



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[W08632]

Machine Id

JOHN DEERE 1023E 1LV1023EELL139302

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		JR0204522	JR0136769	JR0096475
Sample Date		Client Info		26 Feb 2024	27 Feb 2023	26 Jan 2022
Machine Age	hrs	Client Info		146	103	57
Oil Age	hrs	Client Info		0	46	40
Filter Age	hrs	Client Info		0	46	40
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>51	2	5	7
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>31	4	3	6
Lead	ppm	ASTM D5185m	>26	0	0	<1
Copper	ppm	ASTM D5185m	>26	1	2	4
Tin	ppm	ASTM D5185m	>4	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

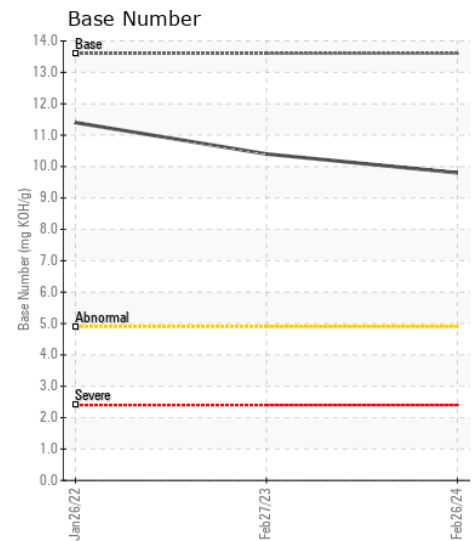
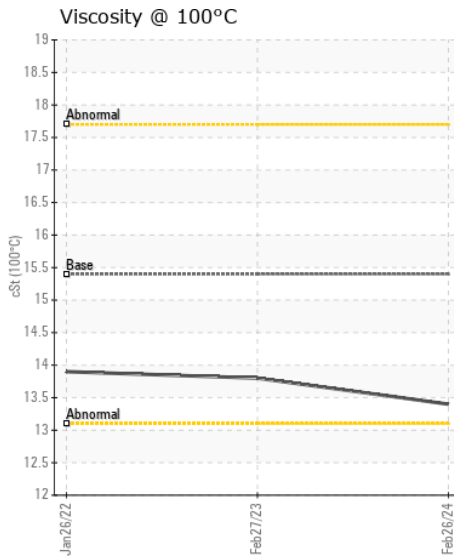
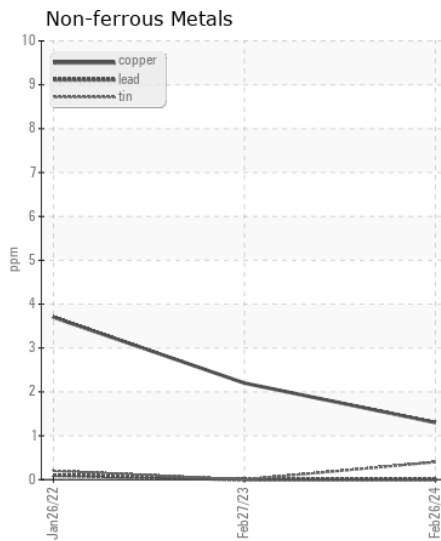
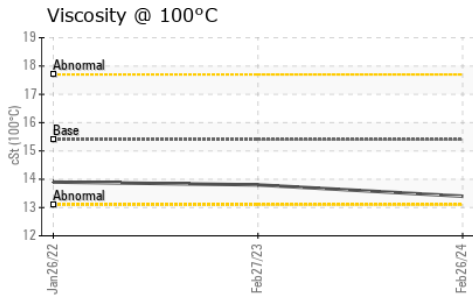
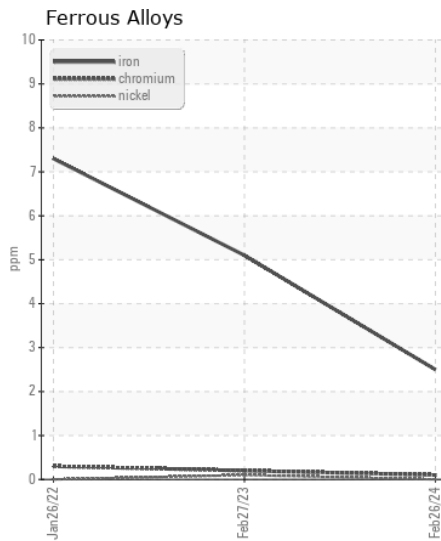
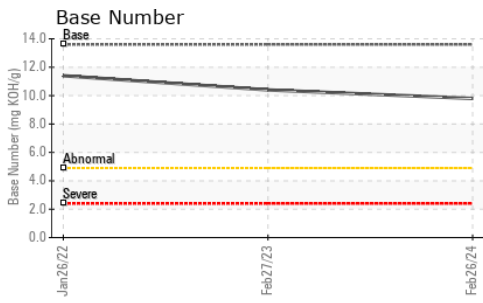
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	22	12	17
Potassium	ppm	ASTM D5185m	>20	<1	2	1
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	6.1	6.2	6.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.7	19.5	20.8
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	NEG	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	<1	5
Boron	ppm	ASTM D5185m		251	287	301
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		239	244	269
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		794	716	862
Calcium	ppm	ASTM D5185m		1272	1354	1507
Phosphorus	ppm	ASTM D5185m		893	827	962
Zinc	ppm	ASTM D5185m		1054	1012	1064
Sulfur	ppm	ASTM D5185m		2951	2731	2680
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.2	14.3	16.0
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	9.8	10.4	11.4
Visc @ 100°C	cSt	ASTM D445	15.4	13.4	13.8	13.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0204522 **Received** : 29 Feb 2024
Lab Number : 06105073 **Tested** : 01 Mar 2024
Unique Number : 10903303 **Diagnosed** : 01 Mar 2024 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

JRE - NEWTON
 2616 NW BLVD
 NEWTON, NC
 US 28658

Contact: J DEMAS

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F:

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)