



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 948L 1DW948LBPPF716904
 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		JR0212343	JR0200194	---
Sample Date		Client Info		10 May 2024	09 Feb 2024	---
Machine Age	hrs	Client Info		984	496	---
Oil Age	hrs	Client Info		0	496	---
Filter Age	hrs	Client Info		0	496	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	27	51	---
Chromium	ppm	ASTM D5185m	>11	<1	<1	---
Nickel	ppm	ASTM D5185m	>5	4	12	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>31	5	3	---
Lead	ppm	ASTM D5185m	>26	<1	2	---
Copper	ppm	ASTM D5185m	>26	12	▲ 86	---
Tin	ppm	ASTM D5185m	>4	1	1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

There is no indication of any contamination in the oil.

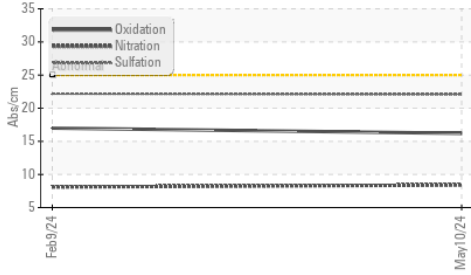
Silicon	ppm	ASTM D5185m	>22	8	11	---
Potassium	ppm	ASTM D5185m	>20	4	11	---
Fuel	%	ASTM D3524	>2.1	<1.0	0.3	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.3	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	8.4	8.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.1	22.2	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.21	NEG	NEG	---

FLUID CONDITION

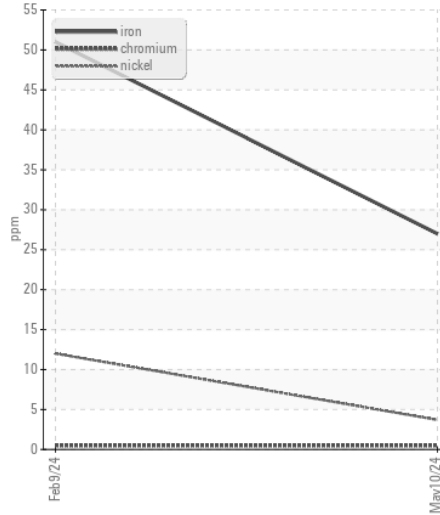
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	2	4	---
Boron	ppm	ASTM D5185m		221	212	---
Barium	ppm	ASTM D5185m		1	0	---
Molybdenum	ppm	ASTM D5185m		257	276	---
Manganese	ppm	ASTM D5185m		<1	2	---
Magnesium	ppm	ASTM D5185m		797	805	---
Calcium	ppm	ASTM D5185m		1395	1356	---
Phosphorus	ppm	ASTM D5185m		910	871	---
Zinc	ppm	ASTM D5185m		1095	1070	---
Sulfur	ppm	ASTM D5185m		3164	2902	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.2	17.0	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.4	8.1	---
Visc @ 100°C	cSt	ASTM D445	15.4	12.5	● 10.0	---

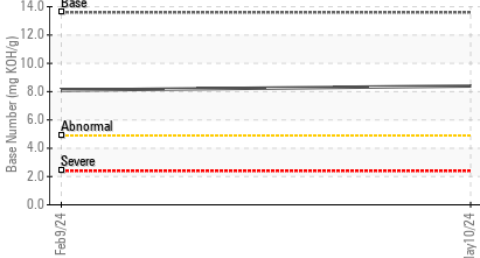
FT-IR (Direct Trend)



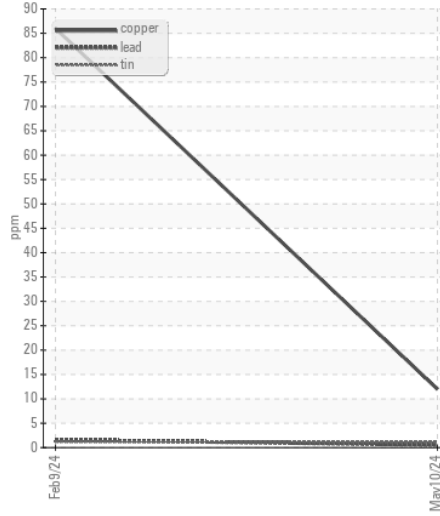
Ferrous Alloys



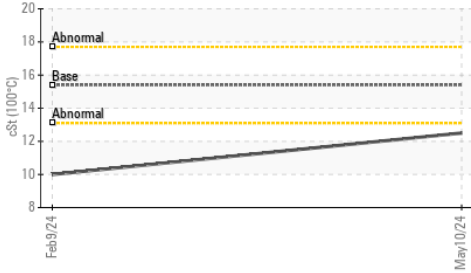
Base Number



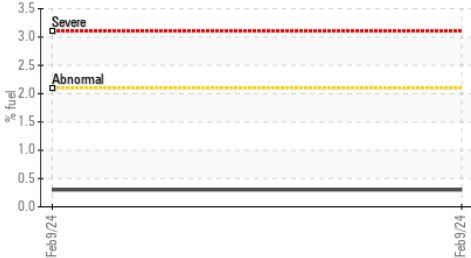
Non-ferrous Metals



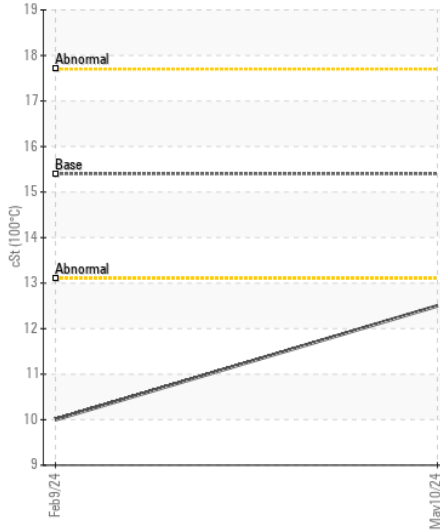
Viscosity @ 100°C



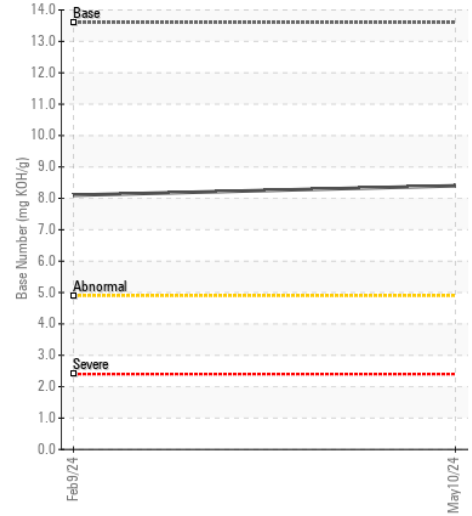
Fuel Dilution



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0212343 **Received** : 14 May 2024
Lab Number : 06178510 **Tested** : 15 May 2024
Unique Number : 11029836 **Diagnosed** : 16 May 2024 - Sean Felton
Test Package : CONST (Additional Tests: FuelDilution, TBN)

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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)