



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



Machine Id  
**JOHN DEERE 850K 1T0850KXTEE256742**  
 Component  
**Diesel Engine**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0225149</b>	JR0061752	JR0039022
Sample Date		Client Info		<b>16 Jul 2024</b>	09 Sep 2020	05 Mar 2020
Machine Age	hrs	Client Info		<b>11057</b>	6619	6044
Oil Age	hrs	Client Info		<b>0</b>	500	0
Filter Age	hrs	Client Info		<b>0</b>	500	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	ABNORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>12</b>	32	42
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	2	2
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>4</b>	6	7
Lead	ppm	ASTM D5185m	>26	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>26	<b>&lt;1</b>	12	▲ 90
Tin	ppm	ASTM D5185m	>4	<b>0</b>	0	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

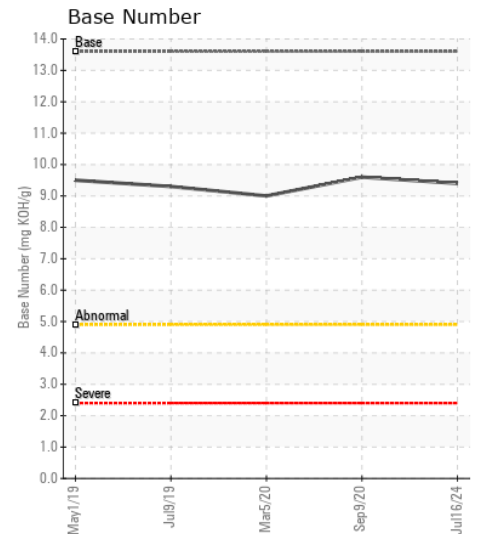
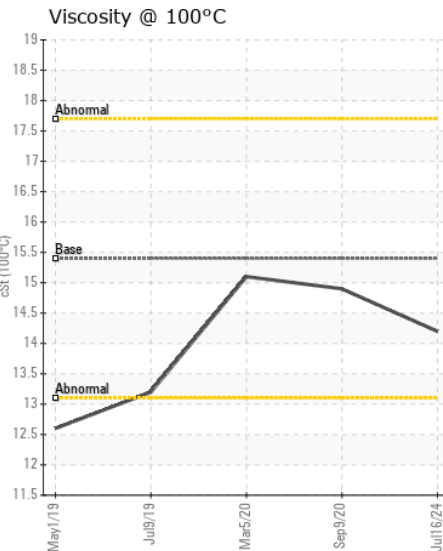
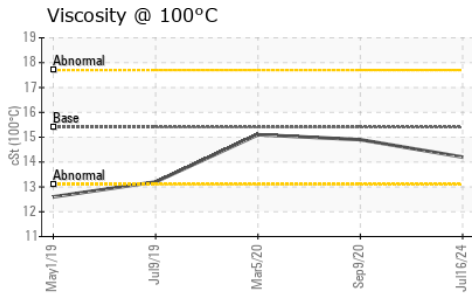
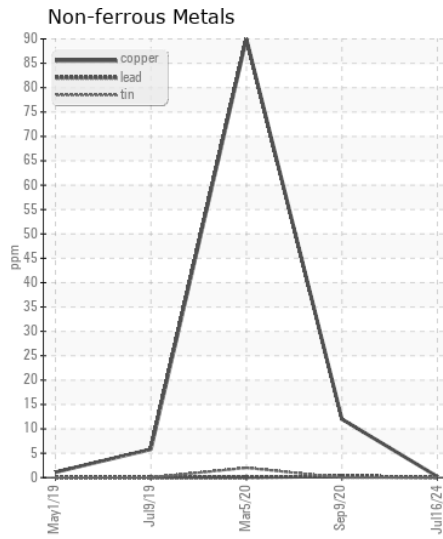
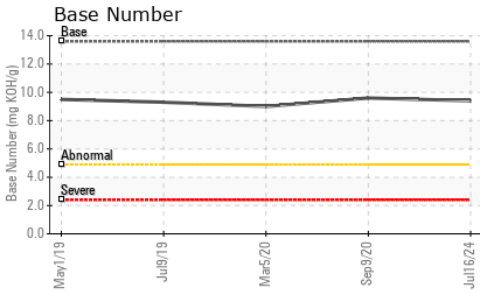
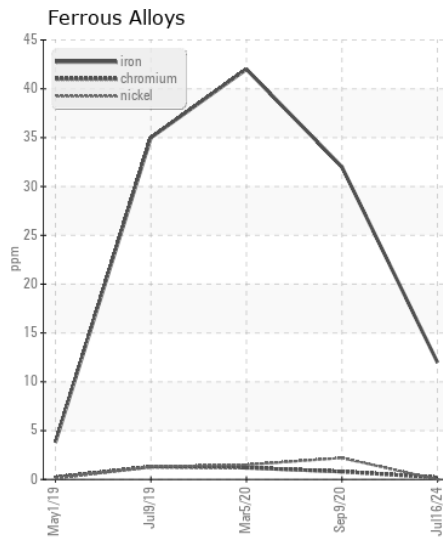
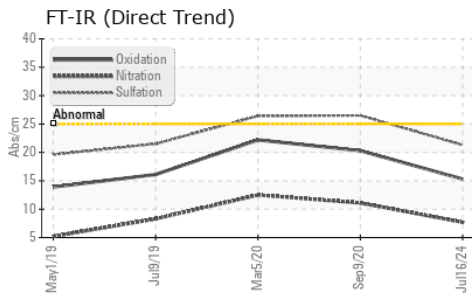
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>6</b>	7	7
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	0	2
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>0.5</b>	1	1.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.7</b>	11.1	12.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.3</b>	26.5	26.4
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	>31	<b>2</b>	5	5
Boron	ppm	ASTM D5185m		<b>249</b>	134	75
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Molybdenum	ppm	ASTM D5185m		<b>228</b>	250	219
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>799</b>	899	762
Calcium	ppm	ASTM D5185m		<b>1525</b>	1689	1486
Phosphorus	ppm	ASTM D5185m		<b>946</b>	869	790
Zinc	ppm	ASTM D5185m		<b>1076</b>	1074	939
Sulfur	ppm	ASTM D5185m		<b>3493</b>	2276	1884
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.3</b>	20.3	22.2
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>9.4</b>	9.6	9
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.2</b>	14.9	15.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0225149 **Received** : 17 Jul 2024  
**Lab Number** : 06238928 **Tested** : 18 Jul 2024  
**Unique Number** : 11127762 **Diagnosed** : 18 Jul 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**JRE - ASHLAND**  
 11047 LEADBETTER RD  
 ASHLAND, VA  
 US 23005  
 Contact: DAVID ZIEG  
 dzieg@jamesriverequipment.com  
 T: (804)798-6001  
 F: (804)798-0292

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)