



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

Machine Id  
**JOHN DEERE 210G E-32 (S/N GXKLF528306)**

Component  
**Diesel Engine**

Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0196225</b>	JR0173417	JR0121725
Sample Date		Client Info		<b>16 Apr 2024</b>	19 Aug 2023	02 Dec 2022
Machine Age	hrs	Client Info		<b>3324</b>	2643	2073
Oil Age	hrs	Client Info		<b>682</b>	570	112
Filter Age	hrs	Client Info		<b>682</b>	570	112
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>48</b>	57	50
Chromium	ppm	ASTM D5185m	>11	<b>1</b>	2	2
Nickel	ppm	ASTM D5185m	>5	<b>2</b>	3	1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>11</b>	4	4
Lead	ppm	ASTM D5185m	>26	<b>2</b>	<1	<1
Copper	ppm	ASTM D5185m	>26	<b>4</b>	5	7
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

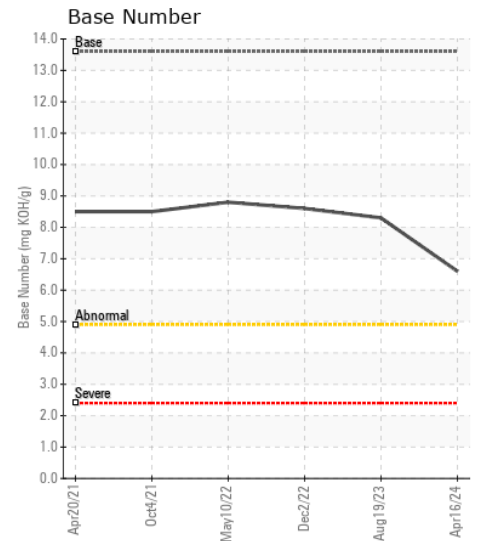
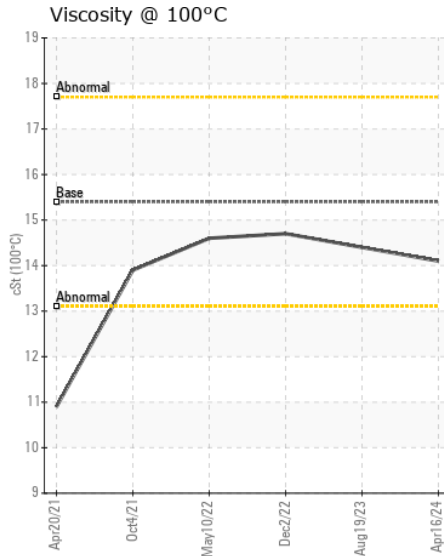
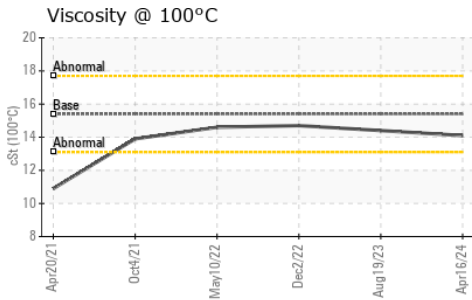
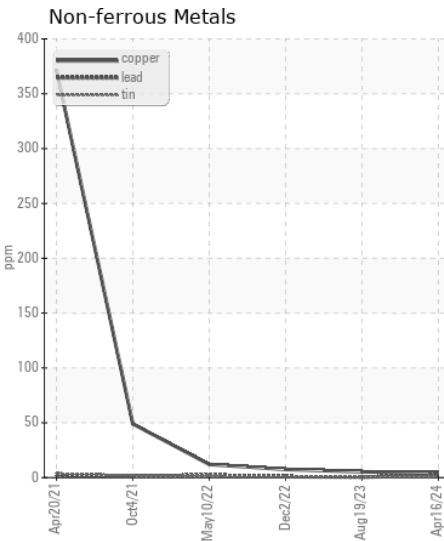
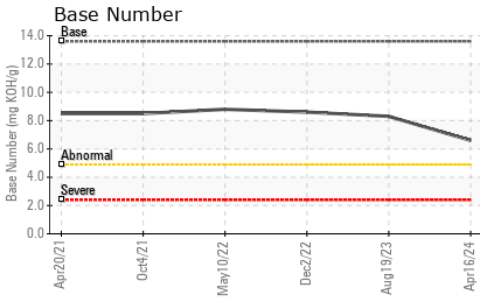
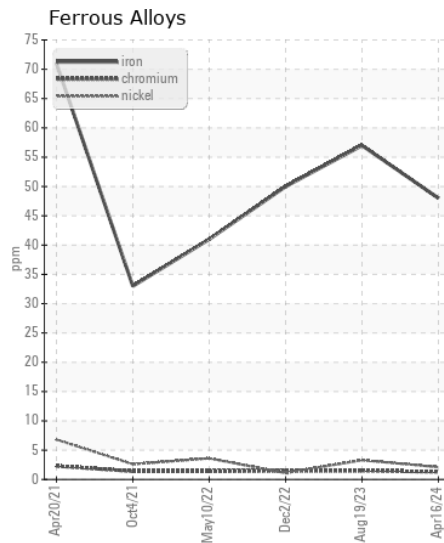
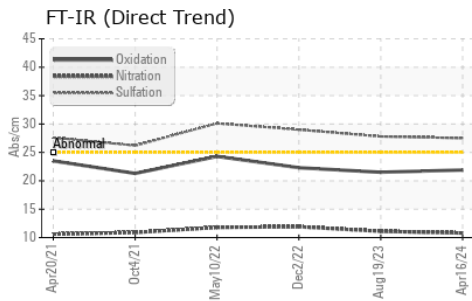
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>12</b>	9	9
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	0	3
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>1</b>	1.1	1.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.8</b>	11.1	11.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>27.5</b>	27.8	29.0
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>6</b>	5	3
Boron	ppm	ASTM D5185m		<b>46</b>	57	50
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>408</b>	299	289
Manganese	ppm	ASTM D5185m		<b>0</b>	1	1
Magnesium	ppm	ASTM D5185m		<b>1287</b>	965	850
Calcium	ppm	ASTM D5185m		<b>2172</b>	1759	1547
Phosphorus	ppm	ASTM D5185m		<b>1461</b>	996	912
Zinc	ppm	ASTM D5185m		<b>1668</b>	1236	1132
Sulfur	ppm	ASTM D5185m		<b>4196</b>	3761	3319
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.9</b>	21.5	22.3
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>6.6</b>	8.3	8.6
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.1</b>	14.4	14.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0196225 **Received** : 17 Apr 2024  
**Lab Number** : 06151754 **Tested** : 18 Apr 2024  
**Unique Number** : 10981832 **Diagnosed** : 19 Apr 2024 - Sean Felton  
**Test Package** : CONST ( Additional Tests: TBN )

**DIVERSIFIED BIO-MASS**  
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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)