



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



Area  
**[W8456]**  
 Machine Id  
**JOHN DEERE 200D C185762 (S/N 1FF200DXPBD512817)**  
 Component  
**Diesel Engine**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)**

### RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. ( Customer Sample Comment: W8456 )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0196803</b>	JR0097852	---
Sample Date		Client Info		<b>12 Feb 2024</b>	19 Apr 2022	---
Machine Age	hrs	Client Info		<b>6753</b>	0	---
Oil Age	hrs	Client Info		<b>6753</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>N/A</b>	N/A	---
Filter Changed		Client Info		<b>N/A</b>	N/A	---
Sample Status				<b>ABNORMAL</b>	NORMAL	---

### WEAR

Cylinder, crank, or cam shaft wear is indicated. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>▲ 64</b>	48	---
Chromium	ppm	ASTM D5185m	>11	<b>1</b>	1	---
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	2	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185m	>31	<b>8</b>	6	---
Lead	ppm	ASTM D5185m	>26	<b>15</b>	2	---
Copper	ppm	ASTM D5185m	>26	<b>4</b>	2	---
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
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.

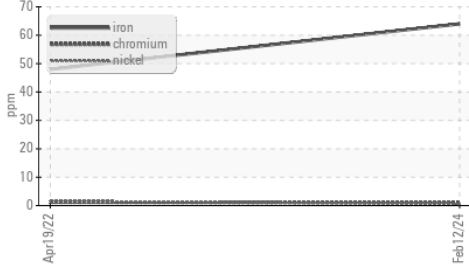
Silicon	ppm	ASTM D5185m	>22	<b>10</b>	10	---
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	6	---
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.21	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>2.2</b>	2.1	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.4</b>	11.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>26.4</b>	26.5	---
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

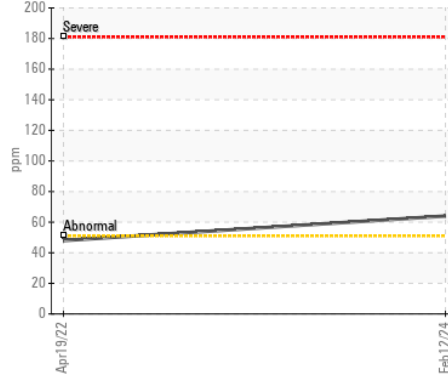
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	<b>0</b>	9	---
Boron	ppm	ASTM D5185m		<b>149</b>	60	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>276</b>	26	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>867</b>	290	---
Calcium	ppm	ASTM D5185m		<b>1430</b>	2096	---
Phosphorus	ppm	ASTM D5185m		<b>871</b>	989	---
Zinc	ppm	ASTM D5185m		<b>1092</b>	1236	---
Sulfur	ppm	ASTM D5185m		<b>2728</b>	2972	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.5</b>	18.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.5</b>	8.1	---
Visc @ 100°C	cSt	ASTM D445	15.4	<b>16.1</b>	15.7	---

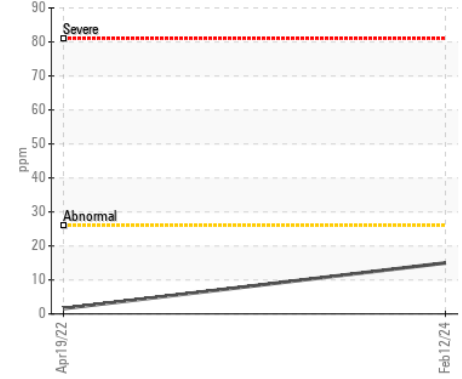
▲ Ferrous Alloys



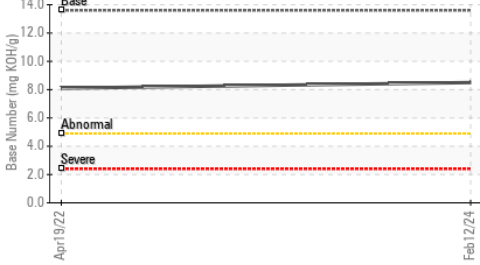
▲ Iron (ppm)



