



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[05W44116]
 Machine Id
JOHN DEERE 160G C233358 (S/N 1FF160GXTLF058109)
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (18 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0196068	JR0123230	---
Sample Date		Client Info		08 Jan 2024	23 Apr 2022	---
Machine Age	hrs	Client Info		4830	1909	---
Oil Age	hrs	Client Info		500	1909	---
Filter Age	hrs	Client Info		500	0	---
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	30	▲ 125	---
Chromium	ppm	ASTM D5185m	>11	<1	4	---
Nickel	ppm	ASTM D5185m	>5	<1	▲ 9	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	0	<1	---
Aluminum	ppm	ASTM D5185m	>31	5	▲ 13	---
Lead	ppm	ASTM D5185m	>26	12	2	---
Copper	ppm	ASTM D5185m	>26	3	7	---
Tin	ppm	ASTM D5185m	>4	0	<1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

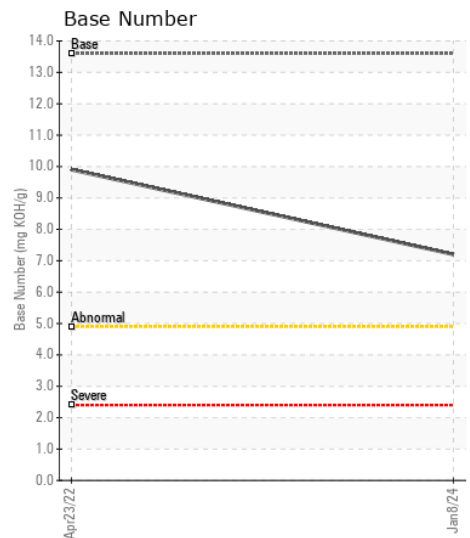
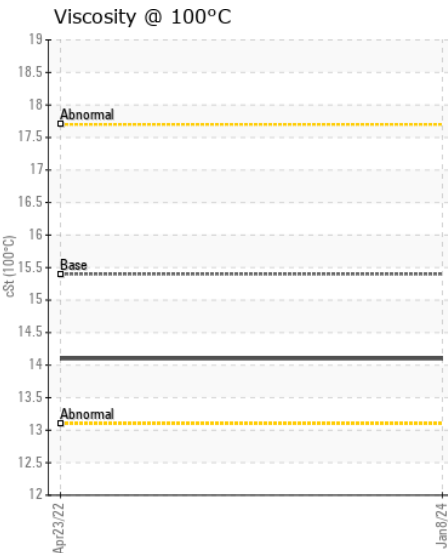
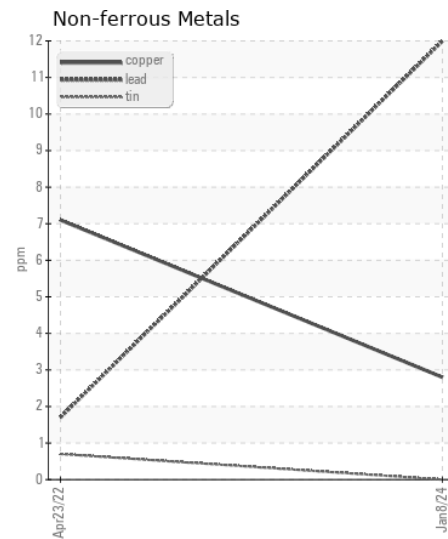
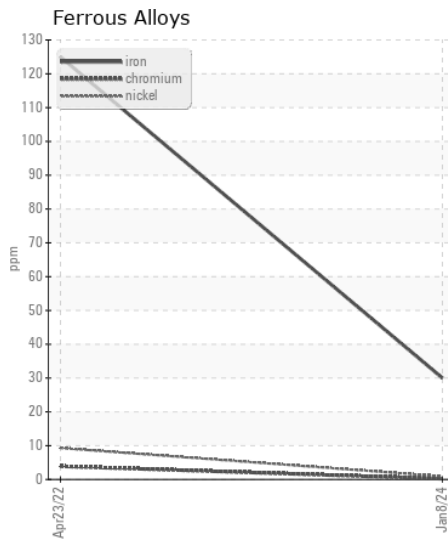
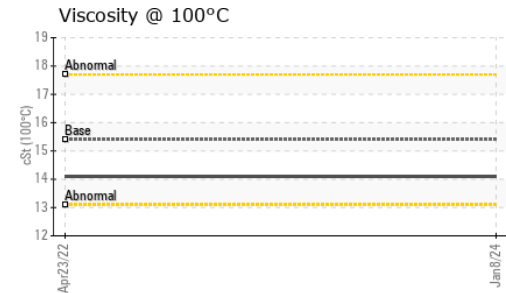
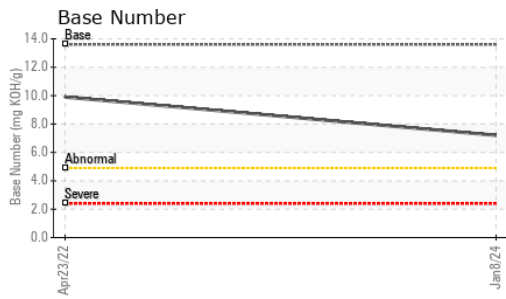
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	11	▲ 32	---
Potassium	ppm	ASTM D5185m	>20	2	2	---
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	0.3	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	9.2	9.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.4	23.8	---
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	5	---
Boron	ppm	ASTM D5185m		153	188	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		228	248	---
Manganese	ppm	ASTM D5185m		0	2	---
Magnesium	ppm	ASTM D5185m		754	894	---
Calcium	ppm	ASTM D5185m		1518	1631	---
Phosphorus	ppm	ASTM D5185m		905	917	---
Zinc	ppm	ASTM D5185m		1094	1095	---
Sulfur	ppm	ASTM D5185m		3364	2736	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.5	18.0	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.2	9.9	---
Visc @ 100°C	cSt	ASTM D445	15.4	14.1	14.1	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0196068 **Received** : 09 Jan 2024
Lab Number : 06055731 **Diagnosed** : 10 Jan 2024
Unique Number : 10821680 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: TBN)

C & D RECOVERY
 24024 FREDERICK RD
 CLARKSBURG, MD
 US 20871
 Contact: HERBIE TRENT

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)

T:
F: