



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 1023E 1LV1023ELGG102086

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		JR0191556	JR0115548	---
Sample Date		Client Info		08 May 2024	04 May 2022	---
Machine Age	hrs	Client Info		297	297	---
Oil Age	hrs	Client Info		297	297	---
Filter Age	hrs	Client Info		0	297	---
Oil Changed		Client Info		N/A	Changed	---
Filter Changed		Client Info		N/A	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>51	11	15	---
Chromium	ppm	ASTM D5185m	>11	<1	<1	---
Nickel	ppm	ASTM D5185m	>5	<1	0	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	<1	---
Aluminum	ppm	ASTM D5185m	>31	4	2	---
Lead	ppm	ASTM D5185m	>26	<1	<1	---
Copper	ppm	ASTM D5185m	>26	2	2	---
Tin	ppm	ASTM D5185m	>4	<1	<1	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

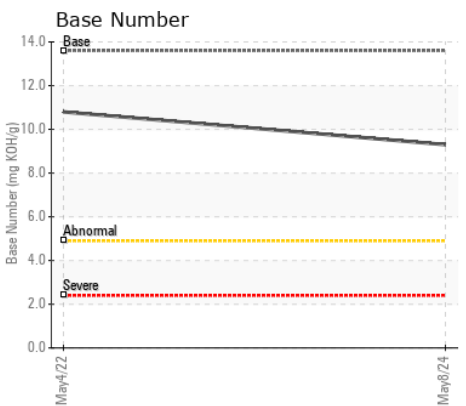
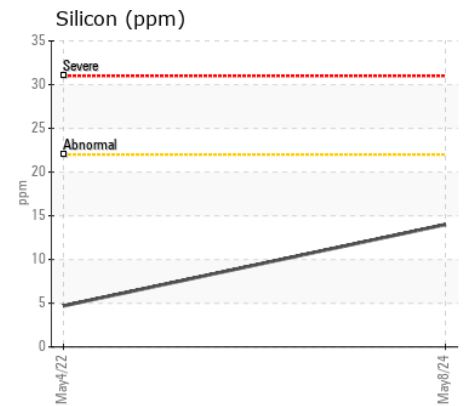
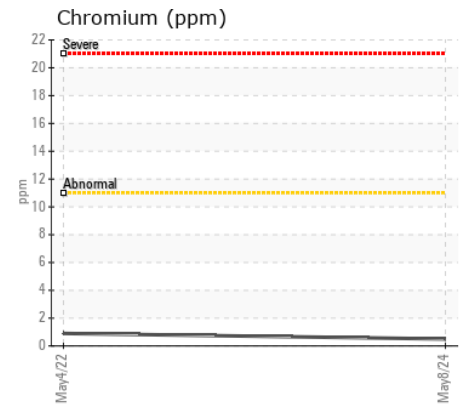
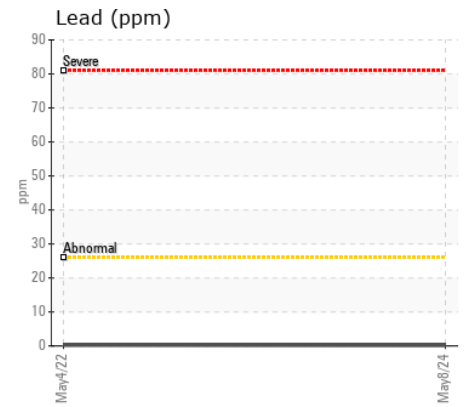
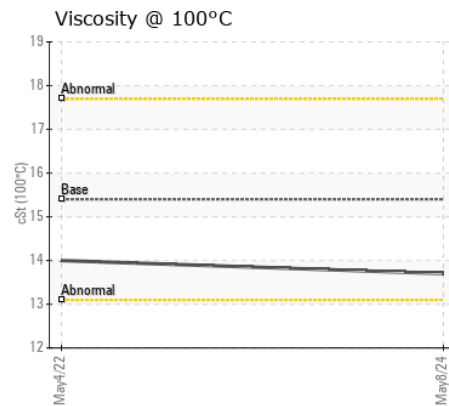
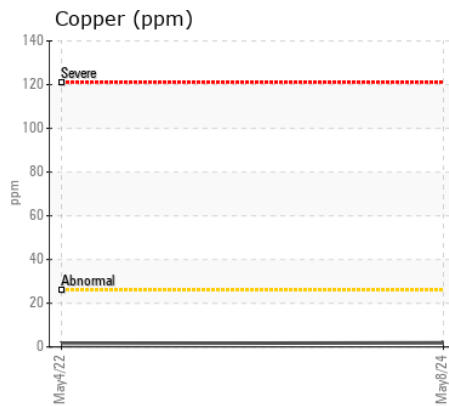
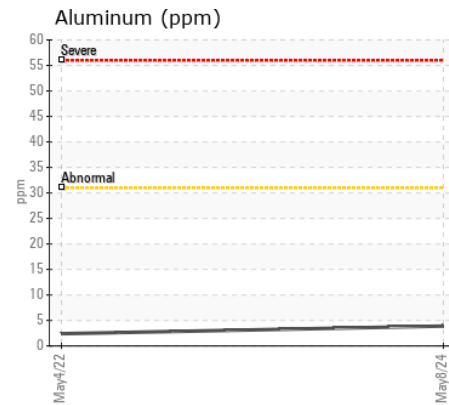
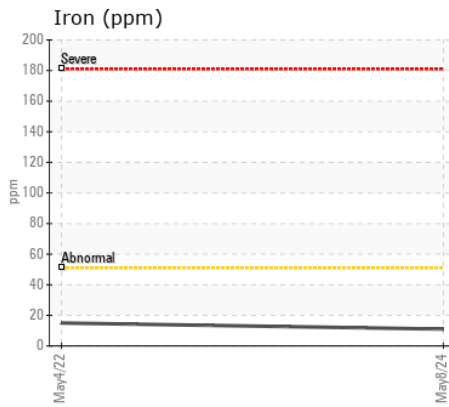
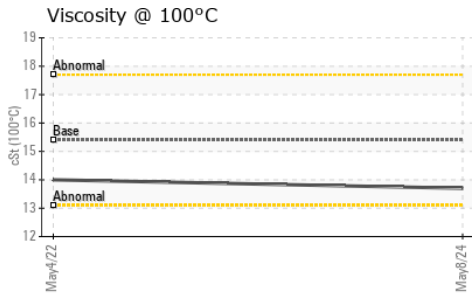
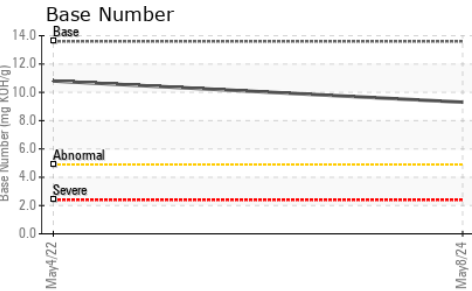
