



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



Machine Id  
**JOHN DEERE 650K 1T0650KKVJF325596**  
 Component  
**Diesel Engine**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (3 GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0205532</b>	JR0171225	JR0143797
Sample Date		Client Info		<b>15 Jun 2024</b>	29 Jun 2023	09 Sep 2022
Machine Age	hrs	Client Info		<b>6594</b>	5520	4521
Oil Age	hrs	Client Info		<b>1074</b>	500	0
Filter Age	hrs	Client Info		<b>0</b>	500	0
Oil Changed		Client Info		<b>Changed</b>	Changed	N/A
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>29</b>	16	34
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	2	1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	2	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	2	<1
Aluminum	ppm	ASTM D5185m	>31	<b>8</b>	5	12
Lead	ppm	ASTM D5185m	>26	<b>20</b>	23	▲ 28
Copper	ppm	ASTM D5185m	>26	<b>4</b>	3	6
Tin	ppm	ASTM D5185m	>4	<b>1</b>	2	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

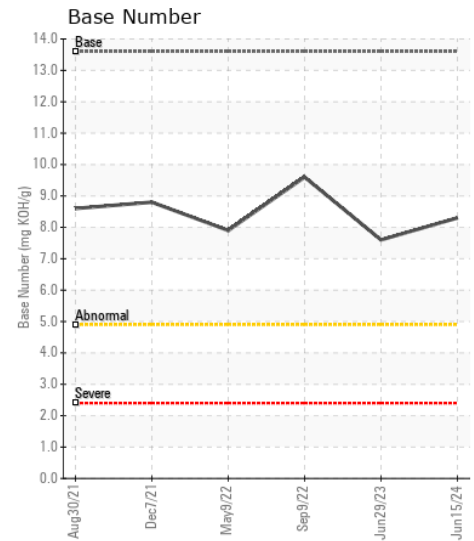
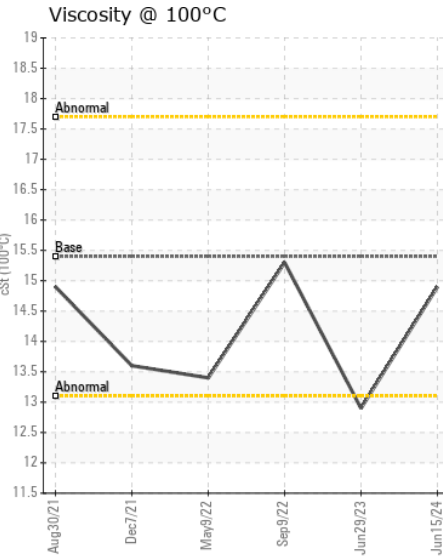
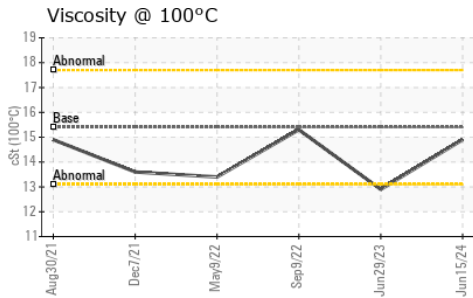
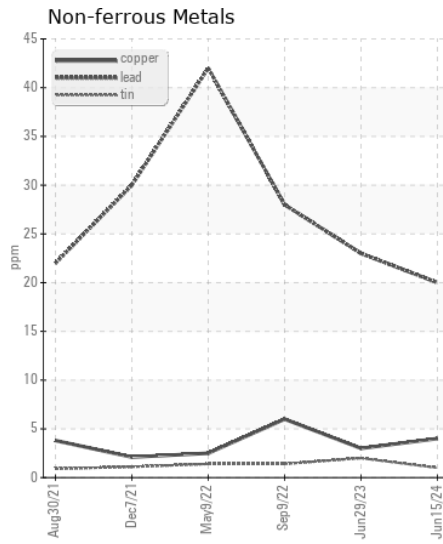
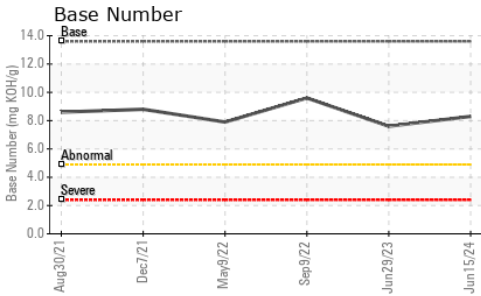
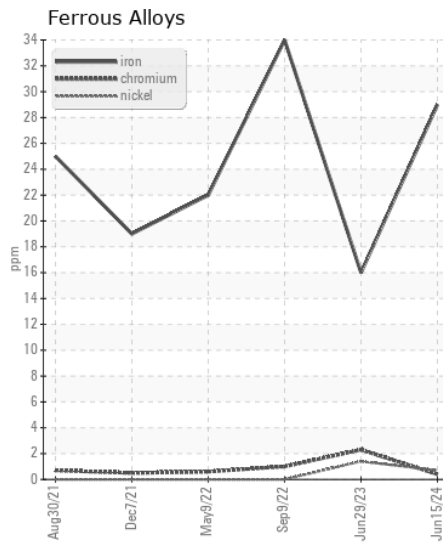
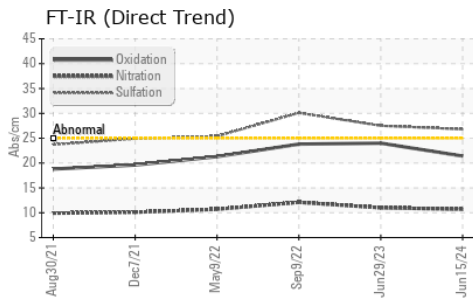
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>11</b>	8	16
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	6	3
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>1.3</b>	0.9	1.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.7</b>	11.0	12.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>26.8</b>	27.5	30.1
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>	4	0
Boron	ppm	ASTM D5185m		<b>103</b>	71	109
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>268</b>	162	279
Manganese	ppm	ASTM D5185m		<b>1</b>	2	<1
Magnesium	ppm	ASTM D5185m		<b>909</b>	603	814
Calcium	ppm	ASTM D5185m		<b>1552</b>	1129	1530
Phosphorus	ppm	ASTM D5185m		<b>1017</b>	602	926
Zinc	ppm	ASTM D5185m		<b>1178</b>	770	1147
Sulfur	ppm	ASTM D5185m		<b>3626</b>	2437	3088
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.4</b>	24.0	23.8
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.3</b>	7.6	9.6
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.9</b>	12.9	15.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0205532 **Received** : 18 Jun 2024  
**Lab Number** : 06213300 **Tested** : 19 Jun 2024  
**Unique Number** : 11086164 **Diagnosed** : 19 Jun 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