



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[W33198]
 Machine Id
JOHN DEERE 650K 1T0650KKPJF344840
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0072610	JR0051206	---
Sample Date		Client Info		02 Feb 2021	07 May 2020	---
Machine Age	hrs	Client Info		0	490	---
Oil Age	hrs	Client Info		500	490	---
Filter Age	hrs	Client Info		500	490	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	32	38	---
Chromium	ppm	ASTM D5185m	>11	2	2	---
Nickel	ppm	ASTM D5185m	>5	0	2	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>31	9	11	---
Lead	ppm	ASTM D5185m	>26	15	10	---
Copper	ppm	ASTM D5185m	>26	18	▲ 175	---
Tin	ppm	ASTM D5185m	>4	1	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

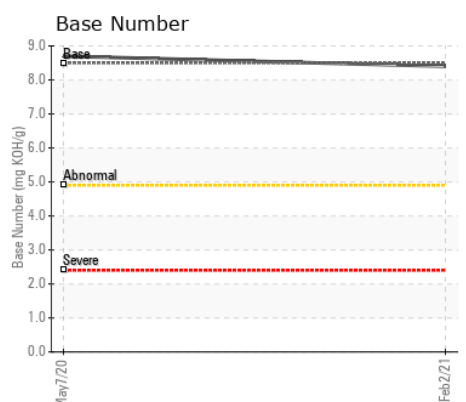
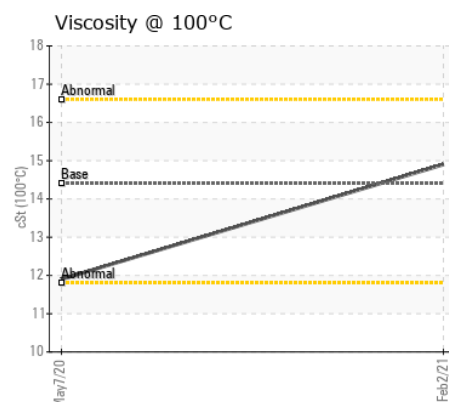
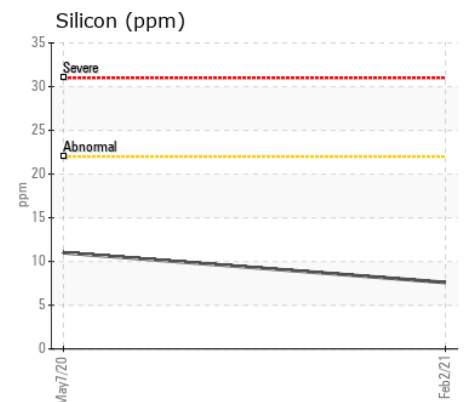
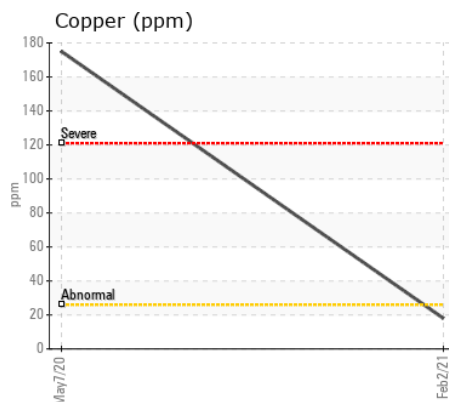
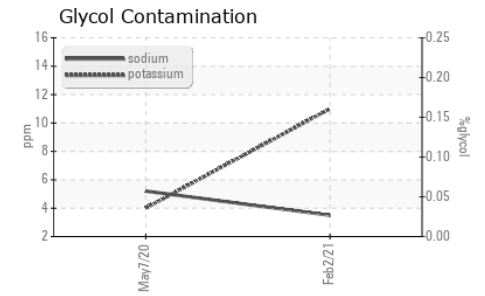
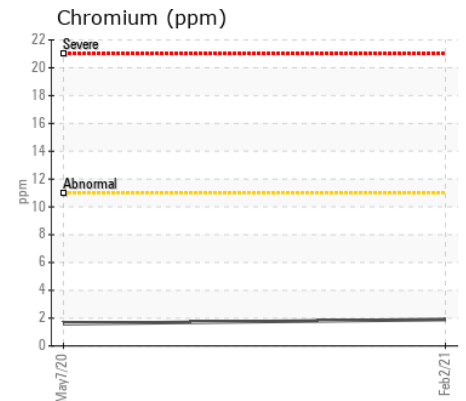
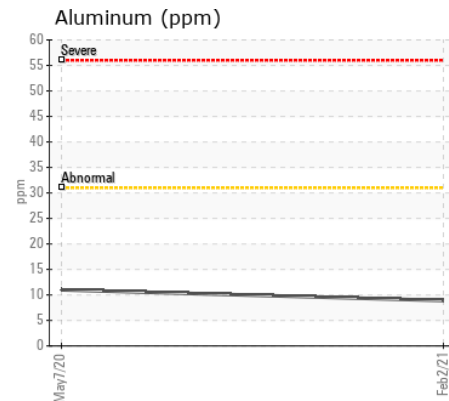
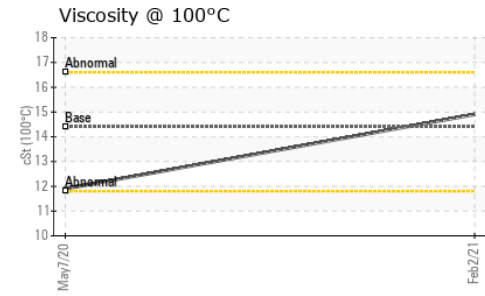
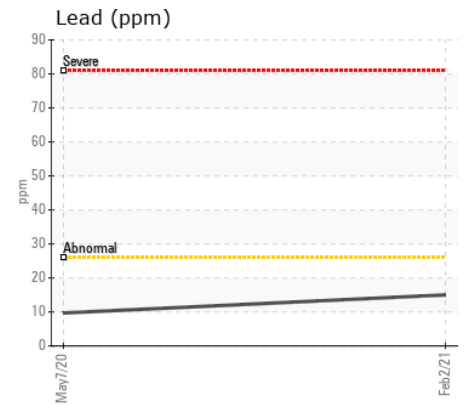
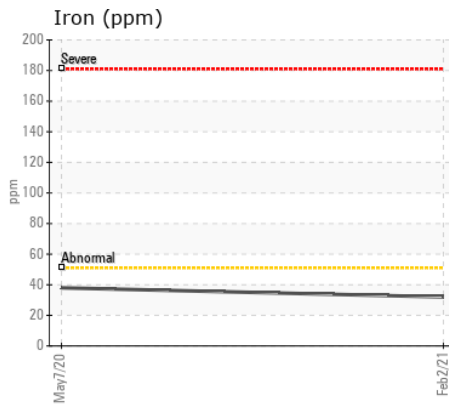
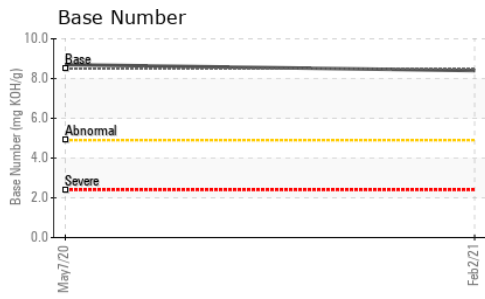
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	8	11	---
Potassium	ppm	ASTM D5185m	>20	11	4	---