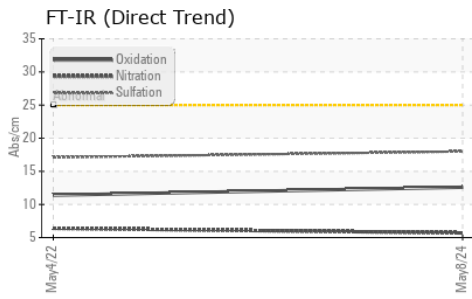
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	14	5	---
Potassium	ppm	ASTM D5185m	>20	3	1	---
Fuel		WC Method	>2.1	<1.0	<1.0	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	5.7	6.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.0	17.1	---
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	3	2	---
Boron	ppm	ASTM D5185m		251	34	---
Barium	ppm	ASTM D5185m		<1	2	---
Molybdenum	ppm	ASTM D5185m		170	36	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		670	123	---
Calcium	ppm	ASTM D5185m		1298	3347	---
Phosphorus	ppm	ASTM D5185m		792	1235	---
Zinc	ppm	ASTM D5185m		936	1432	---
Sulfur	ppm	ASTM D5185m		3346	5645	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.6	11.4	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	9.3	10.8	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.7	14.0	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0191556 **Received** : 13 May 2024
Lab Number : 06178223 **Tested** : 15 May 2024
Unique Number : 11029549 **Diagnosed** : 15 May 2024 - Wes Davis
Test Package : MOBCE (Additional Tests: TBN)

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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