



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
HITACHI 350LC-6 1FFDDR70KHF940305

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		JR0197795	JR0139554	---
Sample Date		Client Info		16 Jan 2024	01 Sep 2022	---
Machine Age	hrs	Client Info		7028	5398	---
Oil Age	hrs	Client Info		1630	0	---
Filter Age	hrs	Client Info		1630	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	20	16	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>4	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	9	9	---
Lead	ppm	ASTM D5185m	>40	6	3	---
Copper	ppm	ASTM D5185m	>330	2	6	---
Tin	ppm	ASTM D5185m	>15	<1	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

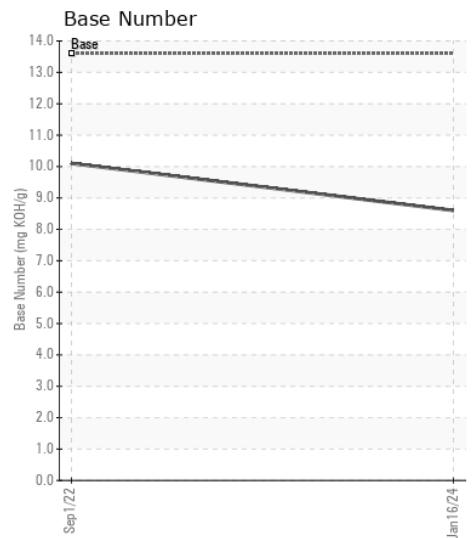
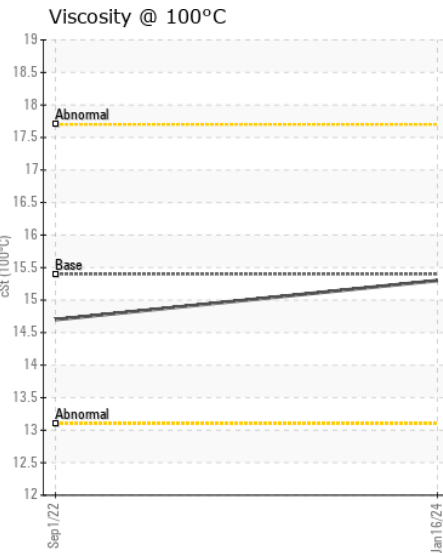
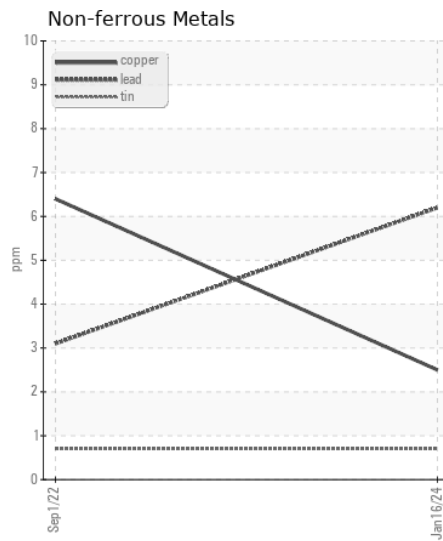
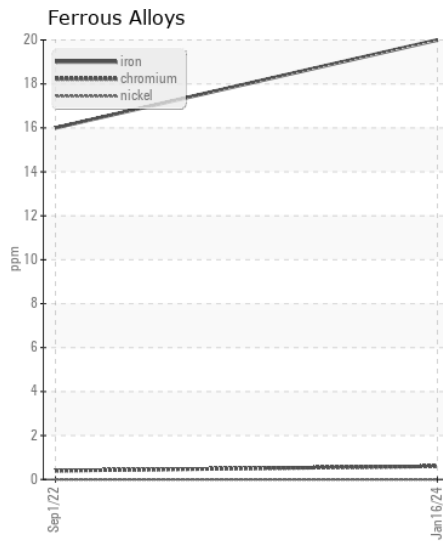
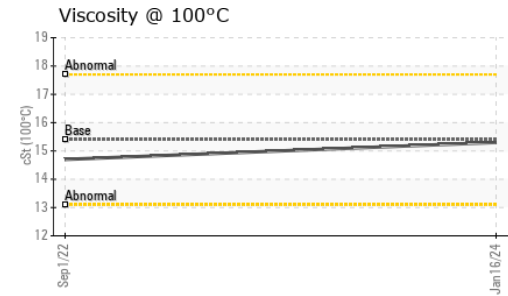
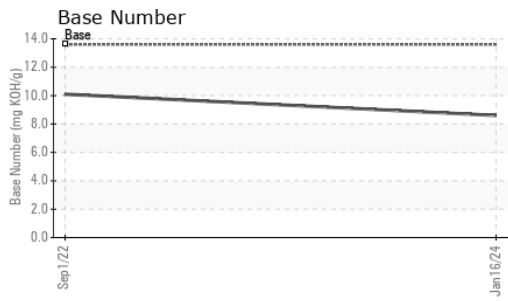
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	10	8	---
Potassium	ppm	ASTM D5185m	>20	1	0	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	1.9	1.2	---
Nitration	Abs/cm	*ASTM D7624	>20	10.3	10.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.3	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	>0.2	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		6	<1	---
Boron	ppm	ASTM D5185m		127	162	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		261	247	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		915	767	---
Calcium	ppm	ASTM D5185m		1519	1390	---
Phosphorus	ppm	ASTM D5185m		868	822	---
Zinc	ppm	ASTM D5185m		1158	1045	---
Sulfur	ppm	ASTM D5185m		2808	2687	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.8	18.4	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.6	10.1	---
Visc @ 100°C	cSt	ASTM D445	15.4	15.3	14.7	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0197795 **Received** : 17 Jan 2024
Lab Number : 06062503 **Diagnosed** : 18 Jan 2024
Unique Number : 10833885 **Diagnostician** : Don Baldrige
Test Package : CONST (Additional Tests: TBN)

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

Contact: RALEIGH SHOP
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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)