



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Area

JAMES NOAH

Machine Id

JOHN DEERE 210GLC JOHN DEERE 210 GLC (S/N 1FF210GXENF530554)

Component

Drain Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 10W30 (6 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		WE0003549	WE0003561	---
Sample Date		Client Info		25 Jun 2024	08 May 2023	---
Machine Age	hrs	Client Info		1019	498	---
Oil Age	hrs	Client Info		521	498	---
Filter Age	hrs	Client Info		519	498	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

The copper level has decreased, but is still abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	35	47	---
Chromium	ppm	ASTM D5185m	>11	1	<1	---
Nickel	ppm	ASTM D5185m	>5	5	4	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>31	8	5	---
Lead	ppm	ASTM D5185m	>26	<1	3	---
Copper	ppm	ASTM D5185m	>26	▲ 62	▲ 412	---
Tin	ppm	ASTM D5185m	>4	1	2	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

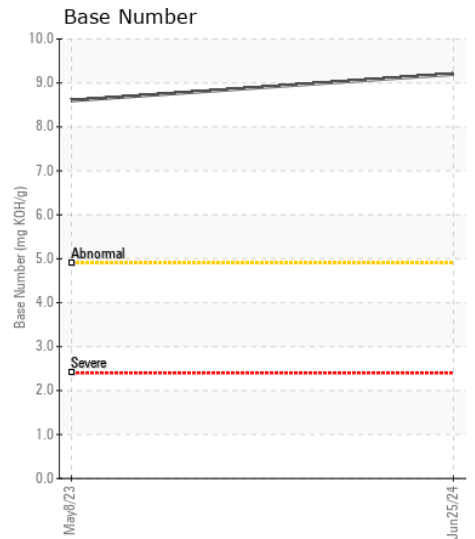
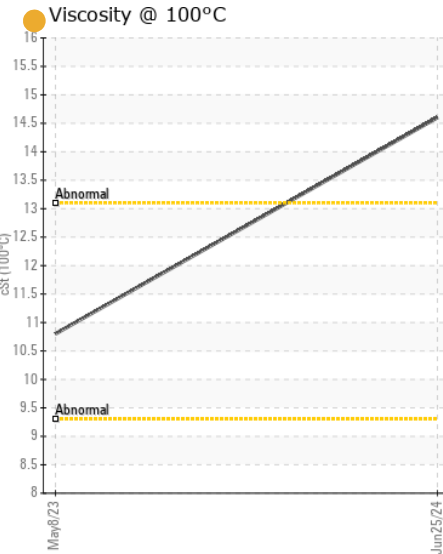
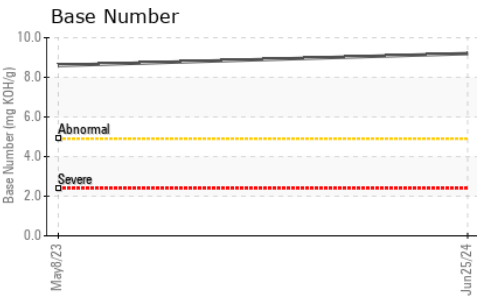
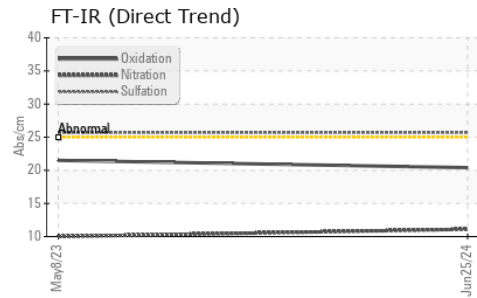
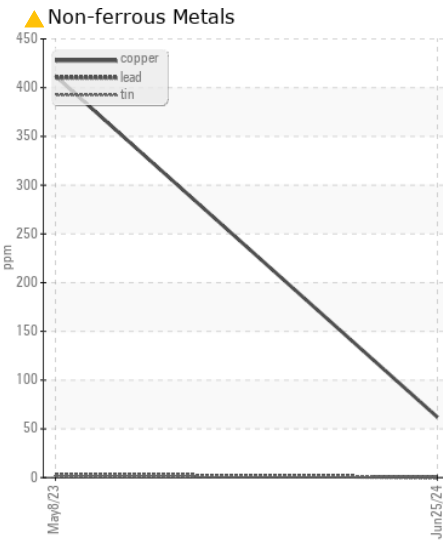
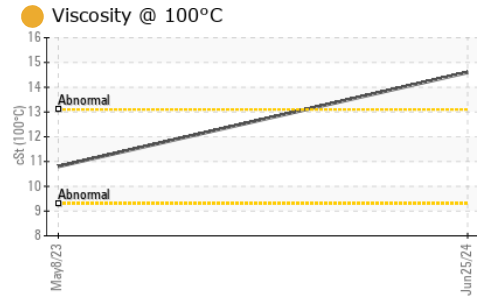
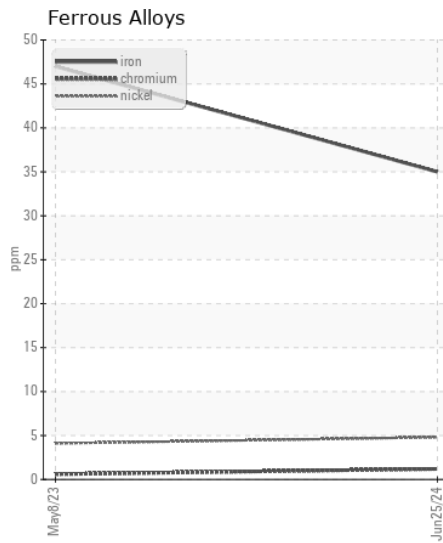
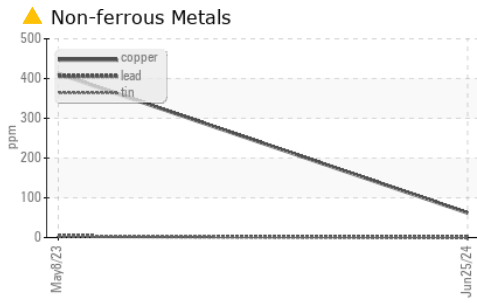
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	11	12	---
