



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



Area  
**[W03979]**  
 Machine Id  
**JOHN DEERE 544K 1DW544KZPFE669951**  
 Component  
**Diesel Engine**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JRMC460107</b>	JRMC445287	---
Sample Date		Client Info		<b>20 Jun 2018</b>	08 Nov 2017	---
Machine Age	hrs	Client Info		<b>2639</b>	2070	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>N/A</b>	N/A	---
Sample Status				<b>NORMAL</b>	NORMAL	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>16</b>	21	---
Chromium	ppm	ASTM D5185m	>11	<b>0</b>	<1	---
Nickel	ppm	ASTM D5185m	>5	<b>1</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>31	<b>4</b>	4	---
Lead	ppm	ASTM D5185m	>26	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m	>26	<b>7</b>	3	---
Tin	ppm	ASTM D5185m	>4	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

**CONTAMINATION**

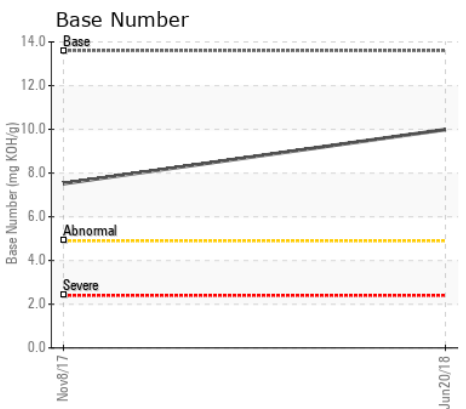
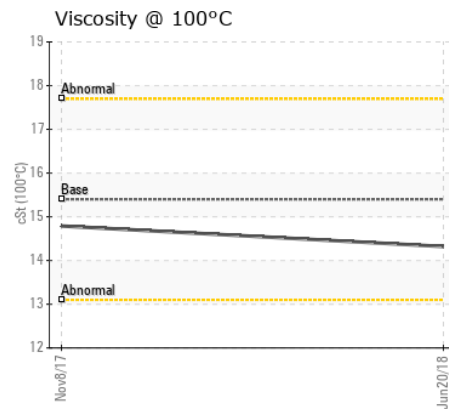
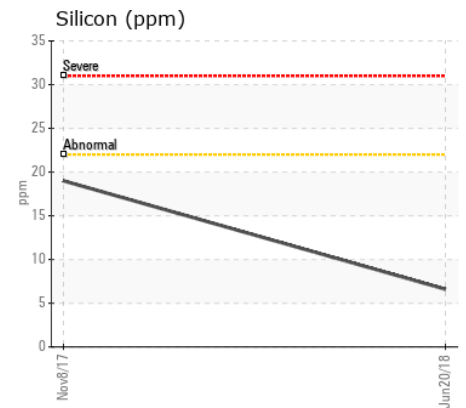
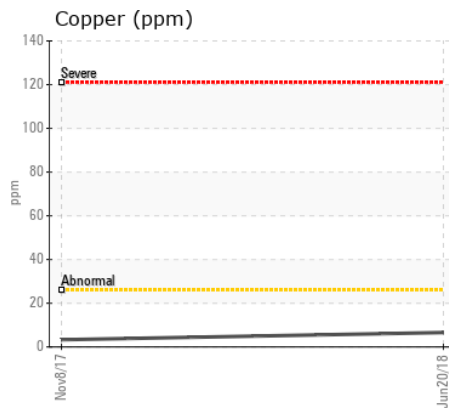
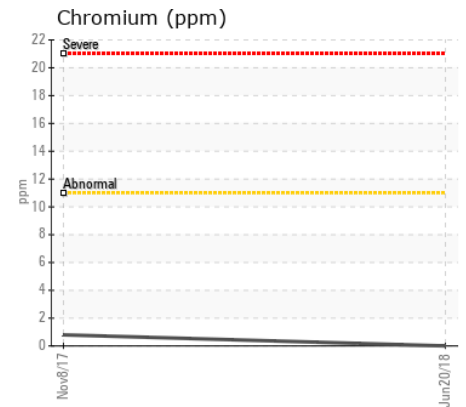
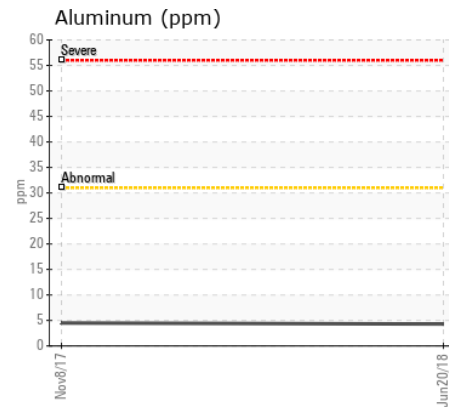
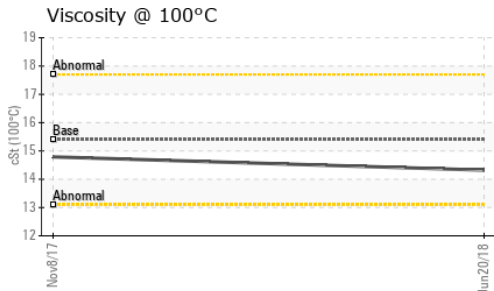
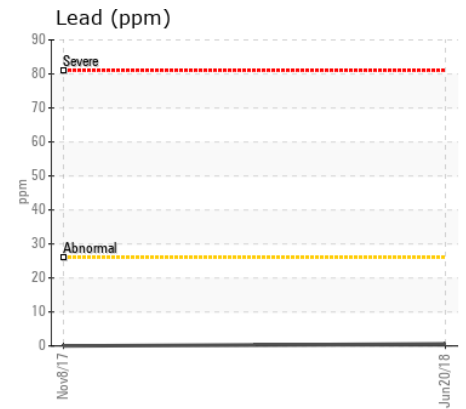
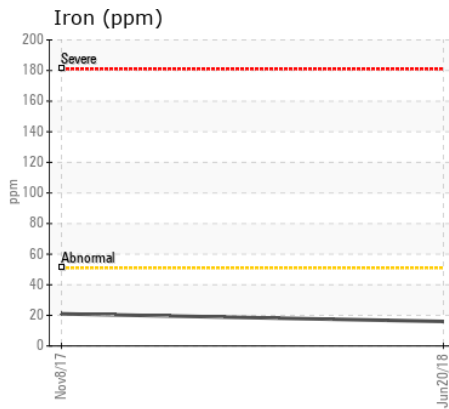
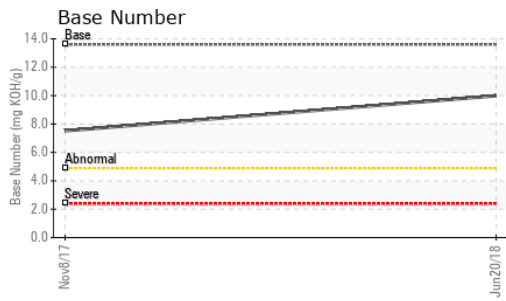
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>7</b>	19	---
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	4	---
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.21	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.4	---
Nitration	Abs/cm	*ASTM D7624	>25	<b>7.</b>	10.	---
Sulfation	Abs/.1mm	*ASTM D7415	>35	<b>19.</b>	25.	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.21	<b>NEG</b>	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>9</b>	6	---
Boron	ppm	ASTM D5185m		<b>122</b>	95	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>224</b>	235	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>756</b>	803	---
Calcium	ppm	ASTM D5185m		<b>1404</b>	1546	---
Phosphorus	ppm	ASTM D5185m		<b>694</b>	806	---
Zinc	ppm	ASTM D5185m		<b>977</b>	1002	---
Sulfur	ppm	ASTM D5185m		<b>2570</b>	2722	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.</b>	20.	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>9.99</b>	7.52	---
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.32</b>	14.79	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JRMC460107 **Received** : 25 Jun 2018  
**Lab Number** : 04497669 **Diagnosed** : 26 Jun 2018  
**Unique Number** : 8246480 **Diagnostician** : Wes Davis  
**Test Package** : MOB 2

**CAPITAL GRADING**  
 2840 PLAZA PL, SUITE 200  
 RALEIGH, NC  
 US 27612  
 Contact: SERVICE MANAGER

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)

T:  
F: