



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

Machine Id  
**JOHN DEERE 250G 1FF250GXCLF611640**  
 Component  
**Diesel Engine**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0224461</b>	JR0180125	JR0180874
Sample Date		Client Info		<b>12 Jul 2024</b>	14 Feb 2024	13 Sep 2023
Machine Age	hrs	Client Info		<b>3012</b>	2460	1941
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>45</b>	30	36
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	1	2
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>5</b>	6	5
Lead	ppm	ASTM D5185m	>26	<b>&lt;1</b>	1	1
Copper	ppm	ASTM D5185m	>26	<b>3</b>	4	6
Tin	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
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.

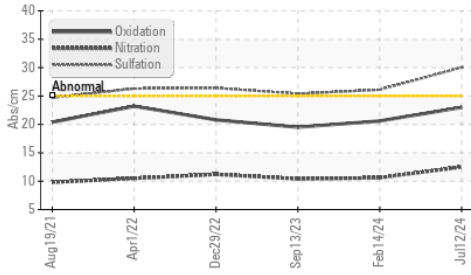
Silicon	ppm	ASTM D5185m	>22	<b>10</b>	10	10
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	4
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>1.6</b>	0.9	1
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.5</b>	10.6	10.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>30.0</b>	26.1	25.4
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

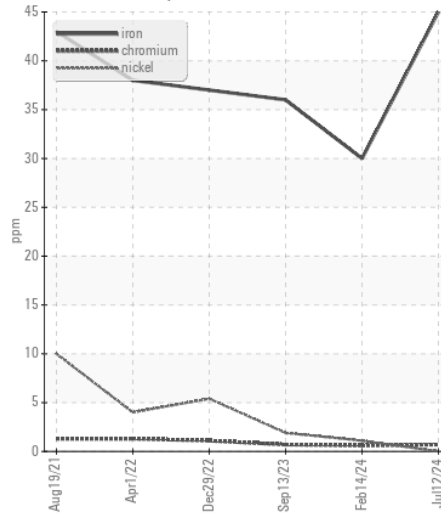
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	<b>6</b>	4	5
Boron	ppm	ASTM D5185m		<b>44</b>	114	77
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Molybdenum	ppm	ASTM D5185m		<b>266</b>	265	254
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m		<b>881</b>	844	888
Calcium	ppm	ASTM D5185m		<b>1587</b>	1447	1591
Phosphorus	ppm	ASTM D5185m		<b>907</b>	856	881
Zinc	ppm	ASTM D5185m		<b>1066</b>	1132	1144
Sulfur	ppm	ASTM D5185m		<b>3262</b>	2938	3569
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>23.0</b>	20.6	19.5
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.2</b>	8.2	7.3
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.7</b>	14.5	13.7

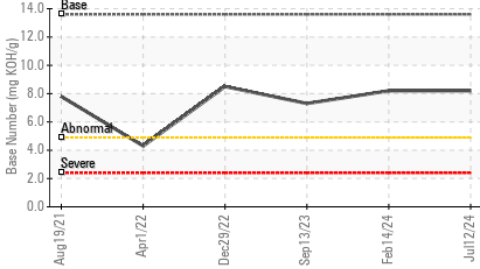
**FT-IR (Direct Trend)**



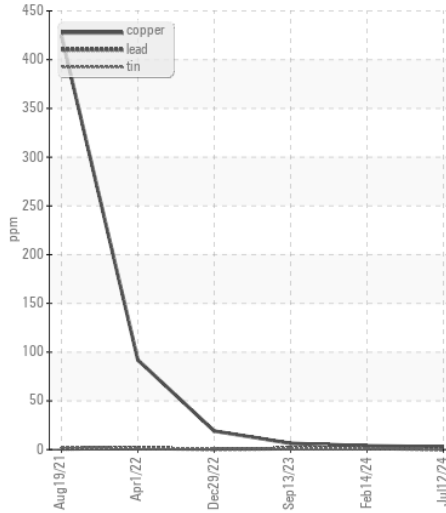
**Ferrous Alloys**



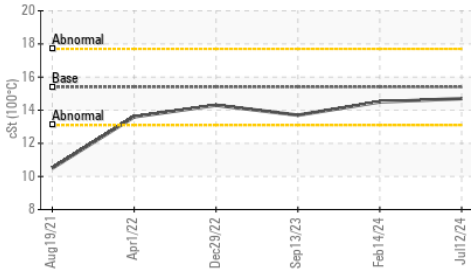
**Base Number**



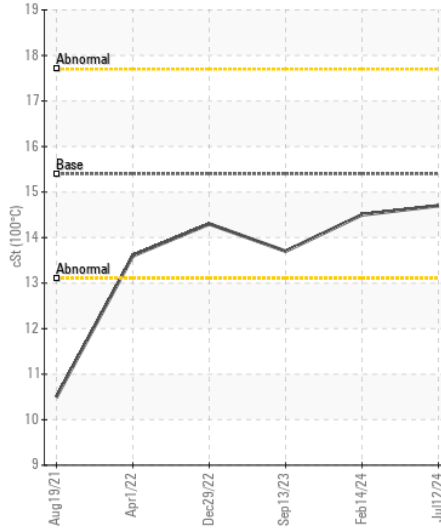
**Non-ferrous Metals**



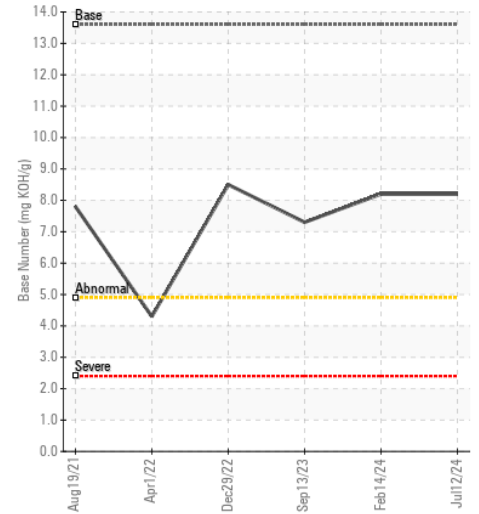
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0224461 **Received** : 15 Jul 2024  
**Lab Number** : 06235666 **Tested** : 16 Jul 2024  
**Unique Number** : 11124500 **Diagnosed** : 16 Jul 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: TBN )

**JRE - ASHLAND**  
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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)