



WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Area

[W8551]

Machine Id

JOHN DEERE GENERATOR (S/N 132850)

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (10 QTS)

RECOMMENDATION

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. (Customer Sample Comment: W8551)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0197003	JR0097850	---
Sample Date		Client Info		21 Feb 2024	24 May 2022	---
Machine Age	hrs	Client Info		349	294	---
Oil Age	hrs	Client Info		55	14	---
Filter Age	hrs	Client Info		55	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				SEVERE	SEVERE	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	4	6	---
Chromium	ppm	ASTM D5185m	>11	<1	<1	---
Nickel	ppm	ASTM D5185m	>5	0	1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	<1	---
Aluminum	ppm	ASTM D5185m	>31	2	2	---
Lead	ppm	ASTM D5185m	>26	0	<1	---
Copper	ppm	ASTM D5185m	>26	3	2	---
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

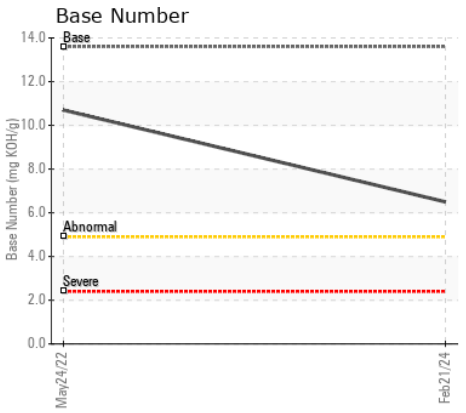
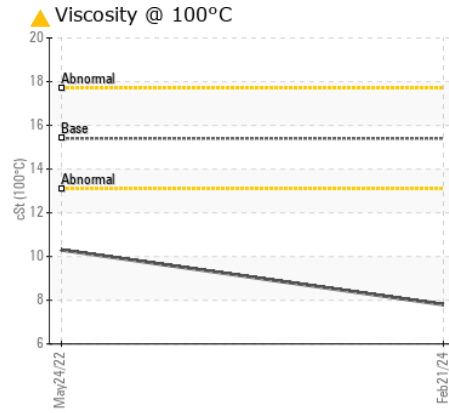
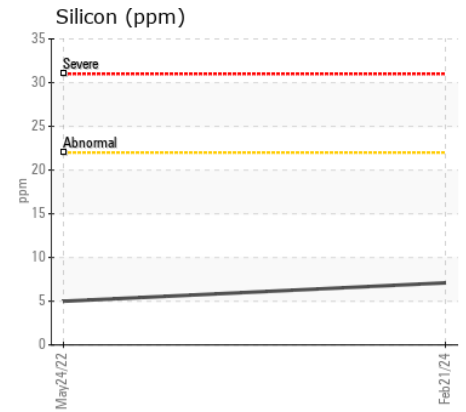
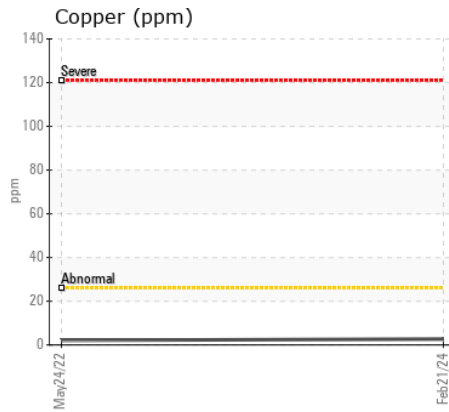
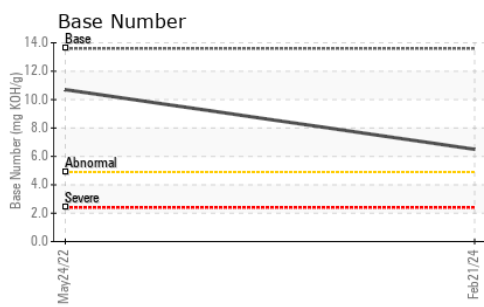
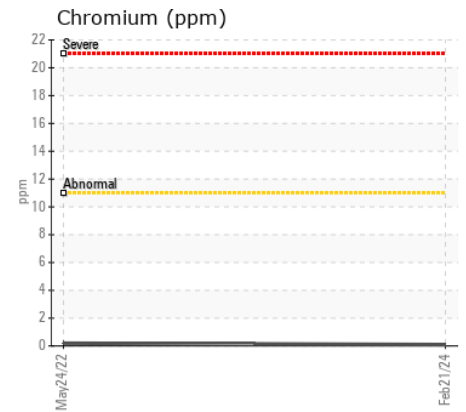
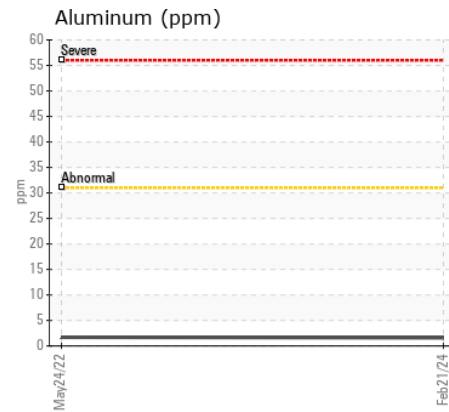
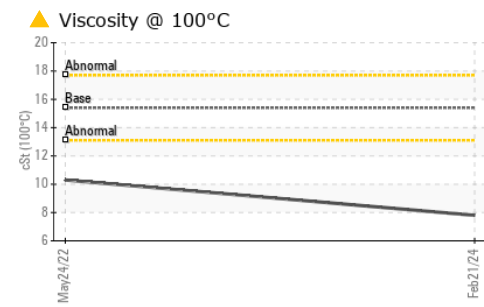
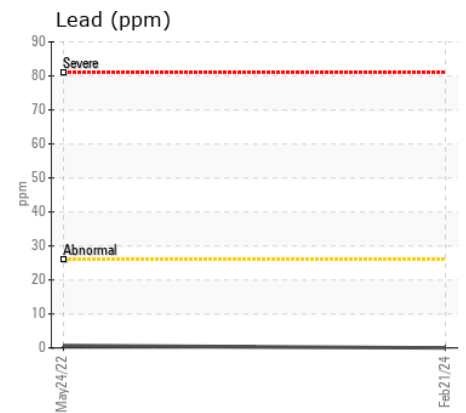
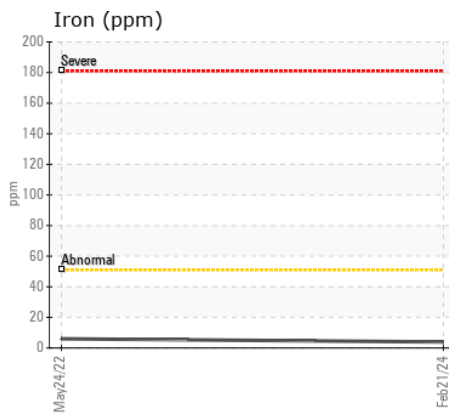
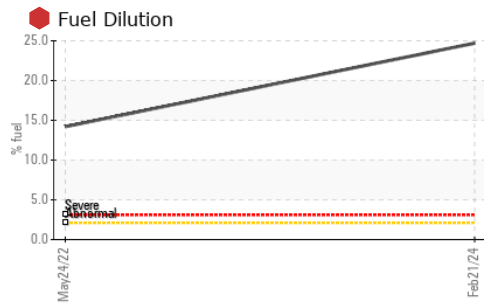
There is a high amount of fuel present in the oil.

