



# OIL ANALYSIS REPORT

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



Area  
**Store 4 - Fairmont [144477]**  
Machine Id  
**JOHN DEERE 250G 1FF250GXLNF611927**  
Component  
**Diesel Engine**  
Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (5 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please note that this is a corrected copy for data entry updates of oil and filter time.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0045527</b>	LEC0043845	LEC0038878
Sample Date		Client Info		<b>25 Oct 2023</b>	01 Aug 2023	10 Feb 2023
Machine Age	hrs	Client Info		<b>1429</b>	1177	649
Oil Age	hrs	Client Info		<b>252</b>	528	649
Filter Age	hrs	Client Info		<b>252</b>	528	649
Oil Changed		Client Info		<b>Not Chngd</b>	Changed	Changed
Filter Changed		Client Info		<b>Not Chngd</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>11</b>	7	14
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>3</b>	2	4
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>31	<b>7</b>	1	3
Lead	ppm	ASTM D5185m	>26	<b>0</b>	0	1
Copper	ppm	ASTM D5185m	>26	<b>4</b>	5	62
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

There is no indication of any contamination in the oil.

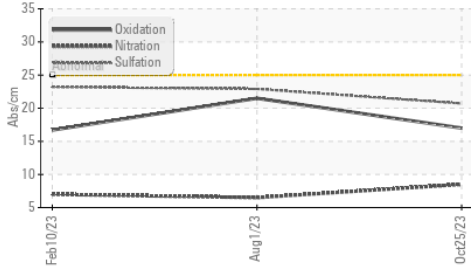
Silicon	ppm	ASTM D5185m	>120	<b>8</b>	9	6
Potassium	ppm	ASTM D5185m	>20	<b>52</b>	▲ 358	0
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol	%	*ASTM D2982		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.5</b>	6.5	7.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.7</b>	22.9	23.2
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

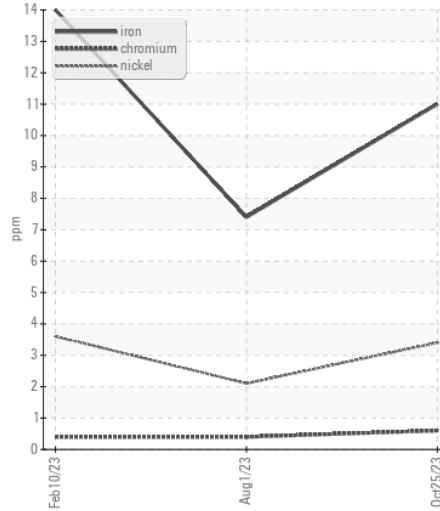
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	<b>4</b>	5	2
Boron	ppm	ASTM D5185m		<b>332</b>	● 671	315
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>355</b>	● 959	140
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>723</b>	● 207	658
Calcium	ppm	ASTM D5185m		<b>1263</b>	● 664	1580
Phosphorus	ppm	ASTM D5185m		<b>842</b>	● 167	717
Zinc	ppm	ASTM D5185m		<b>978</b>	● 213	898
Sulfur	ppm	ASTM D5185m		<b>3452</b>	● 2612	2815
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.0</b>	21.5	16.7
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>9.2</b>	4.1	9.0
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.8</b>	14.1	13.0

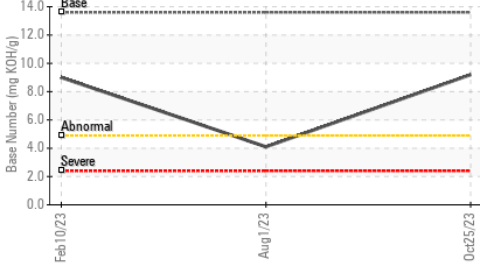
**FT-IR (Direct Trend)**



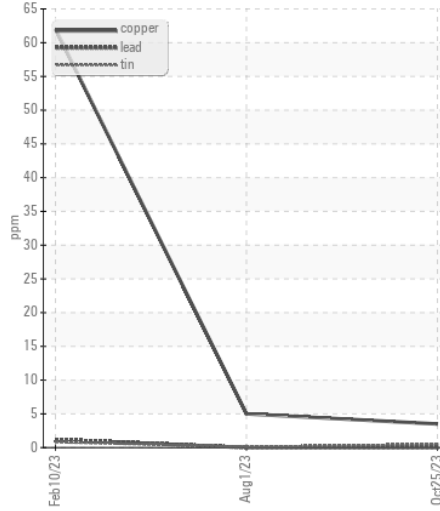
**Ferrous Alloys**



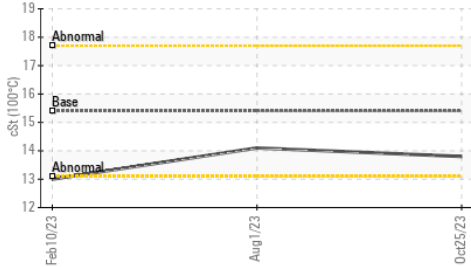
**Base Number**



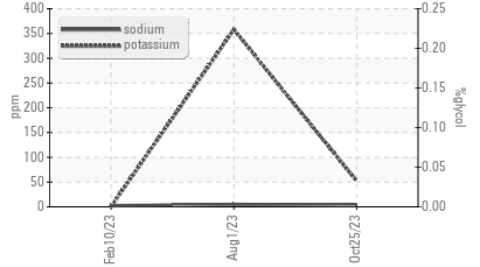
**Non-ferrous Metals**



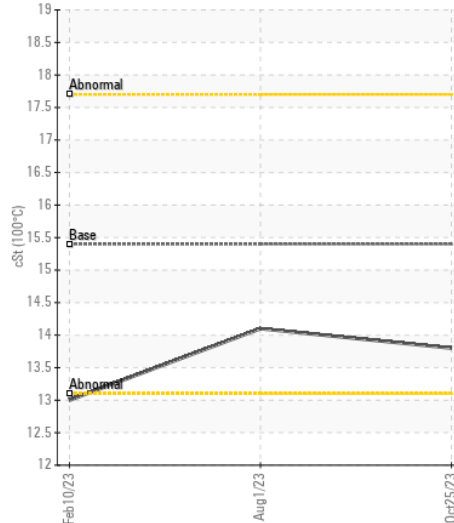
**Viscosity @ 100°C**



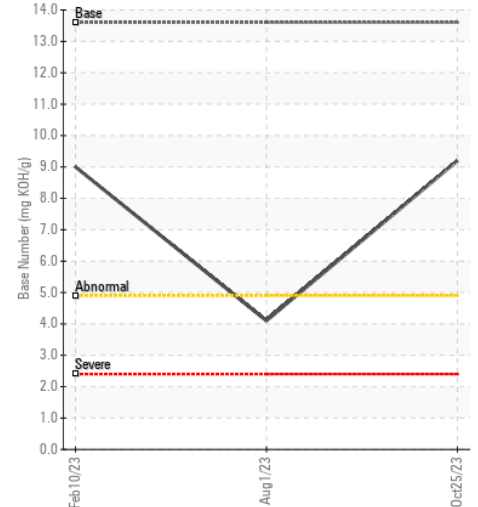
**Glycol Contamination**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0045527 **Received** : 26 Oct 2023  
**Lab Number** : 05990228 **Tested** : 31 Oct 2023  
**Unique Number** : 10712890 **Diagnosed** : 28 Nov 2023 - Doug Bogart  
**Test Package** : CONST ( Additional Tests: Glycol, 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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