



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 350G 1FF350GXPKF814078
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- QTS)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WE0006883	WE0004950	WE0004042
Sample Date		Client Info		11 Apr 2024	13 Sep 2023	11 Apr 2023
Machine Age	hrs	Client Info		3955	3491	2937
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

The iron level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	▲ 68	▲ 52	48
Chromium	ppm	ASTM D5185m	>11	2	1	<1
Nickel	ppm	ASTM D5185m	>5	1	2	1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	● 9	8	2
Lead	ppm	ASTM D5185m	>26	1	<1	<1
Copper	ppm	ASTM D5185m	>26	15	▲ 30	4
Tin	ppm	ASTM D5185m	>4	1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

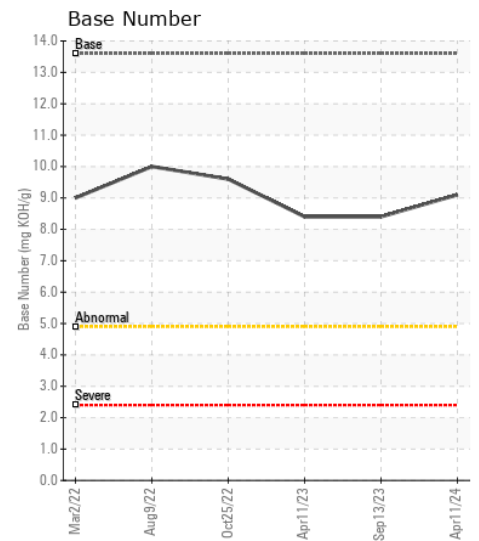
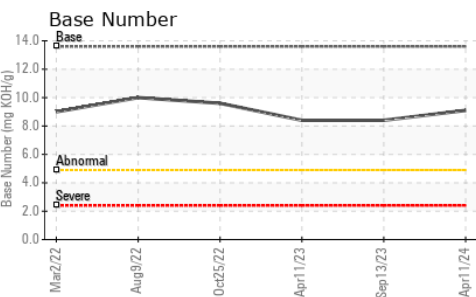
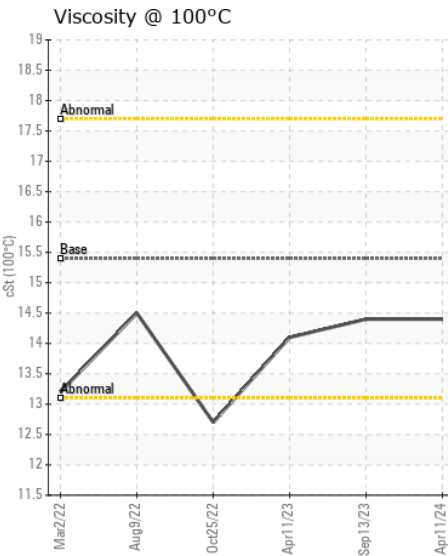
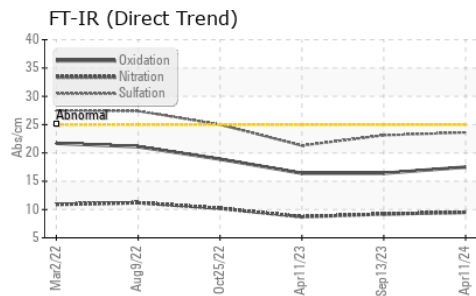
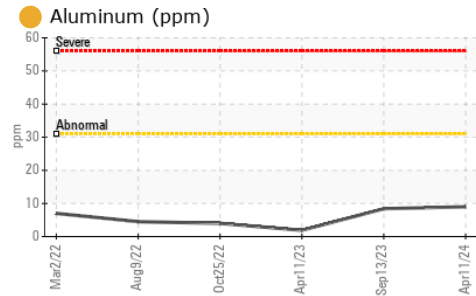
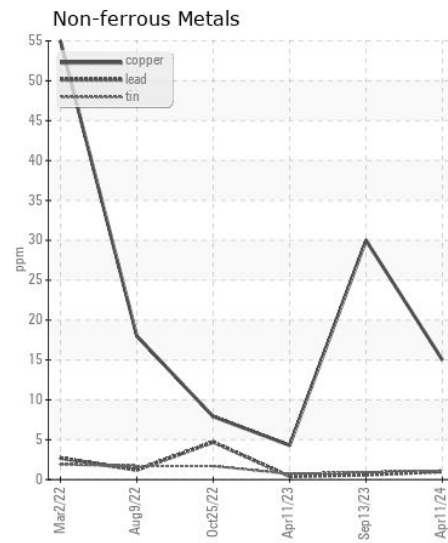
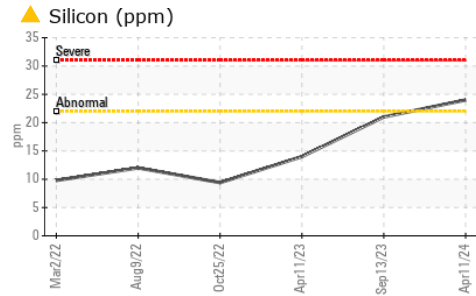
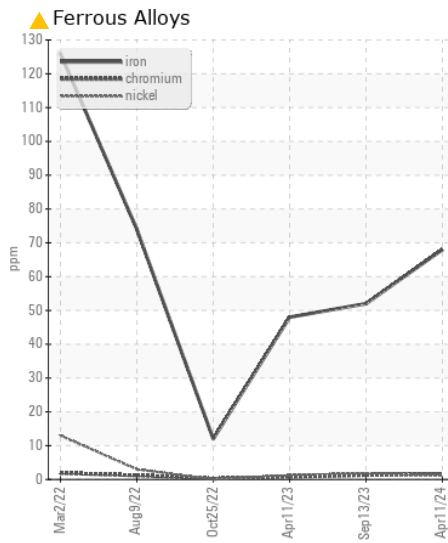
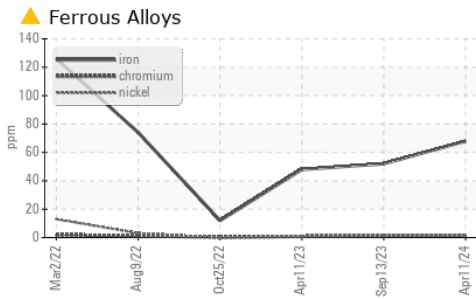
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>22	▲ 24	21	14
Potassium	ppm	ASTM D5185m	>20	4	4	2
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	0.5	0.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	9.5	9.2	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.6	23.1	21.3
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	4	3	2
Boron	ppm	ASTM D5185m		269	170	222
Barium	ppm	ASTM D5185m		2	0	2
Molybdenum	ppm	ASTM D5185m		399	287	263
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		1267	893	810
Calcium	ppm	ASTM D5185m		2136	1586	1575
Phosphorus	ppm	ASTM D5185m		1401	945	883
Zinc	ppm	ASTM D5185m		1593	1161	1055
Sulfur	ppm	ASTM D5185m		4549	3332	2974
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.5	16.4	16.4
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	9.1	8.4	8.4
Visc @ 100°C	cSt	ASTM D445	15.4	14.4	14.4	14.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WE0006883 **Received** : 15 Apr 2024
Lab Number : 06148523 **Tested** : 16 Apr 2024
Unique Number : 10978601 **Diagnosed** : 17 Apr 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: 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)