



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

Machine Id  
**JOHN DEERE 324G 1T0324GKAMJ400490**

Component  
**Diesel Engine**

Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (14 QTS)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0200183</b>	JR0164405	JR0125406
Sample Date		Client Info		<b>15 Jan 2024</b>	17 Apr 2023	22 Mar 2022
Machine Age	hrs	Client Info		<b>1491</b>	1013	456
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>NORMAL</b>	ABNORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>23</b>	40	32
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	1
Aluminum	ppm	ASTM D5185m	>31	<b>4</b>	4	7
Lead	ppm	ASTM D5185m	>26	<b>0</b>	<1	1
Copper	ppm	ASTM D5185m	>26	<b>5</b>	20	▲ 103
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

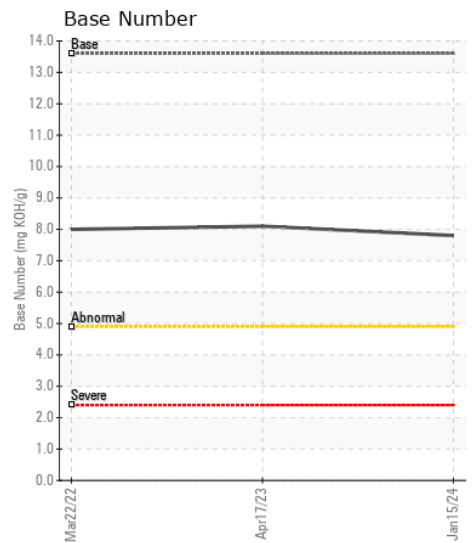
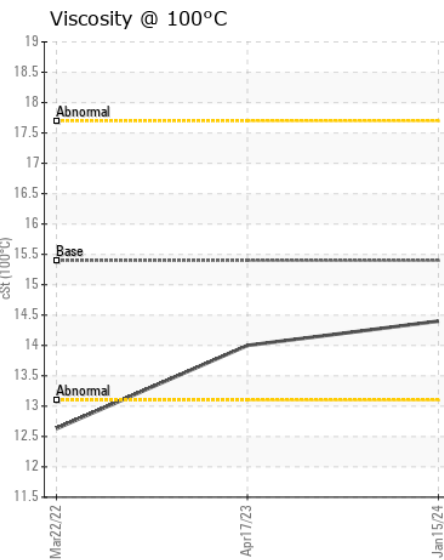
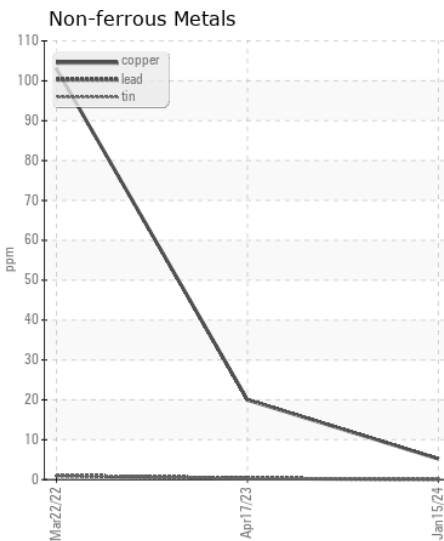
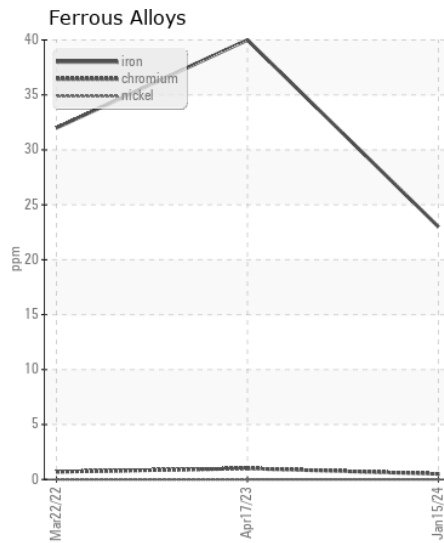
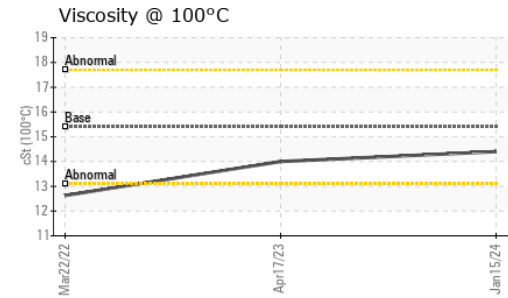
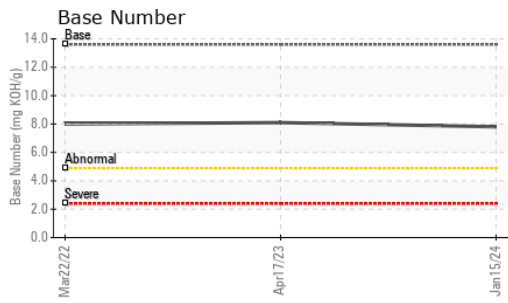
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>14</b>	▲ 22	41
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	1
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>0.8</b>	0.8	0.7
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.9</b>	11.7	11.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>26.6</b>	27.0	31.0
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 suitable for further service.

Sodium	ppm	ASTM D5185m	>31	<b>1</b>	2	10
Boron	ppm	ASTM D5185m		<b>146</b>	133	159
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>248</b>	267	228
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>870</b>	1003	763
Calcium	ppm	ASTM D5185m		<b>1549</b>	1720	1826
Phosphorus	ppm	ASTM D5185m		<b>884</b>	1054	887
Zinc	ppm	ASTM D5185m		<b>1159</b>	1297	1089
Sulfur	ppm	ASTM D5185m		<b>2913</b>	3321	2846
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>23.1</b>	24.1	29.3
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>7.8</b>	8.1	8.0
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.4</b>	14.0	12.63



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0200183 **Received** : 17 Jan 2024  
**Lab Number** : 06062511 **Diagnosed** : 18 Jan 2024  
**Unique Number** : 10833893 **Diagnostician** : Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

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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