



# OIL ANALYSIS REPORT

WEAR  
CONTAMINATION  
FLUID CONDITION

<b>SEVERE</b>
<b>SEVERE</b>
<b>NORMAL</b>



Area  
**Store 3 - Norton**  
Machine Id  
**JOHN DEERE 210G EX13 (S/N 1FF210GXHHF525180)**  
Component  
**Right Propel Gearbox**  
Fluid  
**GEAR OIL SAE 90 (2 GAL)**

## RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

## WEAR

Gear wear is indicated.

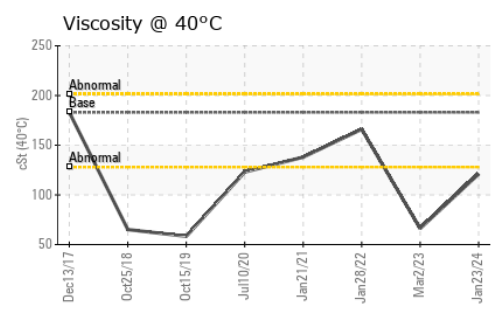
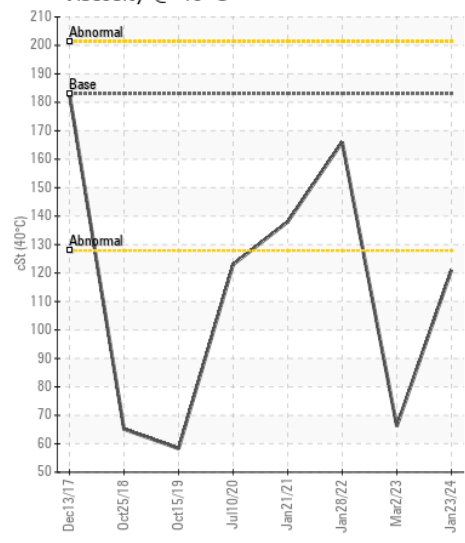
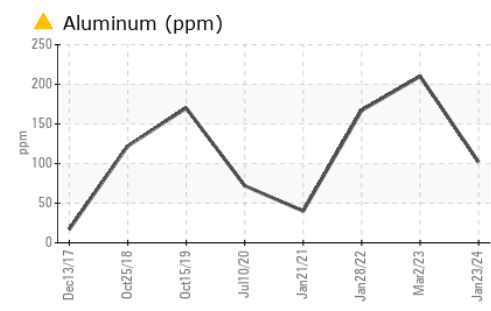
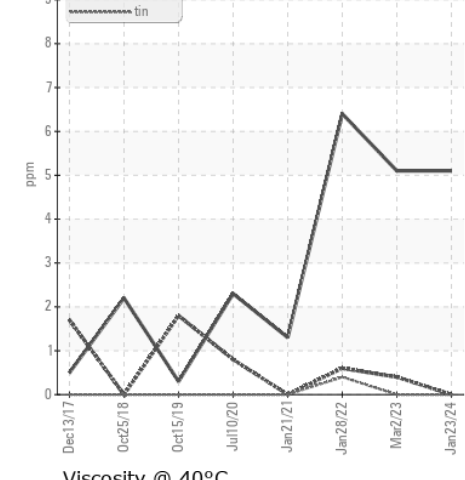
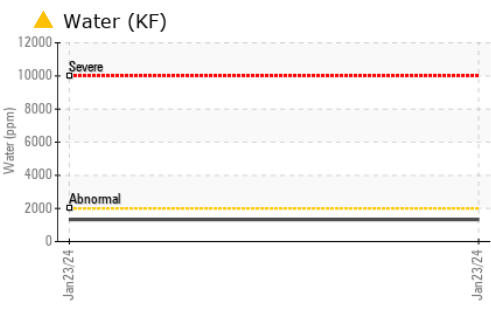
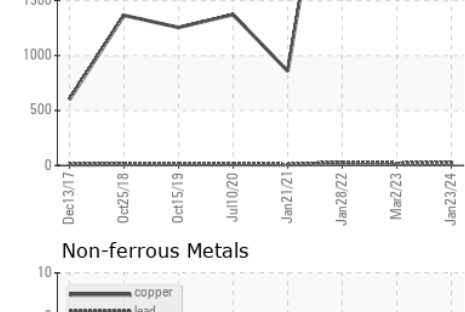
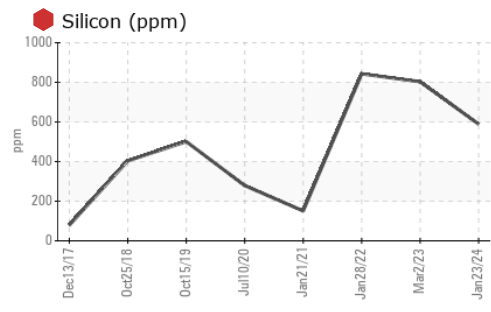
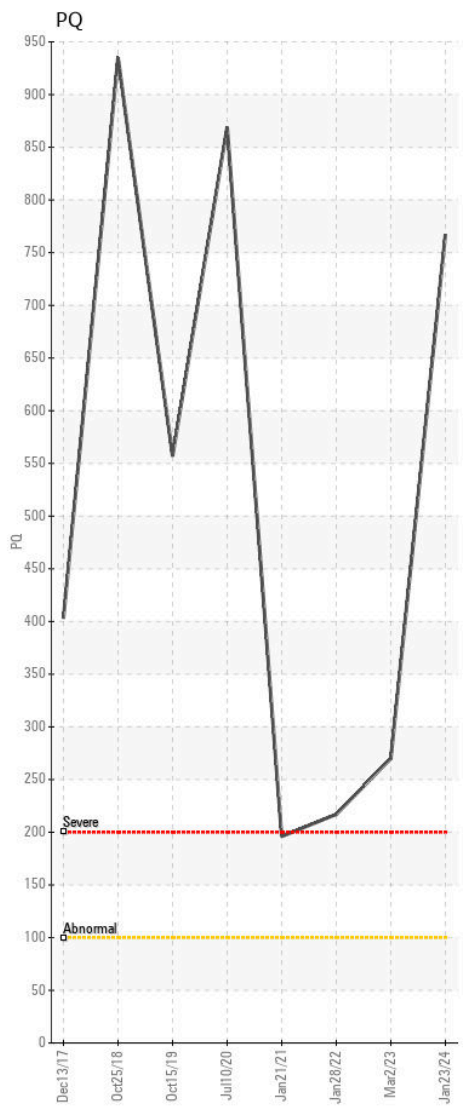
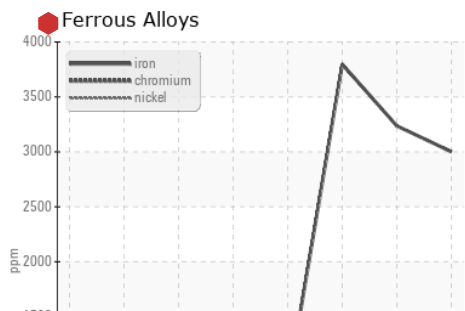
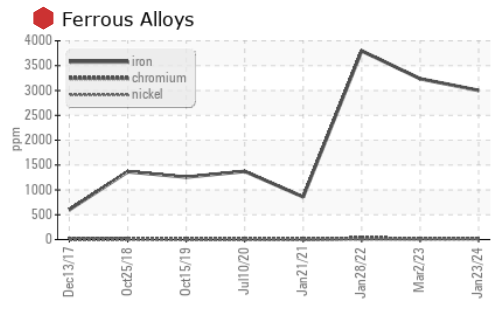
## CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a light concentration of water present in the oil.

## FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0047676</b>	LEC0039955	LEC0026946
Sample Date		Client Info		<b>23 Jan 2024</b>	02 Mar 2023	28 Jan 2022
Machine Age	hrs	Client Info		<b>4844</b>	4309	3254
Oil Age	hrs	Client Info		<b>500</b>	1101	819
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Chngd</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>SEVERE</b>	SEVERE	SEVERE
PQ		ASTM D8184		<b>767</b>	270	217
Iron	ppm	ASTM D5185m	>1250	<b>3001</b>	3236	3797
Chromium	ppm	ASTM D5185m	>10	<b>23</b>	18	28
Nickel	ppm	ASTM D5185m	>10	<b>3</b>	5	4
Titanium	ppm	ASTM D5185m		<b>11</b>	15	17
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m		<b>102</b>	210	167
Lead	ppm	ASTM D5185m		<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m		<b>5</b>	5	6
Tin	ppm	ASTM D5185m		<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silicon	ppm	ASTM D5185m		<b>589</b>	803	843
Potassium	ppm	ASTM D5185m	>20	<b>31</b>	58	45
Water	%	ASTM D6304	>0.2	<b>0.133</b>	---	---
ppm Water	ppm	ASTM D6304	>2000	<b>1330</b>	---	---
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	>0.2	<b>0.2%</b>	NEG	NEG
Sodium	ppm	ASTM D5185m		<b>0</b>	4	9
Boron	ppm	ASTM D5185m	400	<b>149</b>	47	136
Barium	ppm	ASTM D5185m	200	<b>&lt;1</b>	2	0
Molybdenum	ppm	ASTM D5185m	12	<b>3</b>	6	3
Manganese	ppm	ASTM D5185m		<b>21</b>	23	26
Magnesium	ppm	ASTM D5185m	12	<b>31</b>	90	20
Calcium	ppm	ASTM D5185m	150	<b>611</b>	2470	148
Phosphorus	ppm	ASTM D5185m	1650	<b>1048</b>	994	788
Zinc	ppm	ASTM D5185m	125	<b>246</b>	891	34
Sulfur	ppm	ASTM D5185m	22500	<b>19207</b>	6821	23698
Visc @ 40°C	cSt	ASTM D445	183	<b>121</b>	66.2	166



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0047676 **Received** : 30 Jan 2024  
**Lab Number** : 06075116 **Tested** : 05 Feb 2024  
**Unique Number** : 10857207 **Diagnosed** : 05 Feb 2024 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: KF, PQ )

**LANE PIPELINE**  
 2946 E MAIN ST  
 BRIDGEPORT, WV  
 US 26330  
 Contact: SCOTT

Certificate L2367  
 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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 F: