



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**HITACHI 350LC 1FFDDR70EJF940546**

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		<b>JR0205685</b>	JR0179020	JR0155602
Sample Date		Client Info		<b>13 Mar 2024</b>	02 Aug 2023	10 Feb 2023
Machine Age	hrs	Client Info		<b>6907</b>	5975	4983
Oil Age	hrs	Client Info		<b>932</b>	500	500
Filter Age	hrs	Client Info		<b>0</b>	500	500
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>19</b>	11	16
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>10</b>	9	11
Lead	ppm	ASTM D5185m	>40	<b>3</b>	1	2
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	1	1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

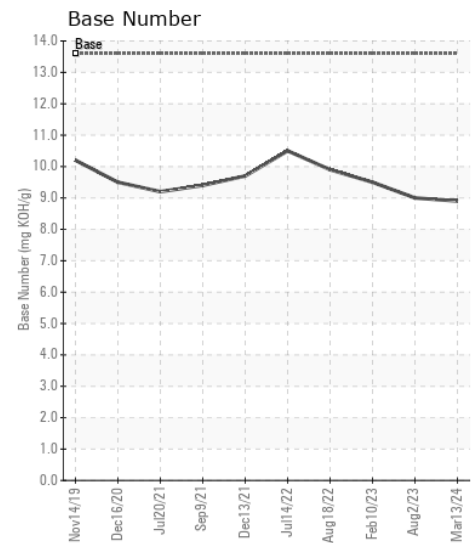
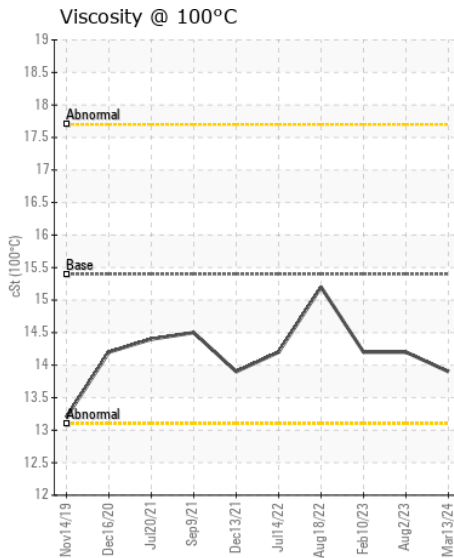
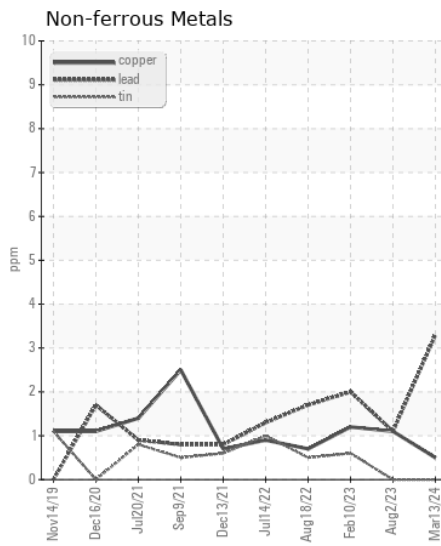
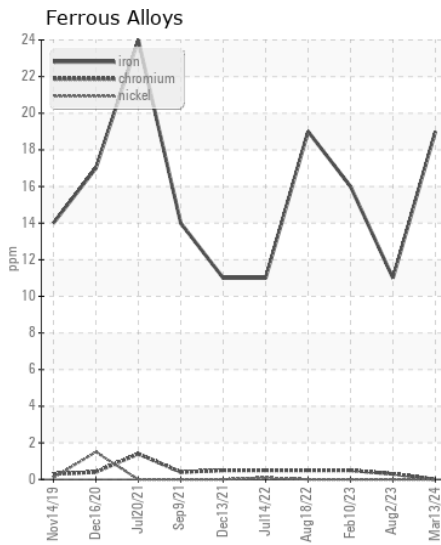
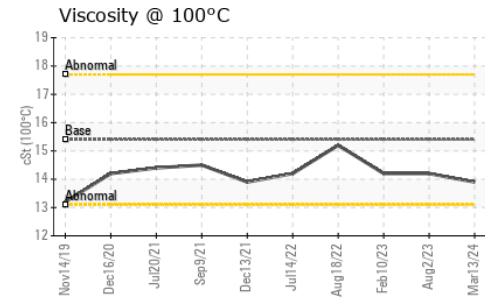
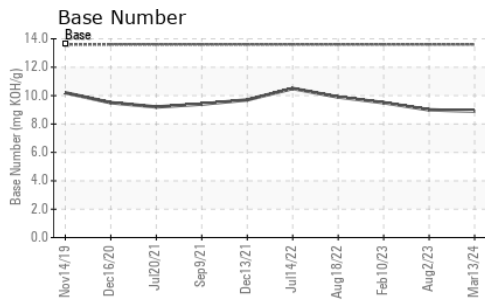
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>10</b>	9	8
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	2	8
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>1</b>	0.9	0.7
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.4</b>	8.4	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.9</b>	21.3	21.6
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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		<b>37</b>	4	48
Boron	ppm	ASTM D5185m		<b>141</b>	220	205
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>230</b>	240	248
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>807</b>	823	788
Calcium	ppm	ASTM D5185m		<b>1458</b>	1503	1488
Phosphorus	ppm	ASTM D5185m		<b>938</b>	867	879
Zinc	ppm	ASTM D5185m		<b>1105</b>	1083	1083
Sulfur	ppm	ASTM D5185m		<b>3405</b>	3444	3538
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.6</b>	14.3	15.1
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.9</b>	9.0	9.5
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.9</b>	14.2	14.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0205685 **Received** : 19 Mar 2024  
**Lab Number** : 06122067 **Tested** : 19 Mar 2024  
**Unique Number** : 10936218 **Diagnosed** : 19 Mar 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

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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)