Potassium	ppm	ASTM D5185m	>20	3	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	0.9	0.7	---
Nitration	Abs/cm	*ASTM D7624	>20	11.1	10.0	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.7	25.7	---
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 oil viscosity is higher than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m	>31	7	6	---
Boron	ppm	ASTM D5185m		161	192	---
Barium	ppm	ASTM D5185m		1	0	---
Molybdenum	ppm	ASTM D5185m		284	297	---
Manganese	ppm	ASTM D5185m		2	4	---
Magnesium	ppm	ASTM D5185m		991	983	---
Calcium	ppm	ASTM D5185m		1590	1675	---
Phosphorus	ppm	ASTM D5185m		1034	970	---
Zinc	ppm	ASTM D5185m		1287	1225	---
Sulfur	ppm	ASTM D5185m		3525	3309	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.4	21.5	---
Base Number (BN)	mg KOH/g	ASTM D2896		9.2	8.6	---
Visc @ 100°C	cSt	ASTM D445		● 14.6	10.8	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WE0003549 **Received** : 27 Jun 2024
Lab Number : 06222014 **Tested** : 27 Jun 2024
Unique Number : 11100211 **Diagnosed** : 28 Jun 2024 - Don Baldrige
Test Package : CONST (Additional Tests: TBN)

WARRIOR TRACTOR AND EQUIPMENT - HUNTSVILLE
 25135 ONE AVIATION WAY SW
 MADISON, AL
 US 35756
 Contact: BOBBY LUCKY
 warriorparts033@gmail.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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F: