



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[W66478]

Machine Id

HITACHI 1FFDC571LNF341038

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		JR0205843	JR0167569	---
Sample Date		Client Info		23 Apr 2024	17 May 2023	---
Machine Age	hrs	Client Info		892	444	---
Oil Age	hrs	Client Info		500	444	---
Filter Age	hrs	Client Info		500	444	---
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	>100	27	26	---
Chromium	ppm	ASTM D5185m	>20	1	<1	---
Nickel	ppm	ASTM D5185m	>4	<1	<1	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	10	7	---
Lead	ppm	ASTM D5185m	>40	1	1	---
Copper	ppm	ASTM D5185m	>330	3	4	---
Tin	ppm	ASTM D5185m	>15	3	7	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

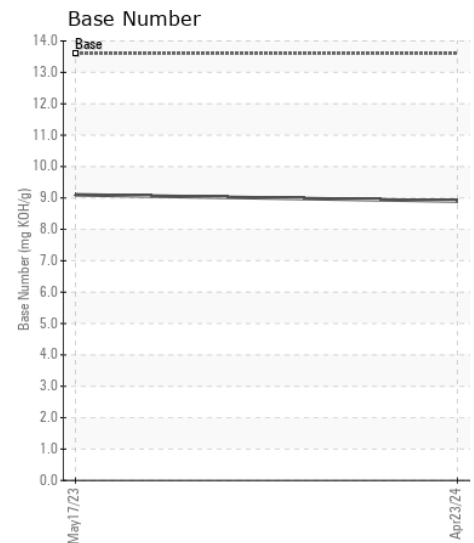
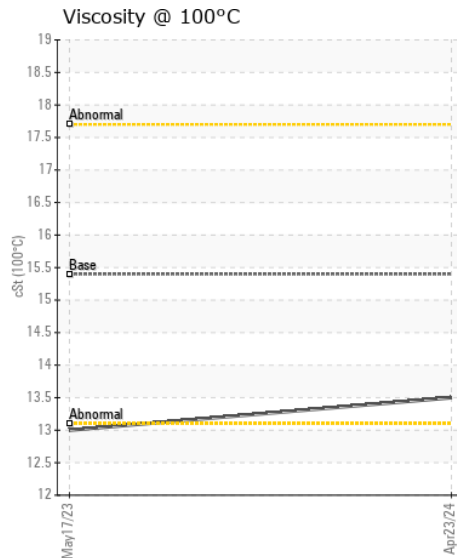
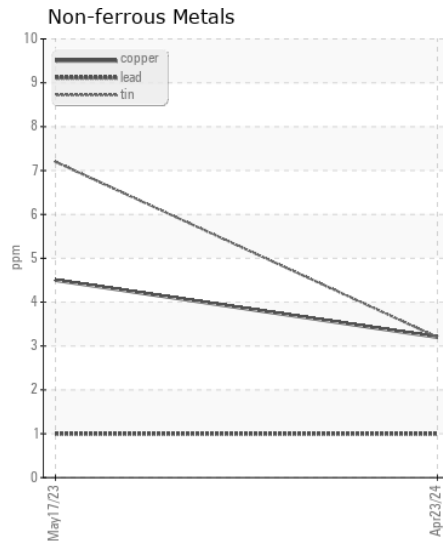
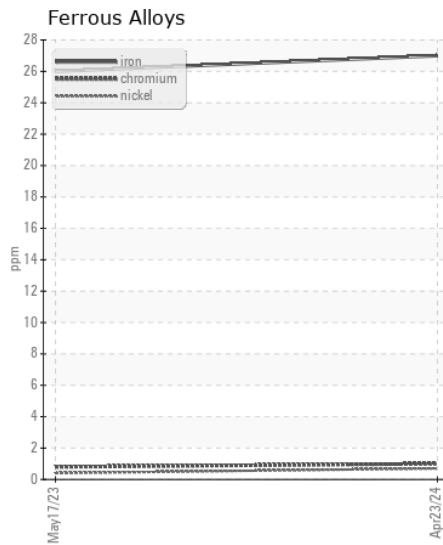
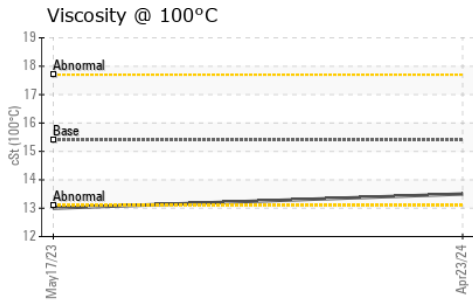
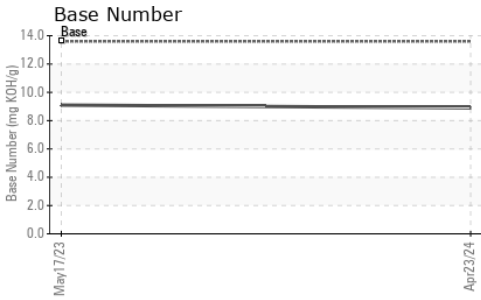
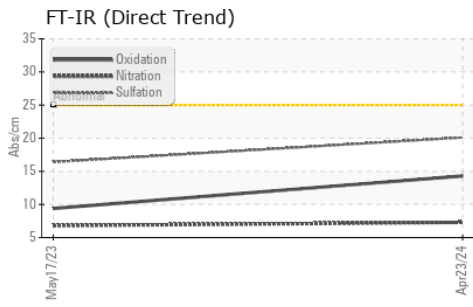
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	16	▲ 33	---
Potassium	ppm	ASTM D5185m	>20	4	6	---
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	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	7.3	6.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.1	16.4	---
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	<1	---
Boron	ppm	ASTM D5185m		284	183	---
Barium	ppm	ASTM D5185m		3	<1	---
Molybdenum	ppm	ASTM D5185m		236	<1	---
Manganese	ppm	ASTM D5185m		2	4	---
Magnesium	ppm	ASTM D5185m		744	16	---
Calcium	ppm	ASTM D5185m		1483	2292	---
Phosphorus	ppm	ASTM D5185m		881	1075	---
Zinc	ppm	ASTM D5185m		1060	1347	---
Sulfur	ppm	ASTM D5185m		3155	3624	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.3	9.4	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.9	9.1	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.5	13.0	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0205843 **Received** : 26 Apr 2024
Lab Number : 06161308 **Tested** : 29 Apr 2024
Unique Number : 10996731 **Diagnosed** : 29 Apr 2024 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

JRE - CHARLOTTE
 9550 STATESVILLE ROAD
 CHARLOTTE, NC
 US 28269

Contact: CHARLOTTE SHOP
 myoung@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)

T: (704)597-0211

F: (704)596-6198