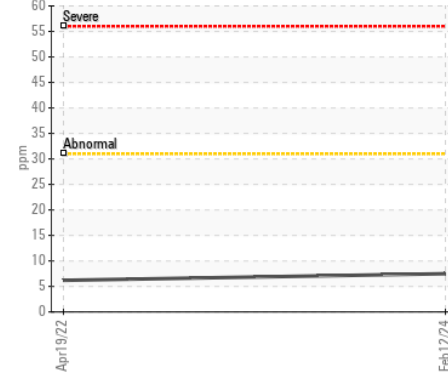
Lead (ppm)



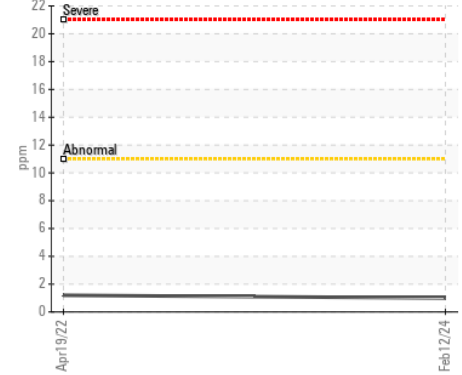
Base Number



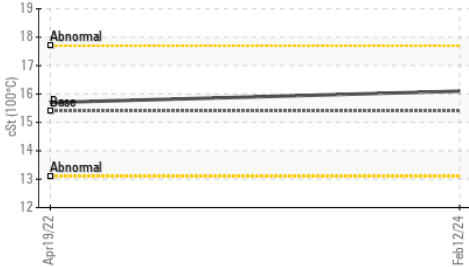
Aluminum (ppm)



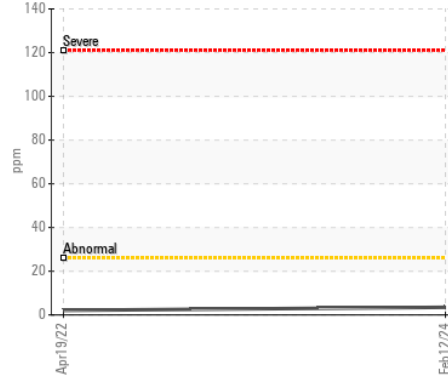
Chromium (ppm)



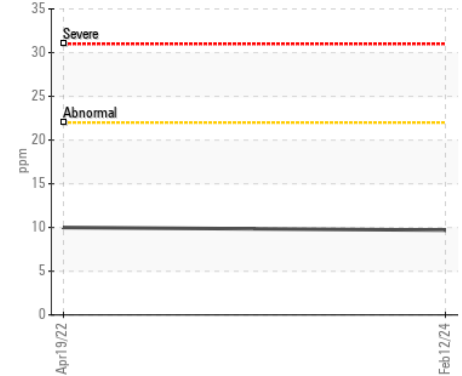
Viscosity @ 100°C



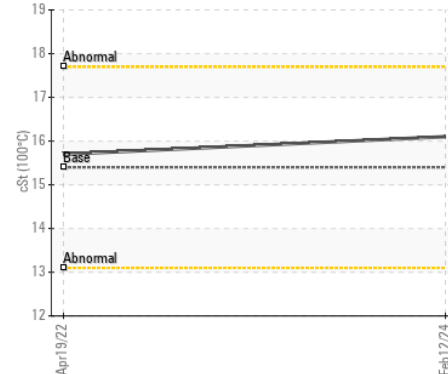
Copper (ppm)



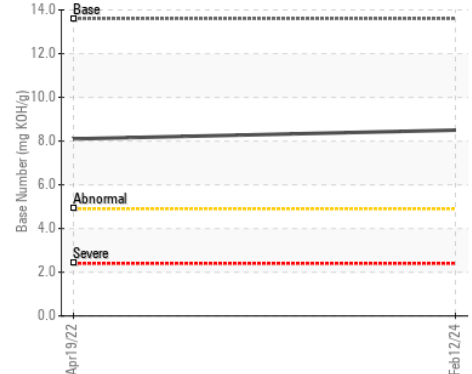
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0196803

Lab Number : 06087094

Unique Number : 10874539

Test Package : MOBCE ( Additional Tests: TBN )

Received : 13 Feb 2024

Tested : 14 Feb 2024

Diagnosed : 14 Feb 2024 - Don Baldrige

JRE - HOPE MILLS/FAYETTEVILLE

5039 HWY 301 SOUTH

HOPE MILLS, NC

US 28348

Contact: FAYETTEVILLE SHOP

stephen.mullis@jamesriverequipment.com;canastasio@wearcheck.com

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: