



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

Machine Id  
**JOHN DEERE 350P 1FF350PAJNF000368**  
 Component  
**Diesel Engine**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- QTS)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0219819</b>	JR0204322	JR0188021
Sample Date		Client Info		<b>07 Jul 2024</b>	22 Feb 2024	26 Oct 2023
Machine Age	hrs	Client Info		<b>20012</b>	11560	1090
Oil Age	hrs	Client Info		<b>8452</b>	4668	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>32</b>	37	35
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m	>5	<b>2</b>	8	4
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>31	<b>4</b>	5	5
Lead	ppm	ASTM D5185m	>26	<b>2</b>	2	2
Copper	ppm	ASTM D5185m	>26	<b>7</b>	15	▲ 43
Tin	ppm	ASTM D5185m	>4	<b>0</b>	1	1
Vanadium	ppm	ASTM D5185m		<b>0</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.

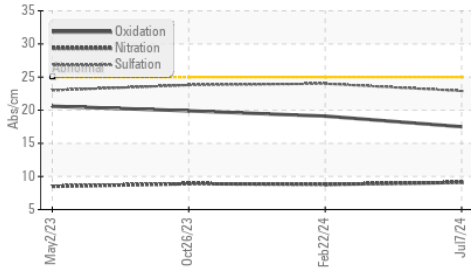
Silicon	ppm	ASTM D5185m	>22	<b>11</b>	14	12
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	<1
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.1</b>	8.8	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.9</b>	24.0	23.8
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

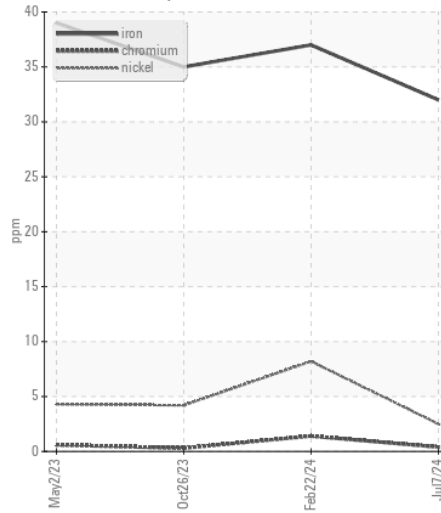
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	<b>2</b>	2	3
Boron	ppm	ASTM D5185m		<b>137</b>	141	118
Barium	ppm	ASTM D5185m		<b>0</b>	2	4
Molybdenum	ppm	ASTM D5185m		<b>249</b>	245	247
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m		<b>871</b>	740	754
Calcium	ppm	ASTM D5185m		<b>1575</b>	1264	1238
Phosphorus	ppm	ASTM D5185m		<b>927</b>	790	810
Zinc	ppm	ASTM D5185m		<b>1108</b>	997	902
Sulfur	ppm	ASTM D5185m		<b>3318</b>	2844	2224
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.5</b>	19.1	19.9
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.1</b>	7.4	6.8
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.8</b>	13.6	13.1

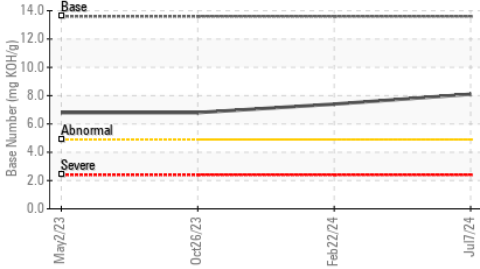
**FT-IR (Direct Trend)**



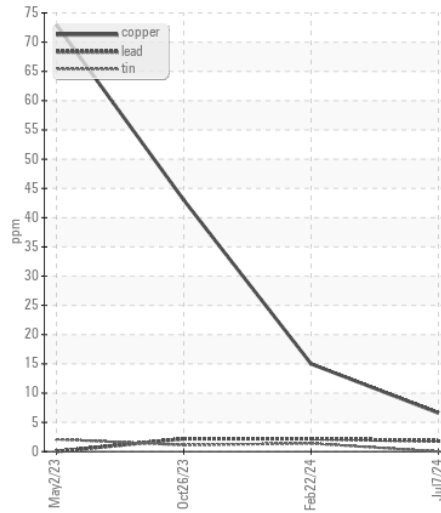
**Ferrous Alloys**



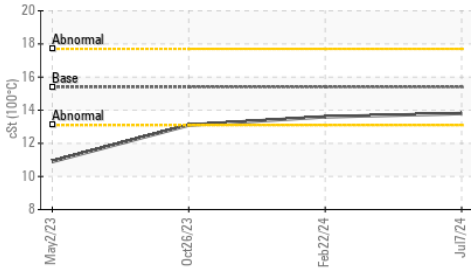
**Base Number**



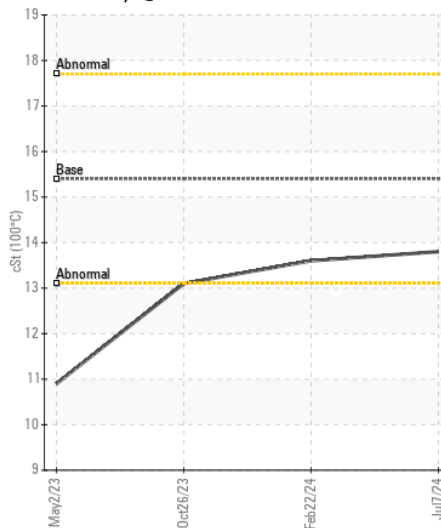
**Non-ferrous Metals**



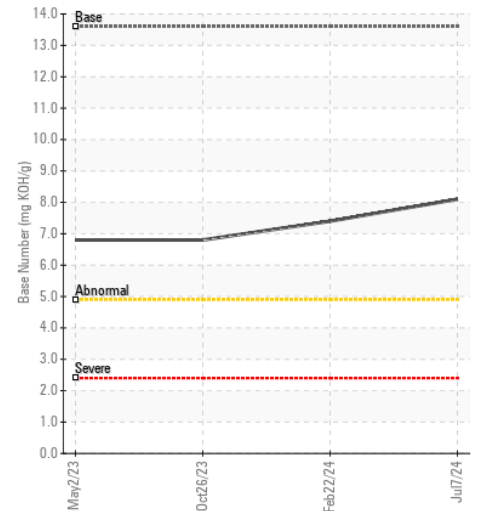
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0219819 **Received** : 09 Jul 2024  
**Lab Number** : 06231274 **Tested** : 10 Jul 2024  
**Unique Number** : 11114767 **Diagnosed** : 10 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

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)

T: (704)597-0211  
 F: (704)596-6198