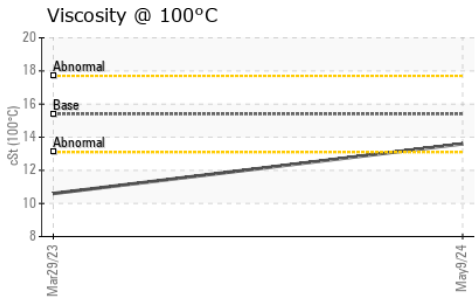
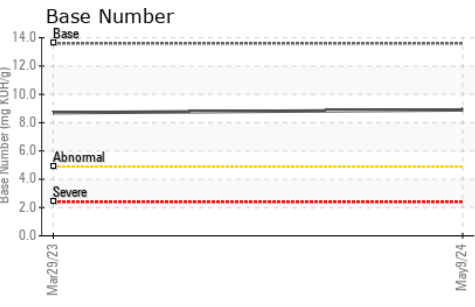
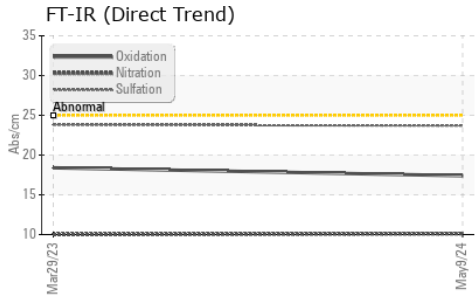
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	12	19	---
Potassium	ppm	ASTM D5185m	>20	4	19	---
Fuel		WC Method	>2.1	<1.0	0.3	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.9	0.6	---
Nitration	Abs/cm	*ASTM D7624	>20	10.1	10.0	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.7	23.8	---
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	3	6	---
Boron	ppm	ASTM D5185m		158	162	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		277	295	---
Manganese	ppm	ASTM D5185m		1	5	---
Magnesium	ppm	ASTM D5185m		880	902	---
Calcium	ppm	ASTM D5185m		1482	1561	---
Phosphorus	ppm	ASTM D5185m		966	977	---
Zinc	ppm	ASTM D5185m		1157	1150	---
Sulfur	ppm	ASTM D5185m		3354	2992	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.4	18.4	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.9	8.7	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.6	10.6	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0177187 **Received** : 21 May 2024
Lab Number : 06187051 **Tested** : 23 May 2024
Unique Number : 11043803 **Diagnosed** : 23 May 2024 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

JRE - MOUNT GILEAD
 305 NORTH MAIN STREET
 MOUNT GILEAD, NC
 US 27306
 Contact: TIM ELSWORTH
 telsworth@jamesriverequipment.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)