



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

Machine Id  
**JOHN DEERE 944K 1DW944KXAML703645**

Component  
**Diesel Engine**

Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (12 GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0175695</b>	JR0163389	JR0156439
Sample Date		Client Info		<b>16 Jun 2023</b>	29 Mar 2023	23 Jan 2023
Machine Age	hrs	Client Info		<b>3021</b>	2545	2110
Oil Age	hrs	Client Info		<b>984</b>	435	545
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>	SEVERE	ABNORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>10</b>	32	37
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>4</b>	6	8
Lead	ppm	ASTM D5185m	>26	<b>8</b>	48	43
Copper	ppm	ASTM D5185m	>26	<b>2</b>	12	15
Tin	ppm	ASTM D5185m	>4	<b>1</b>	4	5
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

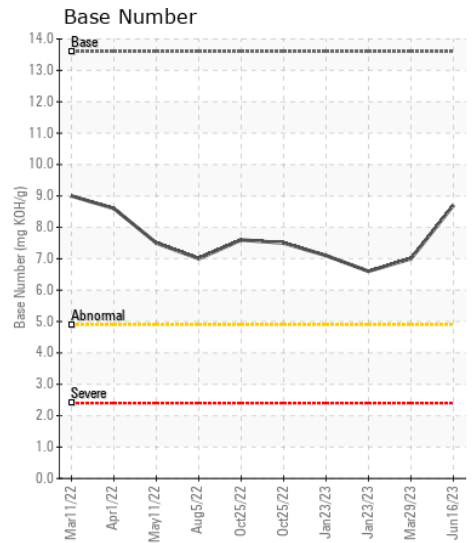
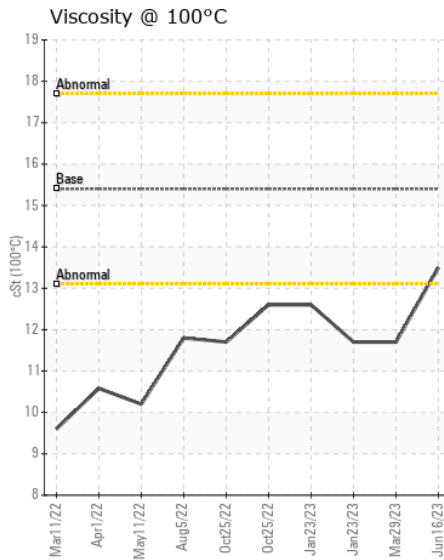
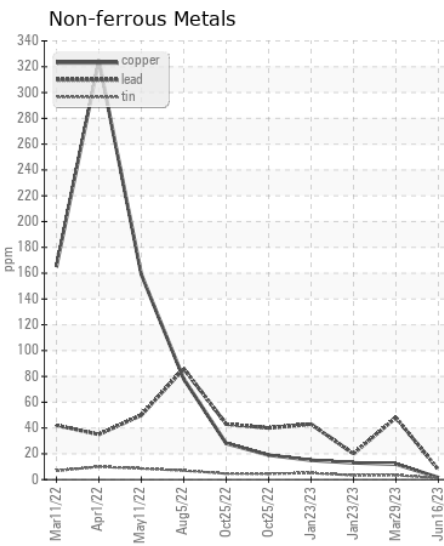
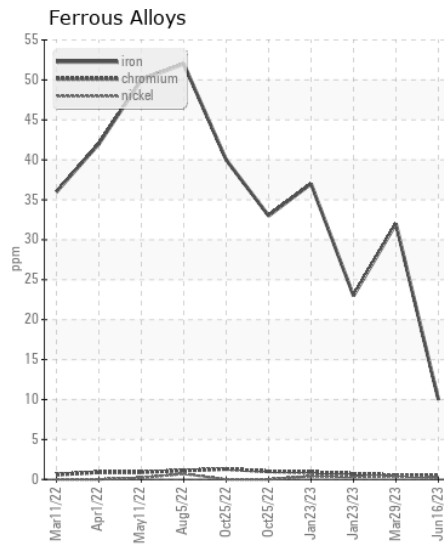
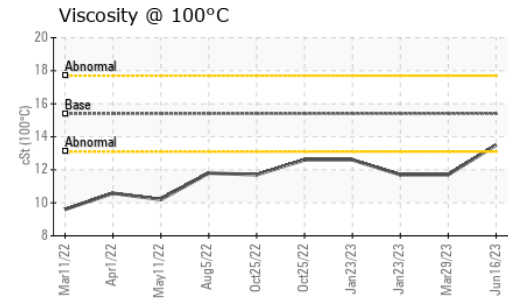
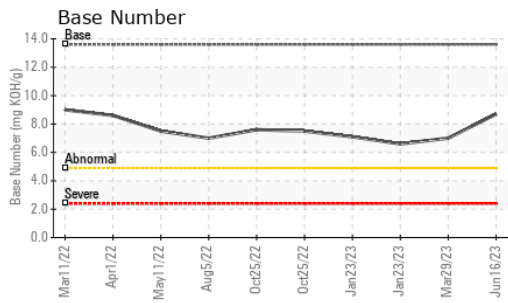
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>8</b>	10	12
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	9	13
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	8.1	7.5
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>	0.8	1.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.5</b>	12.7	12.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.6</b>	27.4	29.9
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>	37	28
Boron	ppm	ASTM D5185m		<b>211</b>	24	20
Barium	ppm	ASTM D5185m		<b>0</b>	0	12
Molybdenum	ppm	ASTM D5185m		<b>245</b>	249	245
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	2	2
Magnesium	ppm	ASTM D5185m		<b>868</b>	762	762
Calcium	ppm	ASTM D5185m		<b>1466</b>	1414	1445
Phosphorus	ppm	ASTM D5185m		<b>879</b>	769	782
Zinc	ppm	ASTM D5185m		<b>1080</b>	998	984
Sulfur	ppm	ASTM D5185m		<b>3744</b>	2893	3158
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.6</b>	22.8	25.3
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.7</b>	7.0	6.6
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.5</b>	11.7	11.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0175695 **Received** : 19 Jun 2023  
**Lab Number** : 05876517 **Diagnosed** : 20 Jun 2023  
**Unique Number** : 10521620 **Diagnostician** : Angela Borella  
**Test Package** : CONST ( Additional Tests: TBN )

**WAKE STONE CORP**  
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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)