Silicon	ppm	ASTM D5185m	>22	7	5	---
Potassium	ppm	ASTM D5185m	>20	2	<1	---
Fuel	%	ASTM D3524	>2.1	24.7	14.2	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	7.3	6.5	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	22.0	---
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

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m	>31	0	3	---
Boron	ppm	ASTM D5185m		165	3	---
Barium	ppm	ASTM D5185m		9	0	---
Molybdenum	ppm	ASTM D5185m		140	2	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m		470	278	---
Calcium	ppm	ASTM D5185m		1070	2332	---
Phosphorus	ppm	ASTM D5185m		667	1038	---
Zinc	ppm	ASTM D5185m		744	1198	---
Sulfur	ppm	ASTM D5185m		2441	3535	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.2	21.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	6.5	10.7	---
Visc @ 100°C	cSt	ASTM D445	15.4	7.8	10.3	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0197003 **Received** : 26 Feb 2024
Lab Number : 06099976 **Tested** : 27 Feb 2024
Unique Number : 10898206 **Diagnosed** : 28 Feb 2024 - Jonathan Hester
Test Package : MOBCE (Additional Tests: PercentFuel, TBN)

JRE - HOPE MILLS/FAYETTEVILLE
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 HOPE MILLS, NC
 US 28348
 Contact: FAYETTEVILLE SHOP
 stephen.mullis@jamesriverequipment.com; canastasio@wearcheck.com
 T:
 F:

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)