



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

Machine Id  
**JOHN DEERE 843L 678437**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 40 (--- QTS)**

### RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0205061</b>	JR0158093	JR0122410
Sample Date		Client Info		<b>10 Apr 2024</b>	02 Mar 2023	12 Apr 2022
Machine Age	hrs	Client Info		<b>10154</b>	8510	7421
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>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL

### WEAR

Cylinder, crank, or cam shaft wear is indicated. Bearing and/or bushing wear is indicated.

Iron	ppm	ASTM D5185m	>51	<b>▲ 76</b>	34	34
Chromium	ppm	ASTM D5185m	>11	<b>2</b>	0	<1
Nickel	ppm	ASTM D5185m	>5	<b>3</b>	<1	3
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>4</b>	2	3
Lead	ppm	ASTM D5185m	>26	<b>▲ 31</b>	0	0
Copper	ppm	ASTM D5185m	>26	<b>▲ 39</b>	<b>▲ 240</b>	2
Tin	ppm	ASTM D5185m	>4	<b>3</b>	<1	1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

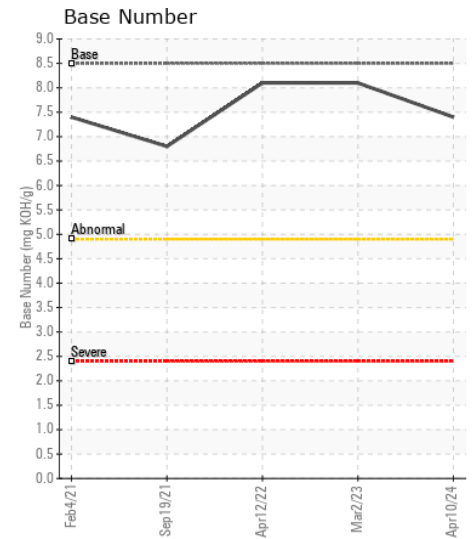
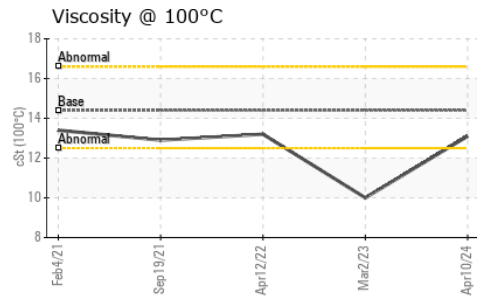
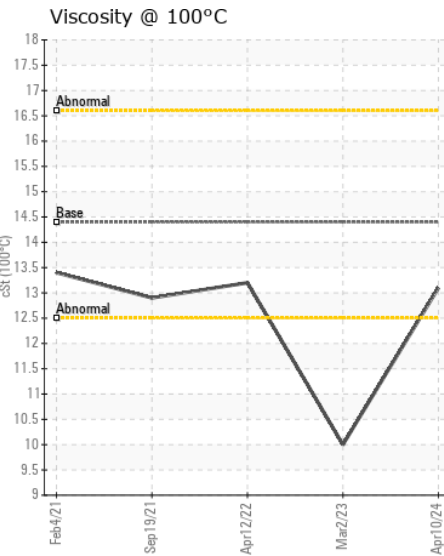
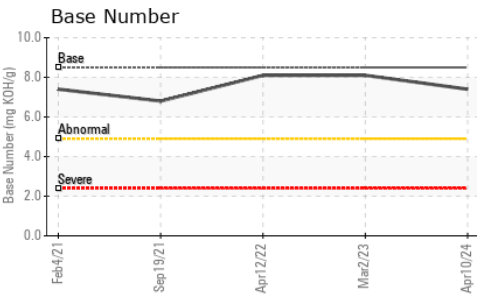
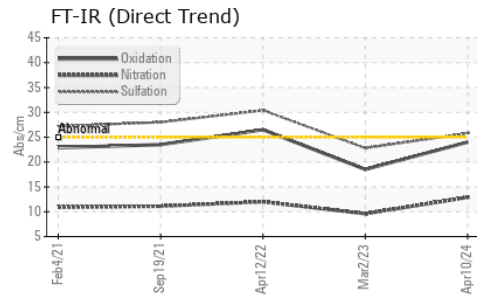
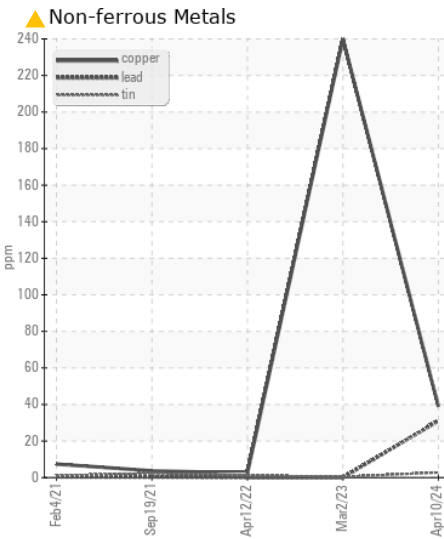
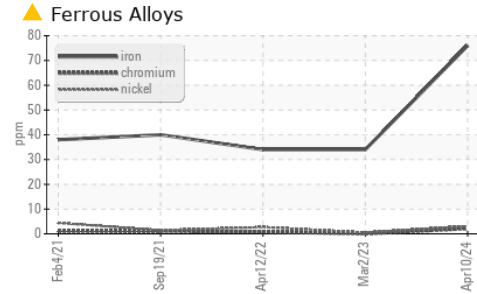
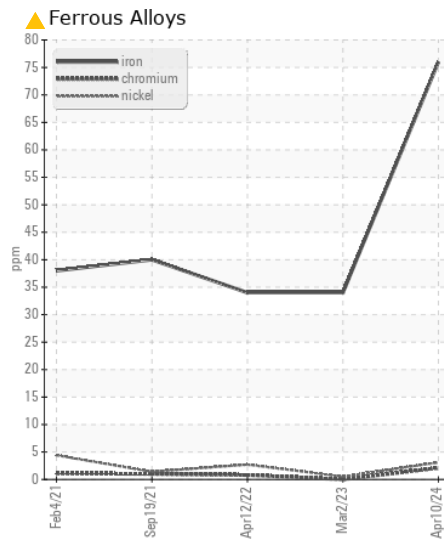
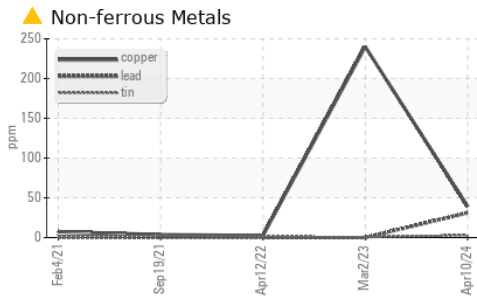
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>10</b>	9	8
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	2	0
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	0.9	<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>1.2</b>	0.4	0.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.9</b>	9.6	12.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.8</b>	22.8	30.4
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	>216	<b>4</b>	3	4
Boron	ppm	ASTM D5185m	250	<b>29</b>	201	41
Barium	ppm	ASTM D5185m	10	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>184</b>	242	220
Manganese	ppm	ASTM D5185m		<b>2</b>	4	<1
Magnesium	ppm	ASTM D5185m	450	<b>529</b>	738	756
Calcium	ppm	ASTM D5185m	3000	<b>1907</b>	1459	1457
Phosphorus	ppm	ASTM D5185m	1150	<b>983</b>	828	773
Zinc	ppm	ASTM D5185m	1350	<b>1193</b>	1050	930
Sulfur	ppm	ASTM D5185m	4250	<b>3294</b>	2534	2121
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>24.0</b>	18.5	26.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.4</b>	8.1	8.1
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.1</b>	10.0	13.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0205061 **Received** : 11 Apr 2024  
**Lab Number** : 06145561 **Tested** : 12 Apr 2024  
**Unique Number** : 10970369 **Diagnosed** : 14 Apr 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: TBN )

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)

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