



# OIL ANALYSIS REPORT

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



Machine Id  
**John Deere 650J 650J-3 (S/N 1T0650JXVBD204237)**  
 Component  
**Hydraulic System**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TLY0002442</b>	TLY0001784	---
Sample Date		Client Info		<b>22 May 2024</b>	16 Aug 2023	---
Machine Age	hrs	Client Info		<b>12047</b>	11607	---
Oil Age	hrs	Client Info		<b>11607</b>	1607	---
Filter Age	hrs	Client Info		<b>11607</b>	1607	---
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	---
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	---
Sample Status				<b>NORMAL</b>	ABNORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>23	<b>28</b>	21	---
Chromium	ppm	ASTM D5185m	>9	<b>18</b>	14	---
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>1</b>	2	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>9	<b>10</b>	9	---
Lead	ppm	ASTM D5185m	>28	<b>&lt;1</b>	2	---
Copper	ppm	ASTM D5185m	>51	<b>33</b>	29	---
Tin	ppm	ASTM D5185m	>5	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

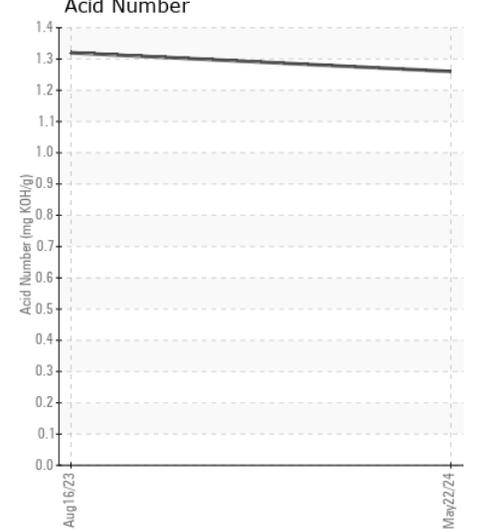
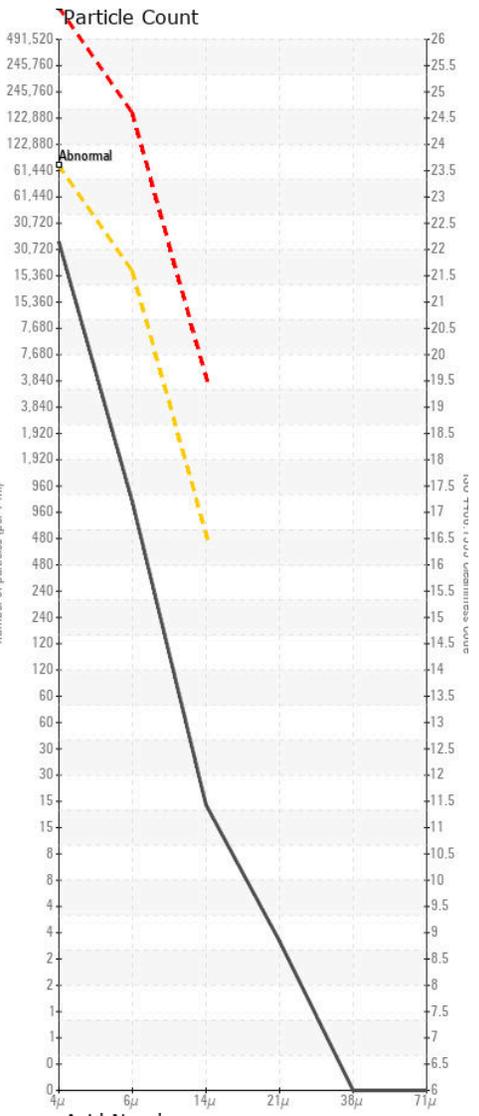
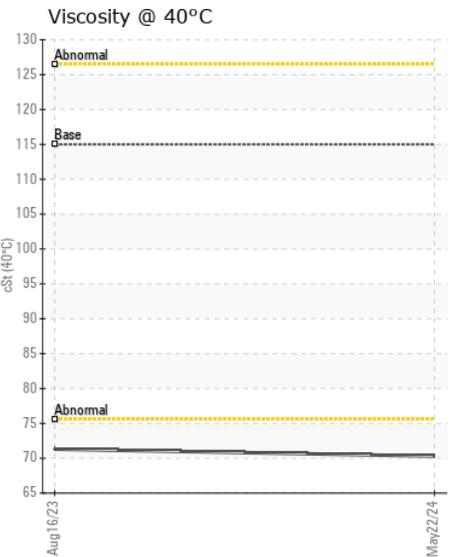
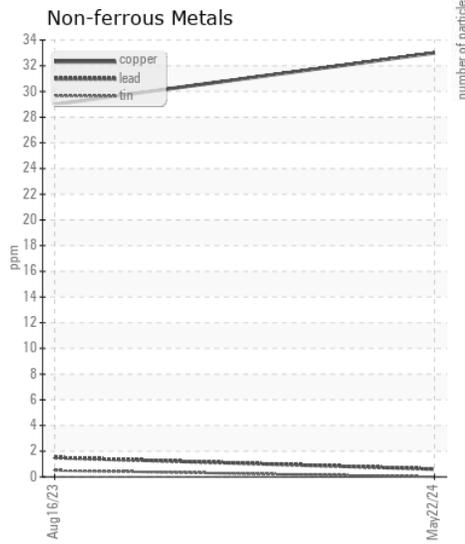
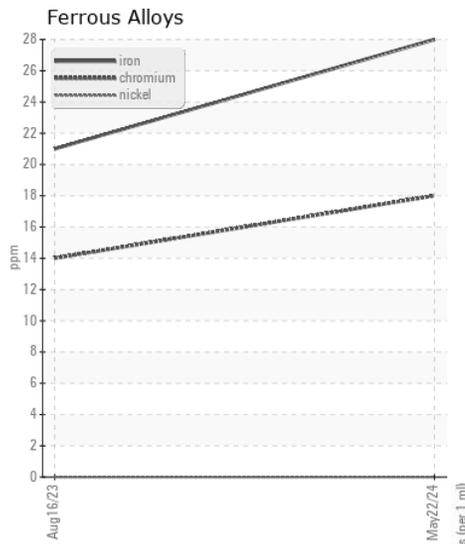
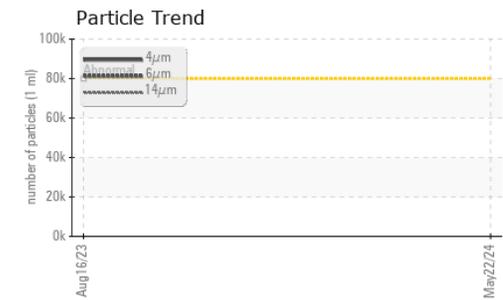
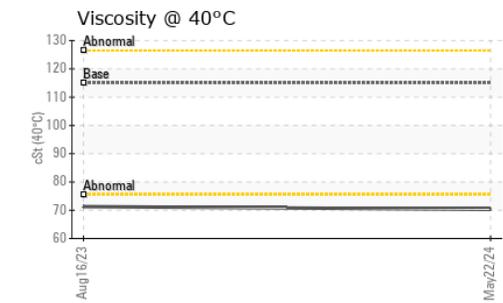
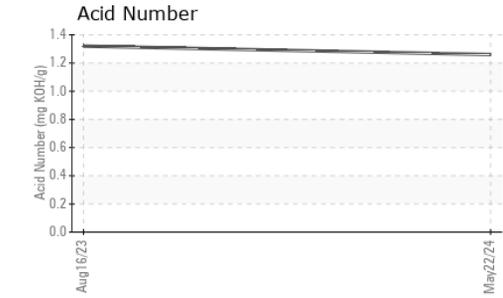
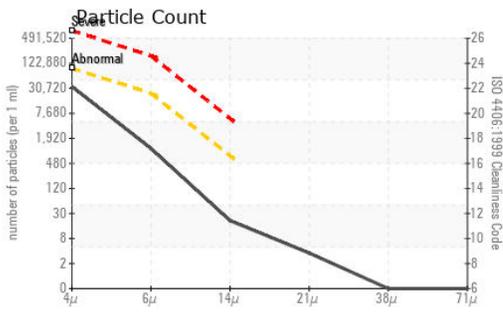
The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>31	<b>23</b>	18	---
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	6	---
Water		WC Method	>0.075	<b>NEG</b>	NEG	---
