



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

Machine Id  
**JOHN DEERE 748L 1DW748LBCMF709667**  
 Component  
**Diesel Engine**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (28 QTS)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0213813</b>	JR0200626	JR0186543
Sample Date		Client Info		<b>23 May 2024</b>	06 Feb 2024	30 Nov 2023
Machine Age	hrs	Client Info		<b>6994</b>	6559	6144
Oil Age	hrs	Client Info		<b>435</b>	415	593
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>17</b>	6	10
Chromium	ppm	ASTM D5185m	>11	<b>2</b>	<1	0
Nickel	ppm	ASTM D5185m	>5	<b>4</b>	1	1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>1</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>7</b>	4	5
Lead	ppm	ASTM D5185m	>26	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>26	<b>5</b>	0	1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
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

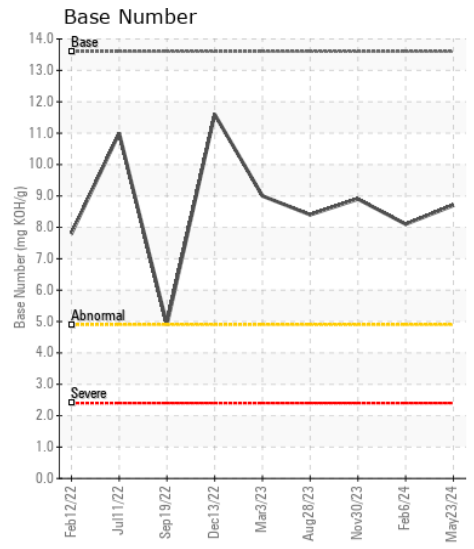
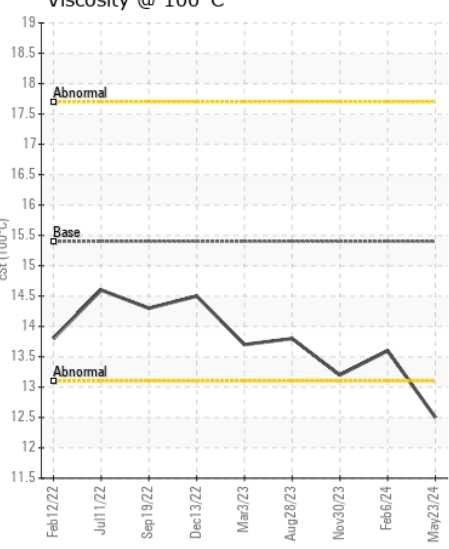
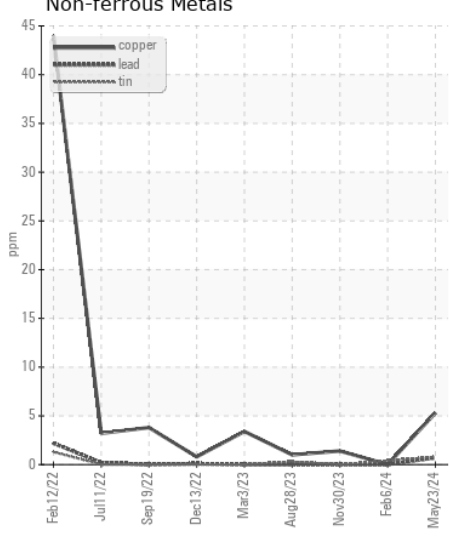
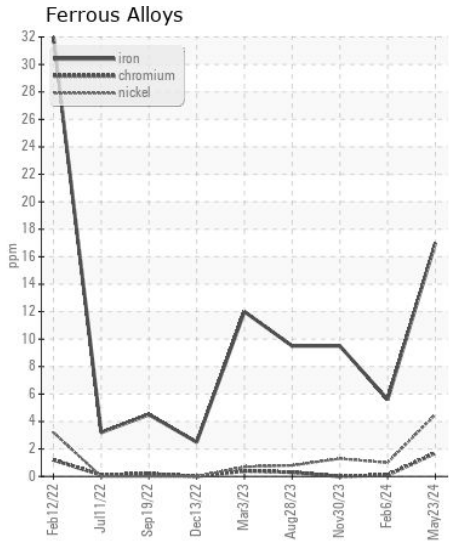
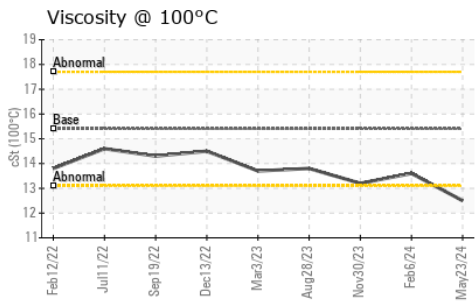
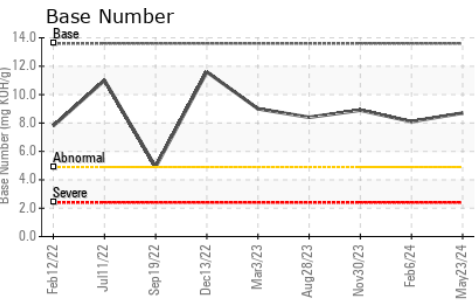
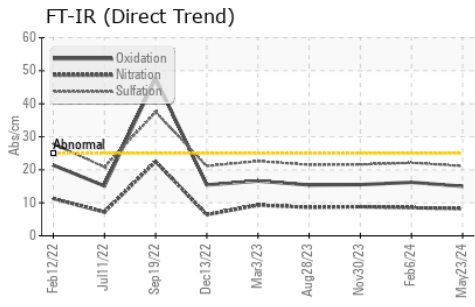
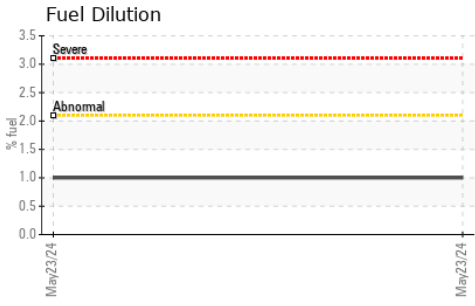
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>14</b>	6	8
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	0	4
Fuel	%	ASTM D3524	>2.1	<b>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>0.3</b>	0.3	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.2</b>	8.5	8.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.1</b>	22.1	21.6
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	0
Boron	ppm	ASTM D5185m		<b>199</b>	193	208
Barium	ppm	ASTM D5185m		<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>226</b>	241	290
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>711</b>	792	844
Calcium	ppm	ASTM D5185m		<b>1560</b>	1319	1603
Phosphorus	ppm	ASTM D5185m		<b>872</b>	930	971
Zinc	ppm	ASTM D5185m		<b>1063</b>	1095	1160
Sulfur	ppm	ASTM D5185m		<b>3010</b>	2906	3479
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.0</b>	16.2	15.5
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.7</b>	8.1	8.9
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.5</b>	13.6	13.2



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0213813 **Received** : 28 May 2024  
**Lab Number** : 06191965 **Tested** : 30 May 2024  
**Unique Number** : 11048717 **Diagnosed** : 30 May 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: FuelDilution, PercentFuel, TBN )

**JRE - GREENVILLE**  
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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)