



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Store 9 - Marietta
Machine Id
JOHN DEERE 250G 1FF250GXANF611974
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (5 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0050225	LEC0043265	---
Sample Date		Client Info		09 Jul 2024	26 Jun 2023	---
Machine Age	hrs	Client Info		900	408	---
Oil Age	hrs	Client Info		492	408	---
Filter Age	hrs	Client Info		492	408	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

The copper level has decreased, but is still abnormal. The nickel level is abnormal. Elemental level of copper (Cu) probably due to leaching of copper from copper components (i.e. cooling core) by the oil additives.

Iron	ppm	ASTM D5185m	>51	38	56	---
Chromium	ppm	ASTM D5185m	>11	2	2	---
Nickel	ppm	ASTM D5185m	>5	▲ 18	▲ 17	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	<1	---
Aluminum	ppm	ASTM D5185m	>31	5	10	---
Lead	ppm	ASTM D5185m	>26	<1	4	---
Copper	ppm	ASTM D5185m	>26	▲ 234	▲ 340	---
Tin	ppm	ASTM D5185m	>4	1	4	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

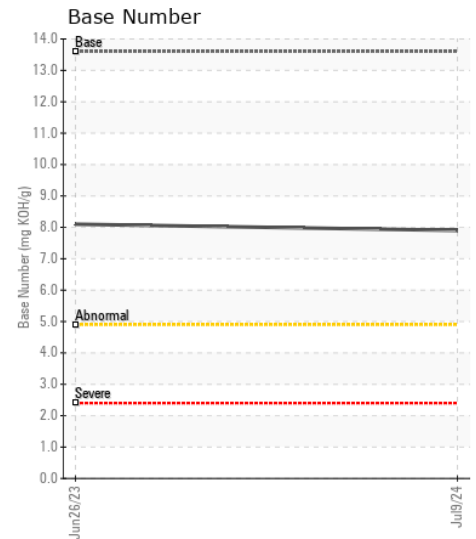
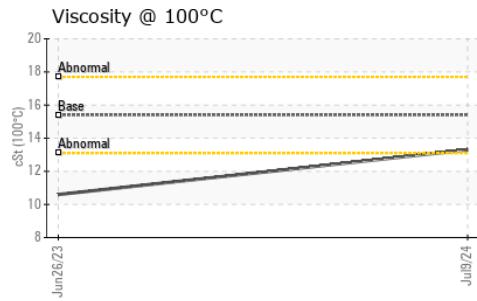
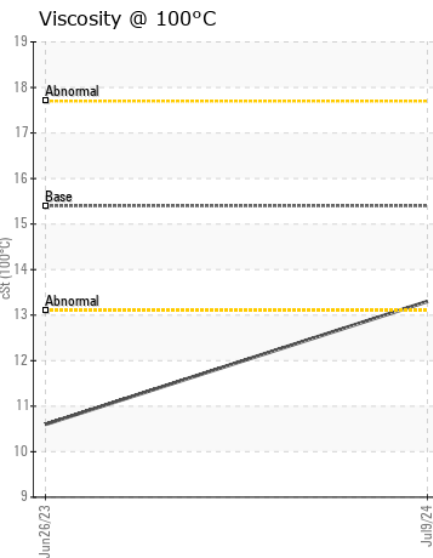
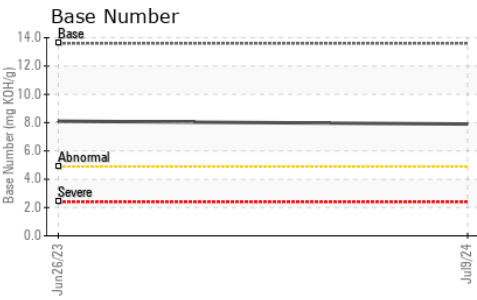
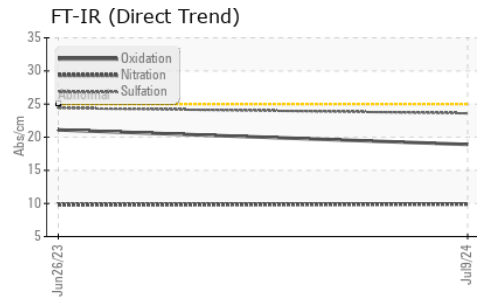
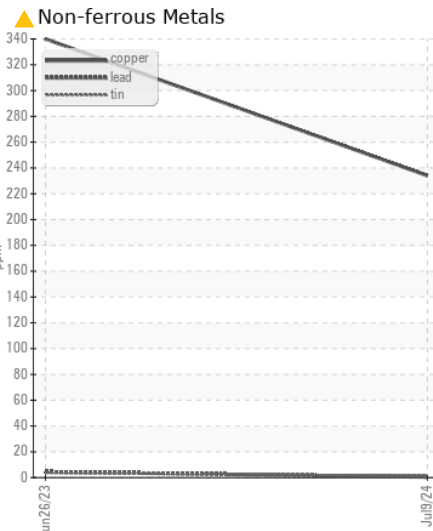
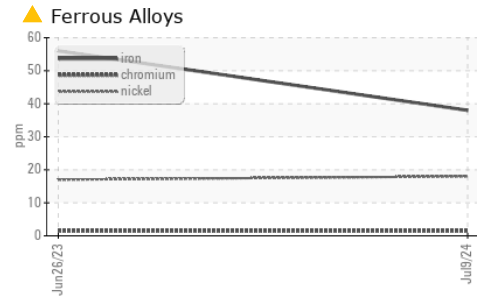
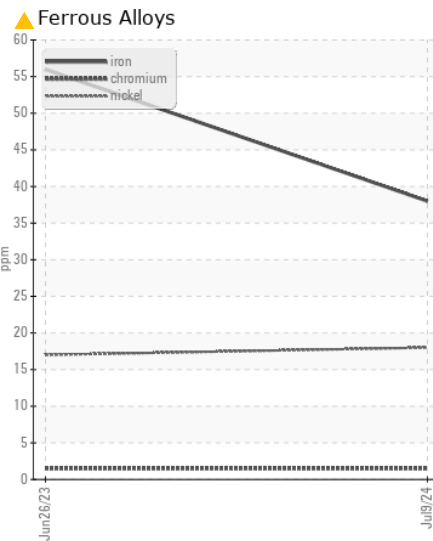
