



# OIL ANALYSIS REPORT

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



Area  
**Store 9 - Marietta**  
Machine Id  
**JOHN DEERE 250GLC 1FF250GXENF612031**  
Component  
**Diesel Engine**  
Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 10W30 (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. ( Customer Sample Comment: 10/30 BREAK IN OIL )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0050877	---	---
Sample Date		Client Info		18 Jun 2024	---	---
Machine Age	hrs	Client Info		543	---	---
Oil Age	hrs	Client Info		543	---	---
Filter Age	hrs	Client Info		543	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

## WEAR

The copper 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. All other metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>51	92	---	---
Chromium	ppm	ASTM D5185m	>11	2	---	---
Nickel	ppm	ASTM D5185m	>5	22	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>31	8	---	---
Lead	ppm	ASTM D5185m	>26	7	---	---
Copper	ppm	ASTM D5185m	>26	▲ 404	---	---
Tin	ppm	ASTM D5185m	>4	3	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

## CONTAMINATION

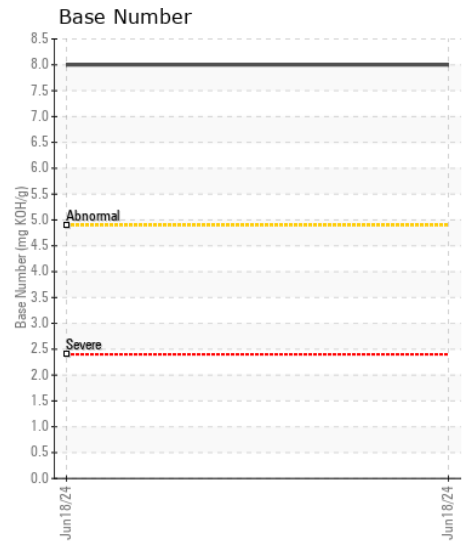
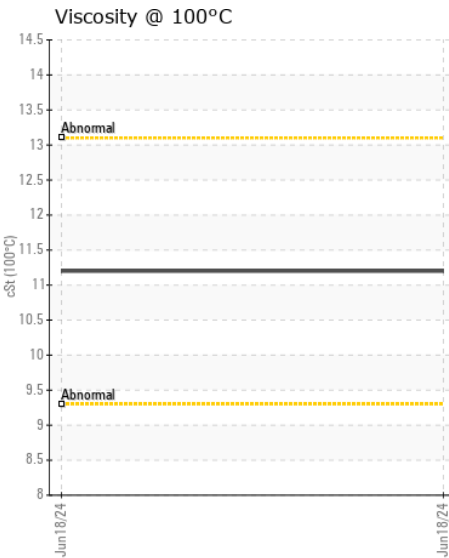
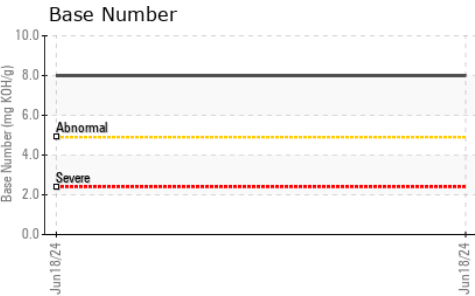
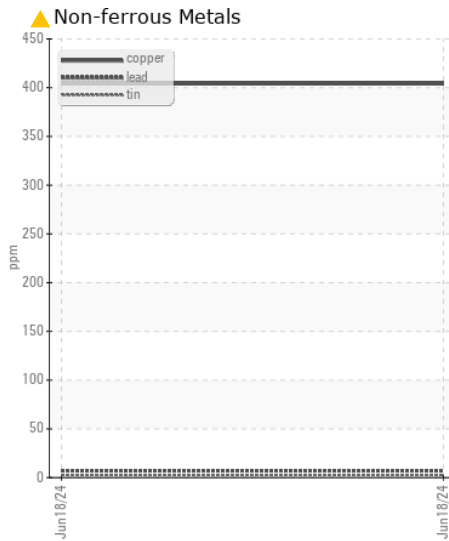
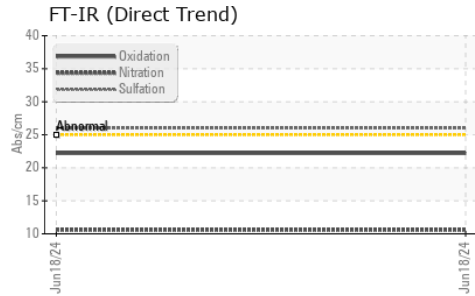
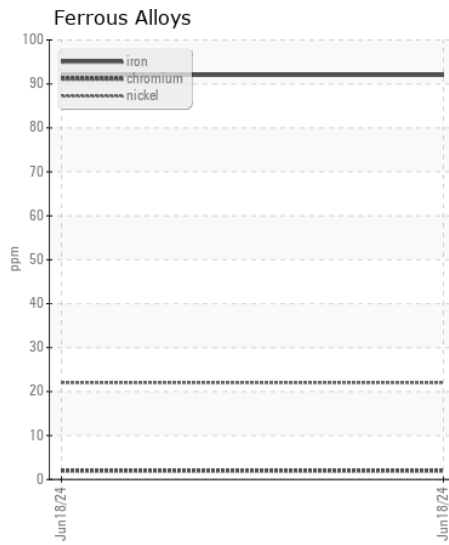
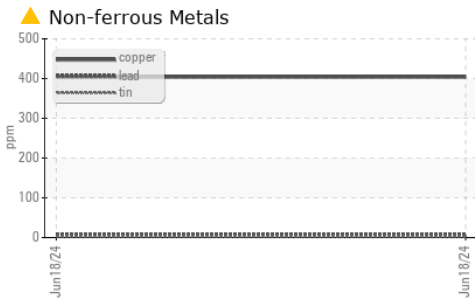
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	14	---	---
Potassium	ppm	ASTM D5185m	>20	12	---	---
Fuel		WC Method	>2.1	<1.0	---	---
Water		WC Method	>0.21	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.7	---	---
Nitration	Abs/cm	*ASTM D7624	>20	10.6	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.0	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.21	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	8	---	---
Boron	ppm	ASTM D5185m		93	---	---
Barium	ppm	ASTM D5185m		2	---	---
Molybdenum	ppm	ASTM D5185m		245	---	---
Manganese	ppm	ASTM D5185m		7	---	---
Magnesium	ppm	ASTM D5185m		925	---	---
Calcium	ppm	ASTM D5185m		1917	---	---
Phosphorus	ppm	ASTM D5185m		1080	---	---
Zinc	ppm	ASTM D5185m		1347	---	---
Sulfur	ppm	ASTM D5185m		3475	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.2	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.0	---	---
Visc @ 100°C	cSt	ASTM D445		11.2	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0050877 **Received** : 20 Jun 2024  
**Lab Number** : **06215639** **Tested** : 21 Jun 2024  
**Unique Number** : 11088503 **Diagnosed** : 22 Jun 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: TBN )

**LESLIE EQUIPMENT COMPANY**  
 105 TENNIS CENTER DR.  
 MARIETTA, OH  
 US 45750-9765  
 Contact: LEANNE KENDALL  
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 T:

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)

F: (740)373-5570