



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

Area

[W20998-FASTRAC]

Machine Id

JOHN DEERE 245G 1FF245GXLNF802923

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

### RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0204451	---	---
Sample Date		Client Info		05 Feb 2024	---	---
Machine Age	hrs	Client Info		427	---	---
Oil Age	hrs	Client Info		427	---	---
Filter Age	hrs	Client Info		427	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	27	---	---
Chromium	ppm	ASTM D5185m	>11	1	---	---
Nickel	ppm	ASTM D5185m	>5	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>31	4	---	---
Lead	ppm	ASTM D5185m	>26	2	---	---
Copper	ppm	ASTM D5185m	>26	13	---	---
Tin	ppm	ASTM D5185m	>4	7	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

### CONTAMINATION

Elemental level of silicon (Si) above normal indicating ingress of seal material.

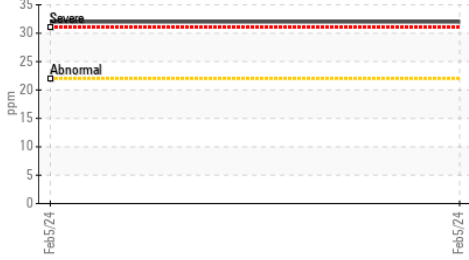
Silicon	ppm	ASTM D5185m	>22	▲ 32	---	---
Potassium	ppm	ASTM D5185m	>20	5	---	---
Fuel	%	ASTM D3524	>2.1	<1.0	---	---
Water		WC Method	>0.21	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	6.5	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.4	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.21	NEG	---	---

### FLUID CONDITION

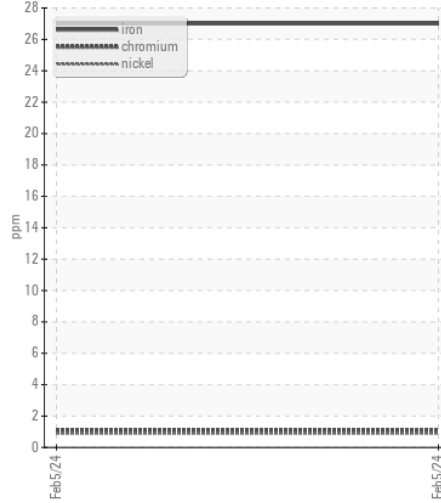
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	0	---	---
Boron	ppm	ASTM D5185m		193	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		5	---	---
Manganese	ppm	ASTM D5185m		6	---	---
Magnesium	ppm	ASTM D5185m		22	---	---
Calcium	ppm	ASTM D5185m		2237	---	---
Phosphorus	ppm	ASTM D5185m		994	---	---
Zinc	ppm	ASTM D5185m		1316	---	---
Sulfur	ppm	ASTM D5185m		2652	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	9.1	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.2	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.0	---	---

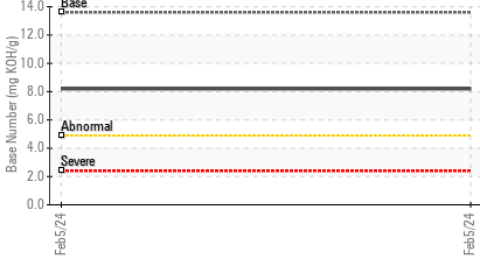
▲ Silicon (ppm)



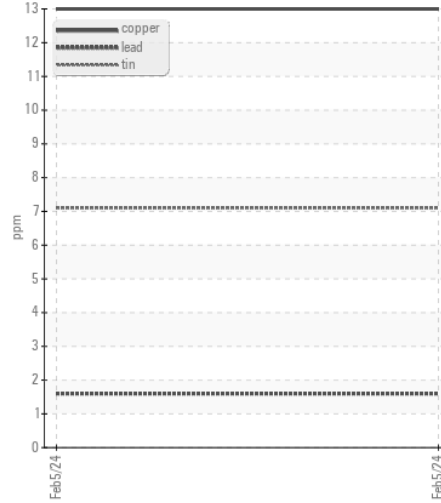
Ferrous Alloys



Base Number



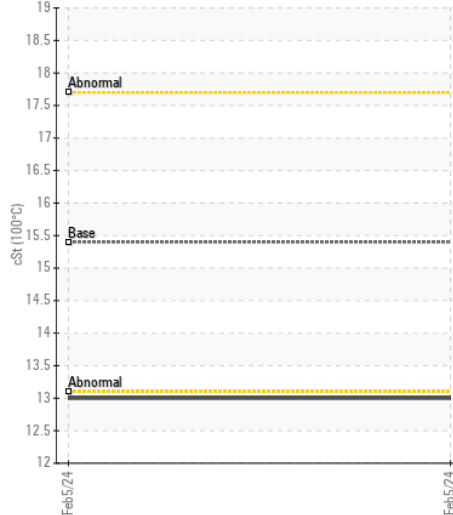
Non-ferrous Metals



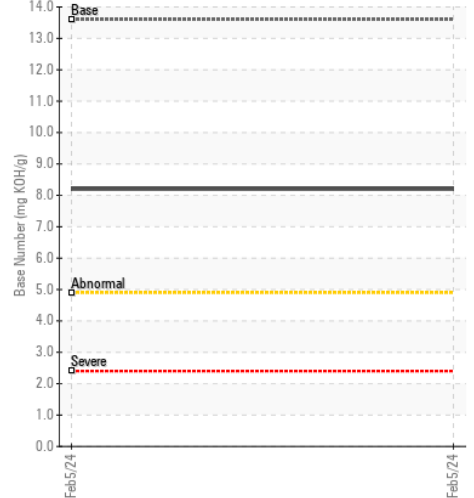
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0204451 **Received** : 09 Feb 2024  
**Lab Number** : 06085345 **Tested** : 12 Feb 2024  
**Unique Number** : 10872790 **Diagnosed** : 12 Feb 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: FuelDilution, TBN )

**JRE - BURKEVILLE**  
 510 WEST COLONIAL DR  
 BURKEVILLE, VA  
 US 23922

Contact: BRANDON BOLLING  
 bbolling@jamesriverequipment.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)

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