



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

Area  
**[SW RODGERS]**  
 Machine Id  
**JOHN DEERE 135P 7237 (S/N 1FF135PAENF000132)**  
 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>JR0218238</b>	JR0205316	JR0157843
Sample Date		Client Info		<b>20 Jun 2024</b>	19 Mar 2024	28 Nov 2023
Machine Age	hrs	Client Info		<b>2418</b>	972	464
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	N/A	N/A
Filter Changed		Client Info		<b>Changed</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>32</b>	5	7
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>5	<b>3</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>2</b>	5	4
Lead	ppm	ASTM D5185m	>26	<b>&lt;1</b>	0	1
Copper	ppm	ASTM D5185m	>26	<b>5</b>	22	16
Tin	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<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.

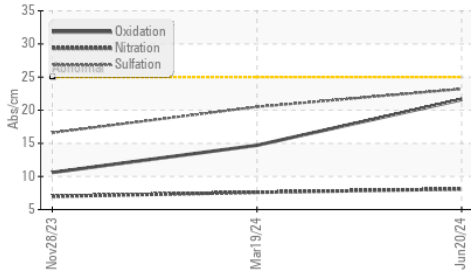
Silicon	ppm	ASTM D5185m	>22	<b>6</b>	7	16
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	4	5
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	1.7
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.1</b>	7.6	7.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.2</b>	20.5	16.6
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

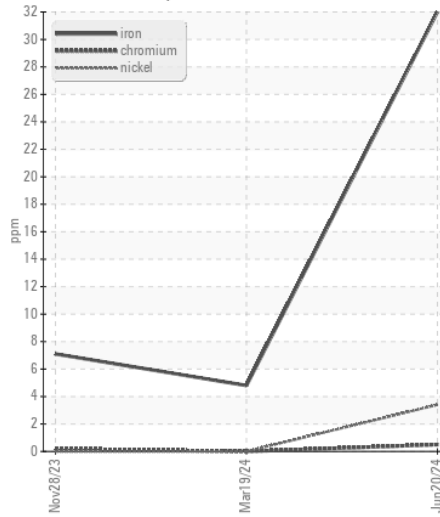
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>31	<b>2</b>	2	2
Boron	ppm	ASTM D5185m		<b>28</b>	233	180
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>43</b>	214	47
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>504</b>	722	156
Calcium	ppm	ASTM D5185m		<b>1845</b>	1612	2090
Phosphorus	ppm	ASTM D5185m		<b>901</b>	962	977
Zinc	ppm	ASTM D5185m		<b>1123</b>	1138	1282
Sulfur	ppm	ASTM D5185m		<b>3188</b>	3493	2731
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.6</b>	14.7	10.6
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>9.9</b>	8.3	8.1
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.3</b>	12.5	12.0

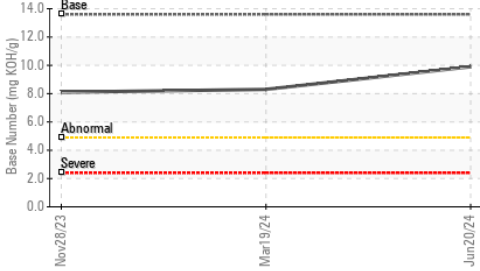
FT-IR (Direct Trend)



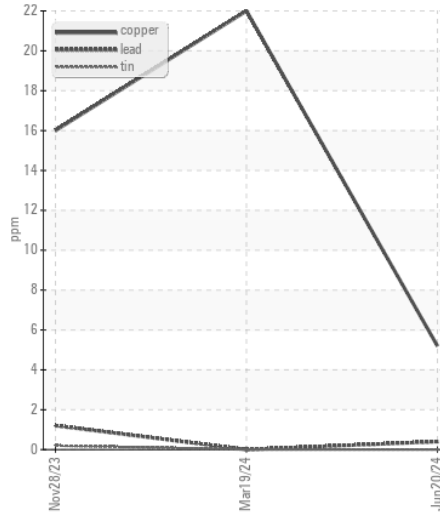
Ferrous Alloys



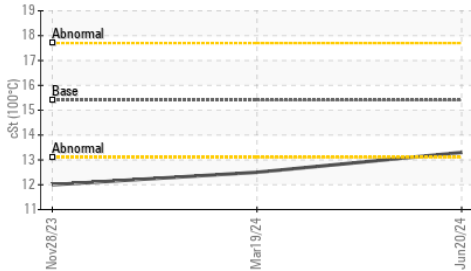
Base Number



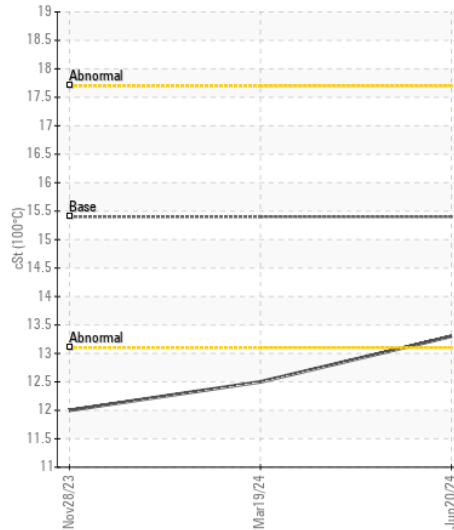
Non-ferrous Metals



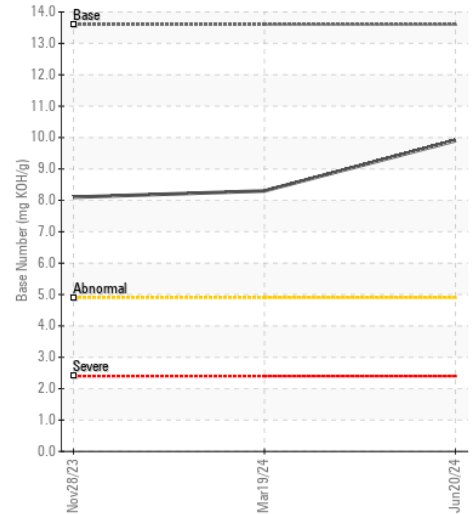
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0218238 **Received** : 24 Jun 2024  
**Lab Number** : 06217999 **Tested** : 25 Jun 2024  
**Unique Number** : 11096196 **Diagnosed** : 25 Jun 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: TBN )

**JRE - MANASSAS PARK**  
 9107 OWENS DRIVE  
 MANASSAS PARK, VA  
 US 20111

Contact: DON VEST  
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 F: (703)631-4715

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)