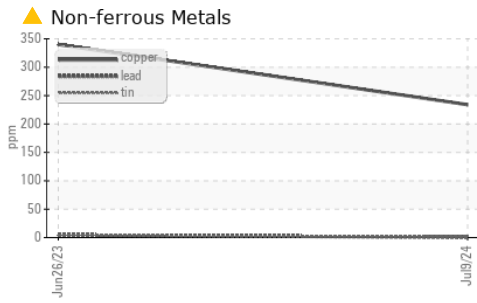
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	9	15	---
Potassium	ppm	ASTM D5185m	>20	4	4	---
Fuel		WC Method	>2.1	<1.0	0.2	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.5	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	9.9	9.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.6	24.4	---
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>31	5	9	---
Boron	ppm	ASTM D5185m		148	260	---
Barium	ppm	ASTM D5185m		0	4	---
Molybdenum	ppm	ASTM D5185m		228	269	---
Manganese	ppm	ASTM D5185m		2	8	---
Magnesium	ppm	ASTM D5185m		778	919	---
Calcium	ppm	ASTM D5185m		1568	1616	---
Phosphorus	ppm	ASTM D5185m		897	922	---
Zinc	ppm	ASTM D5185m		1142	1148	---
Sulfur	ppm	ASTM D5185m		2920	3434	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.9	21.1	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.9	8.1	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.3	▲ 10.6	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0050225 **Received** : 10 Jul 2024
Lab Number : 06232102 **Tested** : 11 Jul 2024
Unique Number : 11115595 **Diagnosed** : 11 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: TBN)

LESLIE EQUIPMENT COMPANY
 105 TENNIS CENTER DR.
 MARIETTA, OH
 US 45750-9765
 Contact: LEANNE KENDALL
 KendalLeanne@lec1.com

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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