



# OIL ANALYSIS REPORT

WEAR	<b>ABNORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area

[125538]

Machine Id

JOHN DEERE 350G 1FF350GXCKF813932

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- QTS)

## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WE0006344</b>	WE0004357	WE0003769
Sample Date		Client Info		<b>21 Feb 2024</b>	29 Jun 2023	15 Mar 2023
Machine Age	hrs	Client Info		<b>4418</b>	3950	3452
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR

Valve wear is indicated. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>50</b>	27	42
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>▲ 33</b>	▲ 9	▲ 24
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>5</b>	3	4
Lead	ppm	ASTM D5185m	>26	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>26	<b>2</b>	2	3
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

There is no indication of any contamination in the oil.

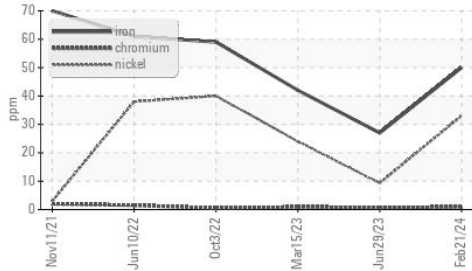
Silicon	ppm	ASTM D5185m	>22	<b>10</b>	9	11
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	4	2
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.4</b>	8.5	9.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.3</b>	22.8	23.0
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

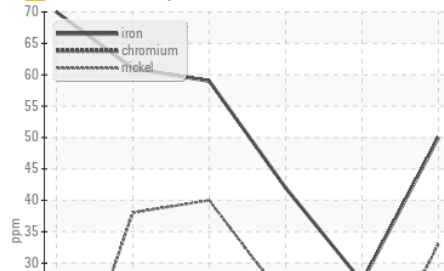
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>31	<b>2</b>	6	0
Boron	ppm	ASTM D5185m		<b>208</b>	232	185
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>263</b>	270	262
Manganese	ppm	ASTM D5185m		<b>2</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>857</b>	934	834
Calcium	ppm	ASTM D5185m		<b>1394</b>	1585	1674
Phosphorus	ppm	ASTM D5185m		<b>872</b>	931	909
Zinc	ppm	ASTM D5185m		<b>1122</b>	1175	1108
Sulfur	ppm	ASTM D5185m		<b>2968</b>	3825	3208
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.4</b>	17.7	16.9
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.7</b>	8.9	9.8
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.4</b>	14.4	14.1

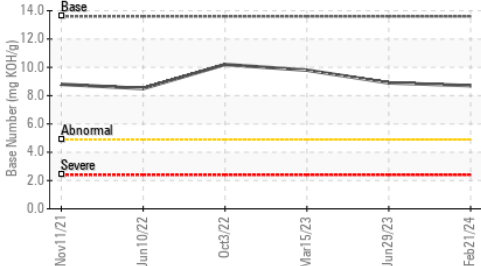
▲ Ferrous Alloys



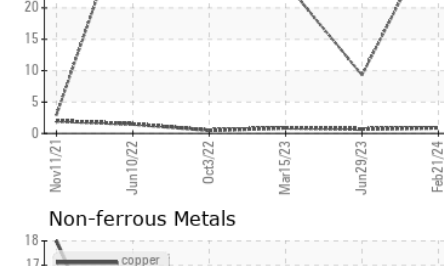
▲ Ferrous Alloys



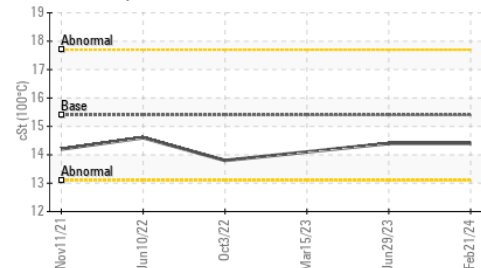
Base Number



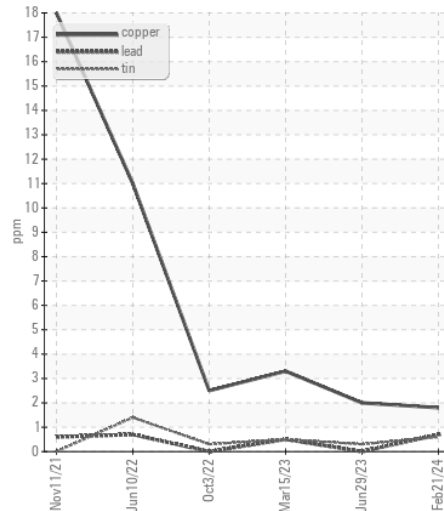
Non-ferrous Metals



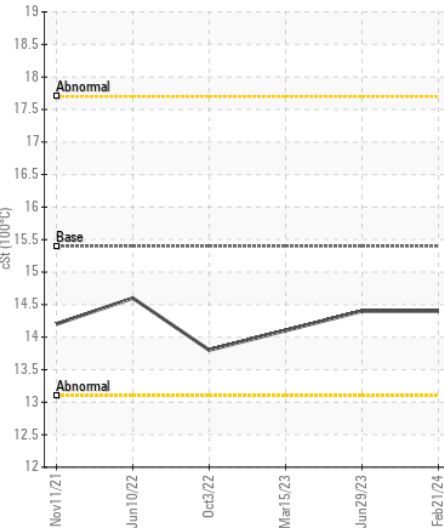
Viscosity @ 100°C



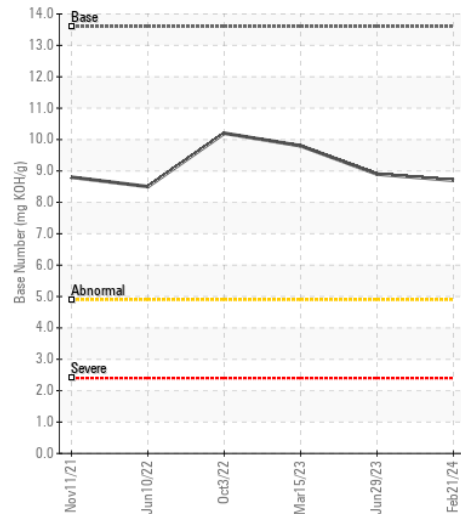
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WE0006344  
**Lab Number** : 06105917  
**Unique Number** : 10909414  
**Test Package** : CONST ( Additional Tests: TBN )

**WARRIOR TRACTOR AND EQUIPMENT - NORTHPORT**  
 P.O. BOX 412  
 NORTHPORT, AL  
 US 35476  
 Contact: PAMELA CLARK  
 pamela@warriortractor.com  
 T: (205)339-0300  
 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)