



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

Machine Id  
**JOHN DEERE 350G 1FF350GXALF814879**  
 Component  
**Diesel Engine**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (10 GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0220400</b>	JR0215025	JR0189257
Sample Date		Client Info		<b>15 Jul 2024</b>	14 May 2024	19 Dec 2023
Machine Age	hrs	Client Info		<b>5002</b>	4707	4137
Oil Age	hrs	Client Info		<b>295</b>	570	3574
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>22</b>	35	33
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>2</b>	3	2
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>31	<b>4</b>	5	5
Lead	ppm	ASTM D5185m	>26	<b>&lt;1</b>	1	0
Copper	ppm	ASTM D5185m	>26	<b>5</b>	3	1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</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.

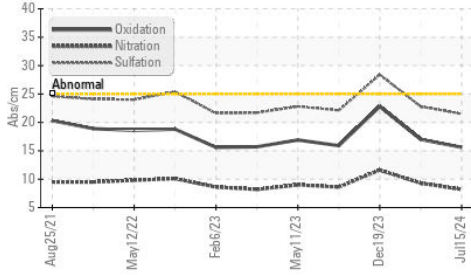
Silicon	ppm	ASTM D5185m	>22	<b>8</b>	9	8
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	3	2
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.6	1.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.2</b>	9.3	11.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.5</b>	22.8	28.4
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

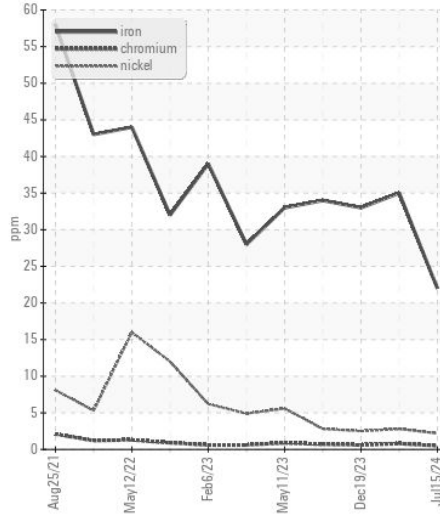
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	<b>0</b>	1	4
Boron	ppm	ASTM D5185m		<b>217</b>	149	127
Barium	ppm	ASTM D5185m		<b>2</b>	1	0
Molybdenum	ppm	ASTM D5185m		<b>261</b>	260	261
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m		<b>807</b>	804	864
Calcium	ppm	ASTM D5185m		<b>1416</b>	1424	1452
Phosphorus	ppm	ASTM D5185m		<b>911</b>	958	949
Zinc	ppm	ASTM D5185m		<b>1089</b>	1095	1114
Sulfur	ppm	ASTM D5185m		<b>3067</b>	3401	2861
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.6</b>	17.0	22.8
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>9.2</b>	8.5	7.1
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.4</b>	13.2	13.4

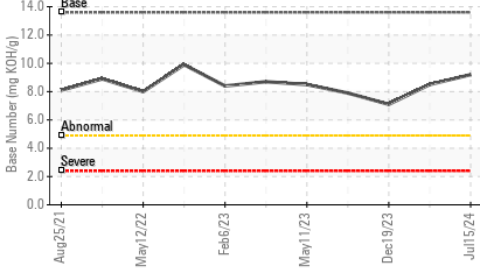
**FT-IR (Direct Trend)**



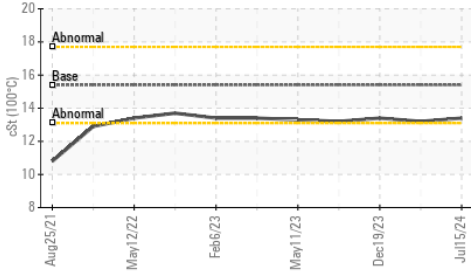
**Ferrous Alloys**



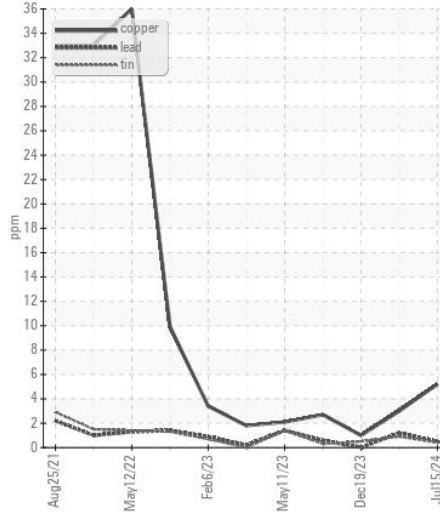
**Base Number**



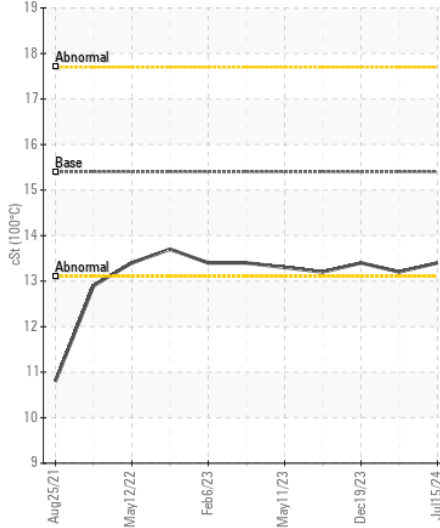
**Viscosity @ 100°C**



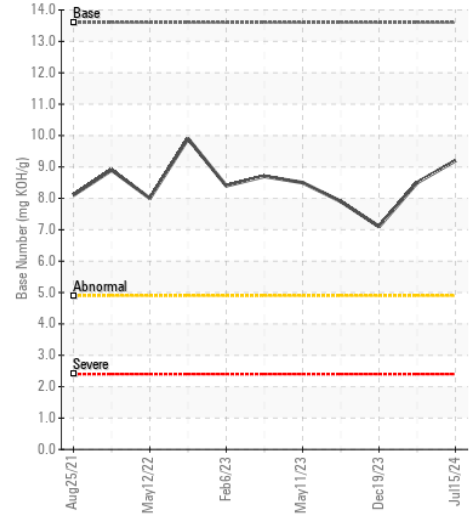
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0220400 **Received** : 17 Jul 2024  
**Lab Number** : 06238999 **Tested** : 18 Jul 2024  
**Unique Number** : 11127833 **Diagnosed** : 18 Jul 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**JRE - CHARLOTTE**  
 9550 STATESVILLE ROAD  
 CHARLOTTE, NC  
 US 28269  
 Contact: CHARLOTTE SHOP  
 myoung@jamesriverequipment.com  
 T: (704)597-0211  
 F: (704)596-6198

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)