



# OIL ANALYSIS REPORT

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

Area

[A34732]

Machine Id

JOHN DEERE 950K 1T0950KXJPF446417

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (8 GAL)

## RECOMMENDATION

Resample at the next service interval to monitor. ( Customer Sample Comment: A34732 )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WE0006617</b>	WE0005857	WE0004845
Sample Date		Client Info		<b>27 Feb 2024</b>	08 Dec 2023	01 Sep 2023
Machine Age	hrs	Client Info		<b>1470</b>	502	502
Oil Age	hrs	Client Info		<b>500</b>	502	502
Filter Age	hrs	Client Info		<b>500</b>	502	502
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	ATTENTION

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>40</b>	44	63
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	1	1
Nickel	ppm	ASTM D5185m	>5	<b>10</b>	▲ 20	8
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>5</b>	8	4
Lead	ppm	ASTM D5185m	>26	<b>1</b>	0	3
Copper	ppm	ASTM D5185m	>26	<b>5</b>	18	77
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	3
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

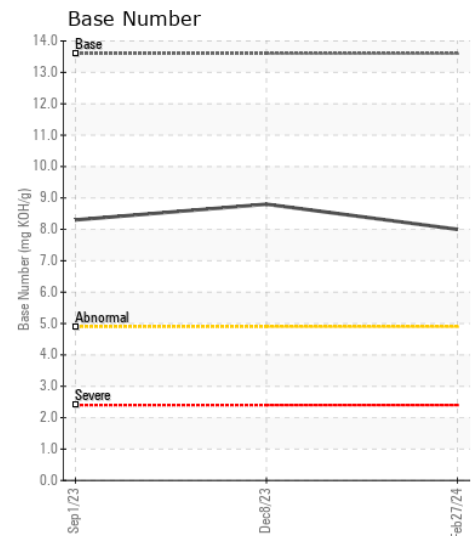
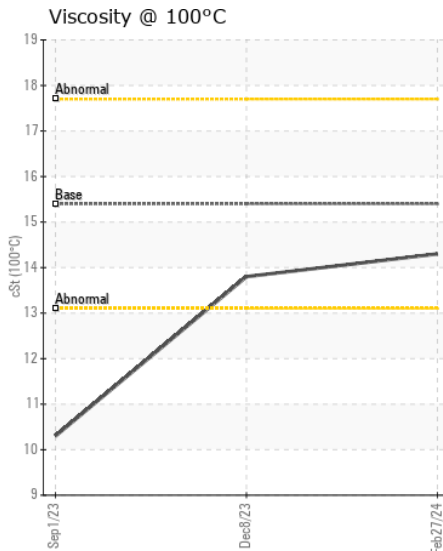
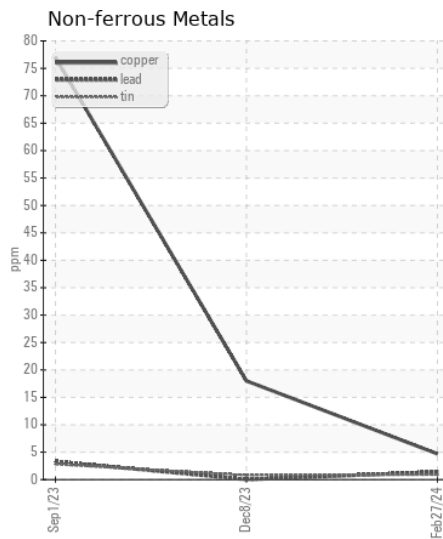
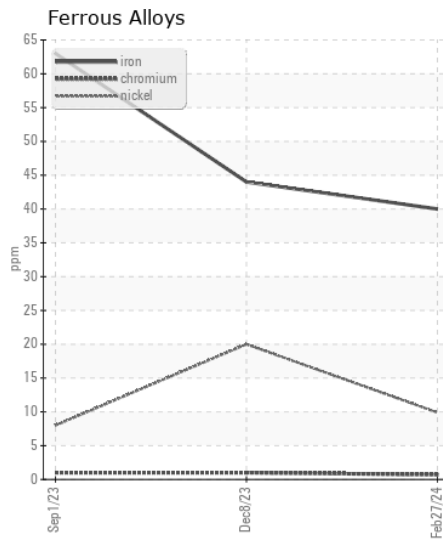
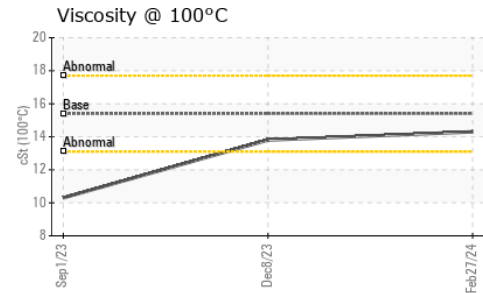
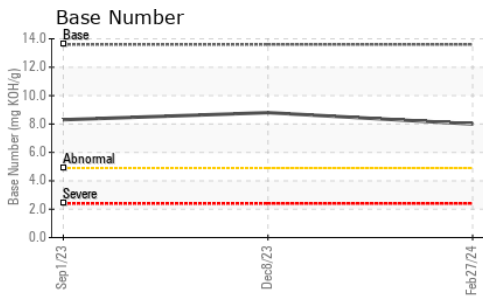
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>17</b>	20	28
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	2	7
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	0.3
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.5	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.9</b>	9.3	9.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.5</b>	23.8	23.6
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 suitable for further service.

Sodium	ppm	ASTM D5185m	>31	<b>2</b>	5	7
Boron	ppm	ASTM D5185m		<b>161</b>	196	124
Barium	ppm	ASTM D5185m		<b>0</b>	0	5
Molybdenum	ppm	ASTM D5185m		<b>273</b>	274	274
Manganese	ppm	ASTM D5185m		<b>1</b>	2	2
Magnesium	ppm	ASTM D5185m		<b>1032</b>	899	907
Calcium	ppm	ASTM D5185m		<b>1749</b>	1503	1501
Phosphorus	ppm	ASTM D5185m		<b>922</b>	964	856
Zinc	ppm	ASTM D5185m		<b>1347</b>	1188	1041
Sulfur	ppm	ASTM D5185m		<b>3298</b>	3038	2880
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.0</b>	18.4	19.0
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.0</b>	8.8	8.3
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.3</b>	13.8	● 10.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : WE0006617

**Lab Number** : 06104206

**Unique Number** : 10902436

**Test Package** : CONST ( Additional Tests: TBN )

**Received** : 29 Feb 2024

**Tested** : 01 Mar 2024

**Diagnosed** : 02 Mar 2024 - Don Baldrige

**WARRIOR TRACTOR AND EQUIPMENT - HUNTSVILLE**

25135 ONE AVIATION WAY SW

MADISON, AL

US 35756

Contact: HERBERT STONE

WTE013@WARRIORTRACTOR.COM

T:

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)