Particles >4µm		ASTM D7647	>80000	<b>29464</b>	---	---
Particles >6µm		ASTM D7647	>20000	<b>964</b>	---	---
Particles >14µm		ASTM D7647	>640	<b>18</b>	---	---
Particles >21µm		ASTM D7647	>160	<b>3</b>	---	---
Particles >38µm		ASTM D7647	>40	<b>0</b>	---	---
Particles >71µm		ASTM D7647	>10	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>23/21/16	<b>22/17/11</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	▲ MODER	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.075	<b>NEG</b>	NEG	---

## FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>158	<b>5</b>	5	---
Boron	ppm	ASTM D5185m	250	<b>55</b>	54	---
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	100	<b>31</b>	29	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m	450	<b>320</b>	294	---
Calcium	ppm	ASTM D5185m	3000	<b>2377</b>	2008	---
Phosphorus	ppm	ASTM D5185m	1150	<b>1007</b>	890	---
Zinc	ppm	ASTM D5185m	1350	<b>1147</b>	1067	---
Sulfur	ppm	ASTM D5185m	4250	<b>4415</b>	4190	---
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.26</b>	1.32	---
Visc @ 40°C	cSt	ASTM D445	115	<b>70.3</b>	71.3	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TLY0002442  
**Lab Number** : 06193885  
**Unique Number** : 11056008  
**Test Package** : CONST

**Received** : 29 May 2024  
**Tested** : 30 May 2024  
**Diagnosed** : 31 May 2024 - Angela Borella

**GAINES & COMPANY**  
 112 WESTMINSTER RD  
 REISTERSTOWN, MD  
 US 21136

Contact: LANCE TANCRAITOR  
 ltancraitor@gainesandco.com  
 T: (410)833-9833

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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