



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

Machine Id  
**JOHN DEERE 944K 1DW944KXLJF691265**

Component  
**Diesel Engine**

Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)**

### RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0167564</b>	JR0156492	JR0138949
Sample Date		Client Info		<b>16 May 2023</b>	22 Dec 2022	22 Aug 2022
Machine Age	hrs	Client Info		<b>6455</b>	6014	5527
Oil Age	hrs	Client Info		<b>439</b>	487	5012
Filter Age	hrs	Client Info		<b>439</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	SEVERE

### WEAR

The lead level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>36</b>	18	41
Chromium	ppm	ASTM D5185m	>11	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>31	<b>8</b>	5	12
Lead	ppm	ASTM D5185m	>26	<b>▲ 30</b>	7	▲ 98
Copper	ppm	ASTM D5185m	>26	<b>14</b>	13	25
Tin	ppm	ASTM D5185m	>4	<b>3</b>	3	4
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

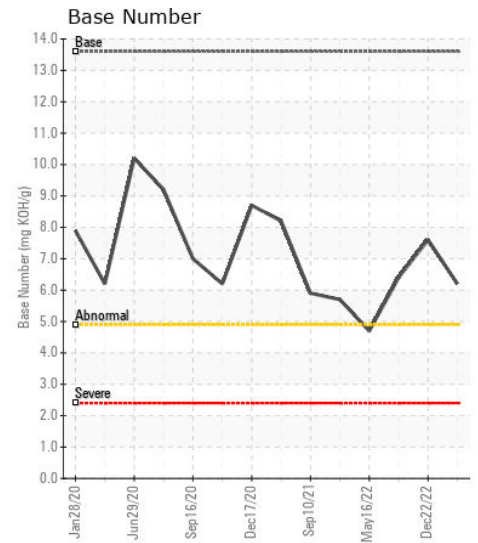
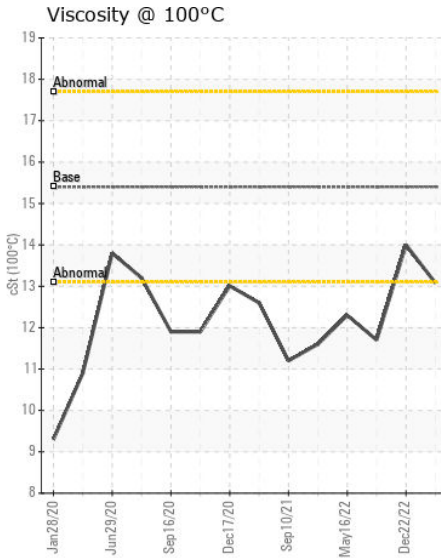
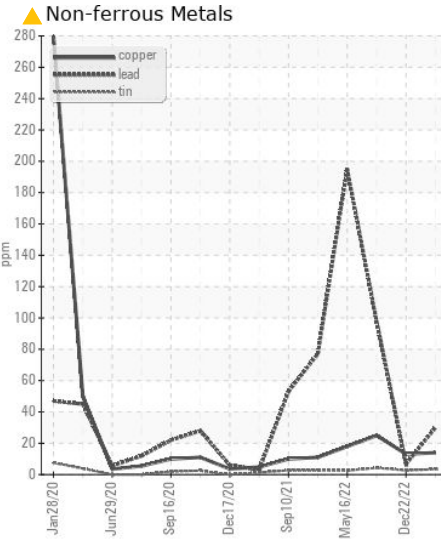
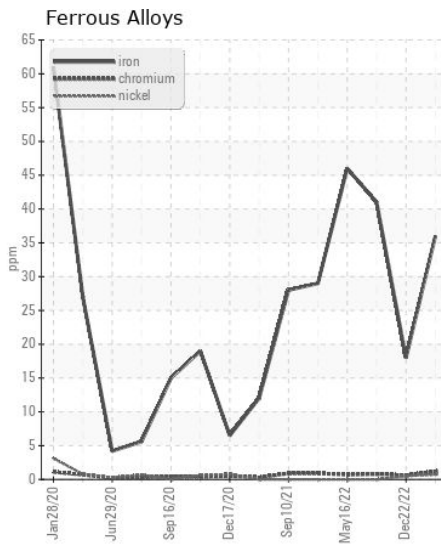
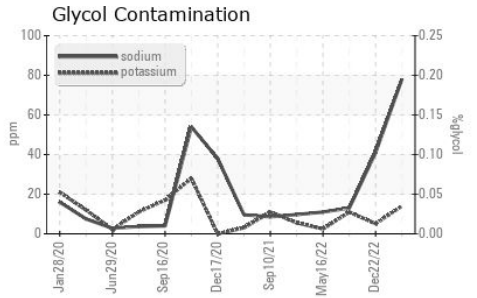
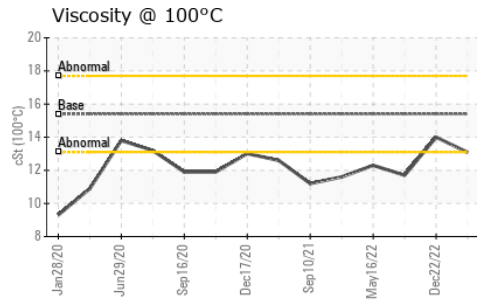
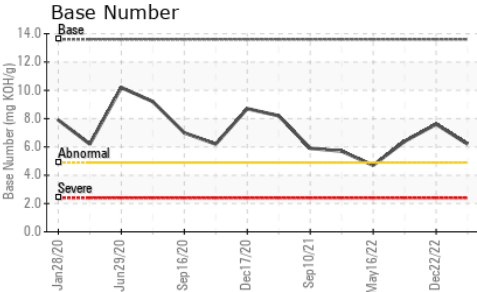
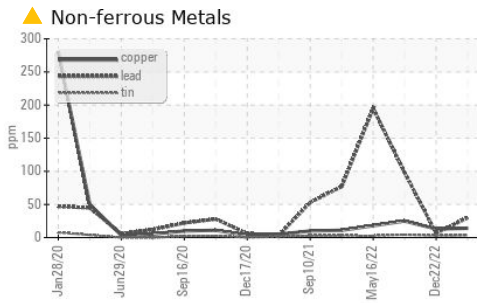
Sodium and/or potassium levels are high. Test for glycol is negative.

Silicon	ppm	ASTM D5185m	>22	<b>12</b>	9	17
Potassium	ppm	ASTM D5185m	>20	<b>14</b>	5	11
Fuel		WC Method	>5	<b>&lt;1.0</b>	0.9	▲ 8.7
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol	%	*ASTM D2982		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.8</b>	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.9</b>	10.8	13.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>28.9</b>	24.7	31.1
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>31	<b>● 78</b>	41	13
Boron	ppm	ASTM D5185m		<b>20</b>	65	23
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>174</b>	195	247
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>718</b>	763	745
Calcium	ppm	ASTM D5185m		<b>1694</b>	1583	1441
Phosphorus	ppm	ASTM D5185m		<b>865</b>	882	813
Zinc	ppm	ASTM D5185m		<b>1122</b>	1127	1018
Sulfur	ppm	ASTM D5185m		<b>4403</b>	3524	2846
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>22.6</b>	18.7	28.2
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>6.2</b>	7.6	6.4
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.08</b>	14.0	▲ 11.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0167564 **Received** : 18 May 2023  
**Lab Number** : 05851012 **Tested** : 18 May 2023  
**Unique Number** : 10480367 **Diagnosed** : 18 May 2023 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: Glycol, 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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