Fuel		WC Method	>2.1	<1.0	<1.0	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol	%	*ASTM D2982		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.9	0.5	---
Nitration	Abs/cm	*ASTM D7624	>20	11.5	10.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.5	25.4	---
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	>0.21	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	>216	4	5	---
Boron	ppm	ASTM D5185m	250	93	115	---
Barium	ppm	ASTM D5185m	10	0	2	---
Molybdenum	ppm	ASTM D5185m	100	196	248	---
Manganese	ppm	ASTM D5185m		1	4	---
Magnesium	ppm	ASTM D5185m	450	715	885	---
Calcium	ppm	ASTM D5185m	3000	1870	1901	---
Phosphorus	ppm	ASTM D5185m	1150	1046	952	---
Zinc	ppm	ASTM D5185m	1350	1211	1139	---
Sulfur	ppm	ASTM D5185m	4250	2587	2628	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.9	21.1	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.4	8.7	---
Visc @ 100°C	cSt	ASTM D445	14.4	14.9	11.9	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0072610 **Received** : 03 Feb 2021
Lab Number : 05174274 **Tested** : 05 Feb 2021
Unique Number : 9349557 **Diagnosed** : 05 Feb 2021 - Jonathan Hester
Test Package : MOBCE (Additional Tests: Glycol, 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)