



WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	SEVERE

Area
[HOWARD SHOCKEY]
 Machine Id
JOHN DEERE 310G C043444 (S/N T0310GX940601)
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0221307	JR0067403	---
Sample Date		Client Info		12 Jul 2024	10 Nov 2020	---
Machine Age	hrs	Client Info		7356	7081	---
Oil Age	hrs	Client Info		356	0	---
Filter Age	hrs	Client Info		356	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				SEVERE	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	10	▲ 70	---
Chromium	ppm	ASTM D5185m	>11	<1	1	---
Nickel	ppm	ASTM D5185m	>5	0	2	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>31	4	9	---
Lead	ppm	ASTM D5185m	>26	3	9	---
Copper	ppm	ASTM D5185m	>26	<1	3	---
Tin	ppm	ASTM D5185m	>4	0	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

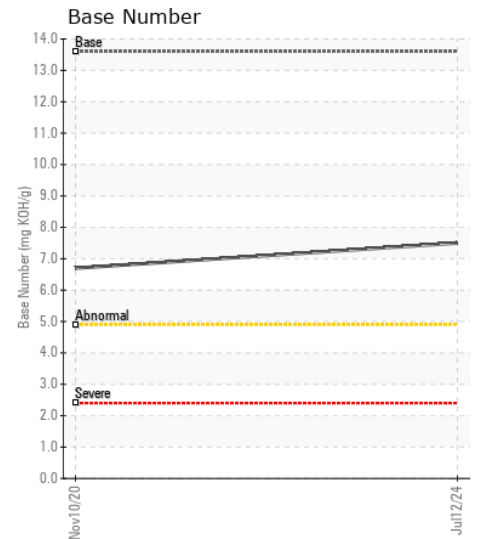
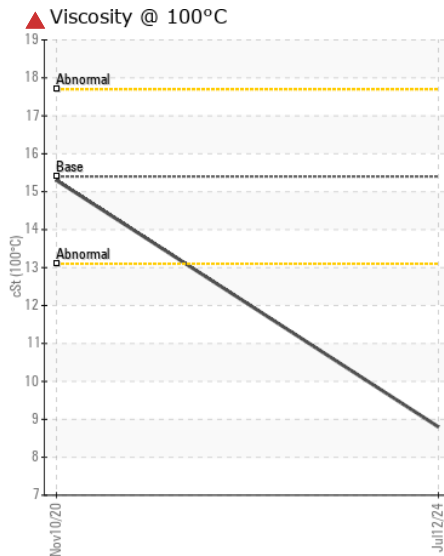
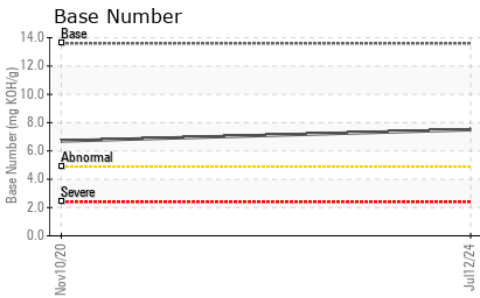
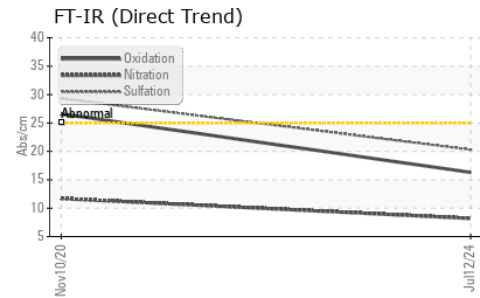
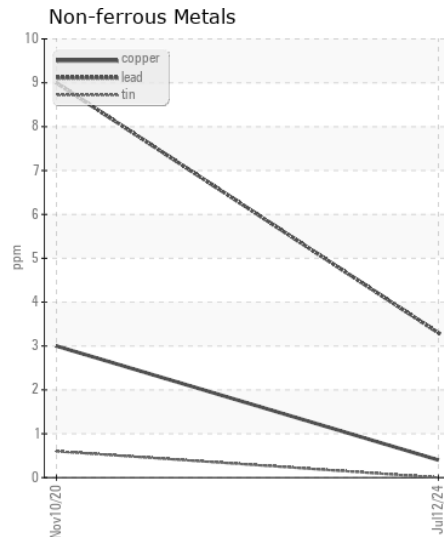
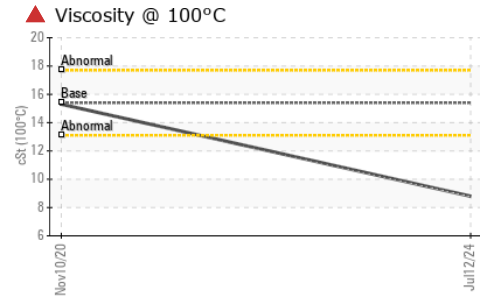
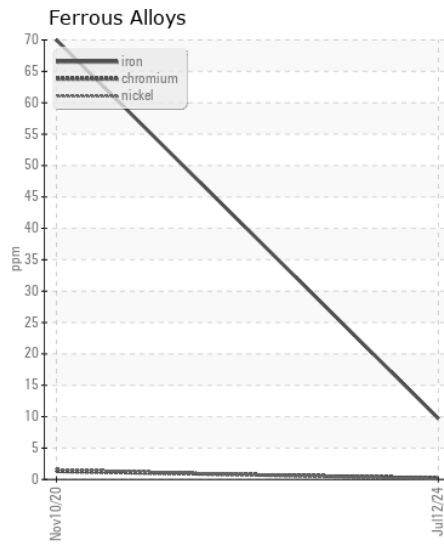
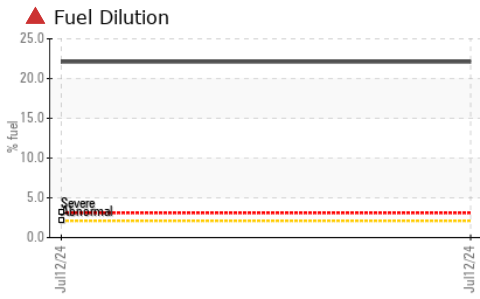
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185m	>22	13	8	---
Potassium	ppm	ASTM D5185m	>20	<1	<1	---
Fuel	%	ASTM D3524	>2.1	▲ 22.1	<1.0	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0.7	---
Nitration	Abs/cm	*ASTM D7624	>20	8.2	11.7	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.3	29.3	---
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. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m	>31	2	2	---
Boron	ppm	ASTM D5185m		205	260	---
Barium	ppm	ASTM D5185m		<1	0	---
Molybdenum	ppm	ASTM D5185m		200	151	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		655	554	---
Calcium	ppm	ASTM D5185m		1183	1740	---
Phosphorus	ppm	ASTM D5185m		734	1043	---
Zinc	ppm	ASTM D5185m		809	1389	---
Sulfur	ppm	ASTM D5185m		2722	2774	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	26.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.5	6.7	---
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 8.8	15.3	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0221307 **Received** : 16 Jul 2024
Lab Number : 06237566 **Tested** : 18 Jul 2024
Unique Number : 11126400 **Diagnosed** : 18 Jul 2024 - Wes Davis
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

JRE - STEPHENSON
 245 YARDMASTER COURT
 STEPHENSON, VA
 US 22656-1761
 Contact: PHIL DAUGHERTY
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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)

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