



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 644K 1DW644KZAED661834
Component
Front Axle
Fluid
JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0197513	JR0167646	---
Sample Date		Client Info		15 Jan 2024	18 May 2023	---
Machine Age	hrs	Client Info		11098	10147	---
Oil Age	hrs	Client Info		11098	1000	---
Filter Age	hrs	Client Info		0	1000	---
Oil Changed		Client Info		Not Changed	N/A	---
Filter Changed		Client Info		Not Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>750	171	164	---
Chromium	ppm	ASTM D5185m	>11	<1	<1	---
Nickel	ppm	ASTM D5185m	>10	0	<1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>21	<1	<1	---
Lead	ppm	ASTM D5185m	>49	18	18	---
Copper	ppm	ASTM D5185m	>101	28	25	---
Tin	ppm	ASTM D5185m	>10	2	4	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

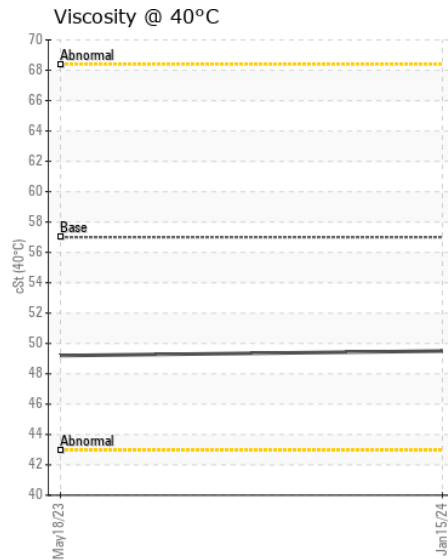
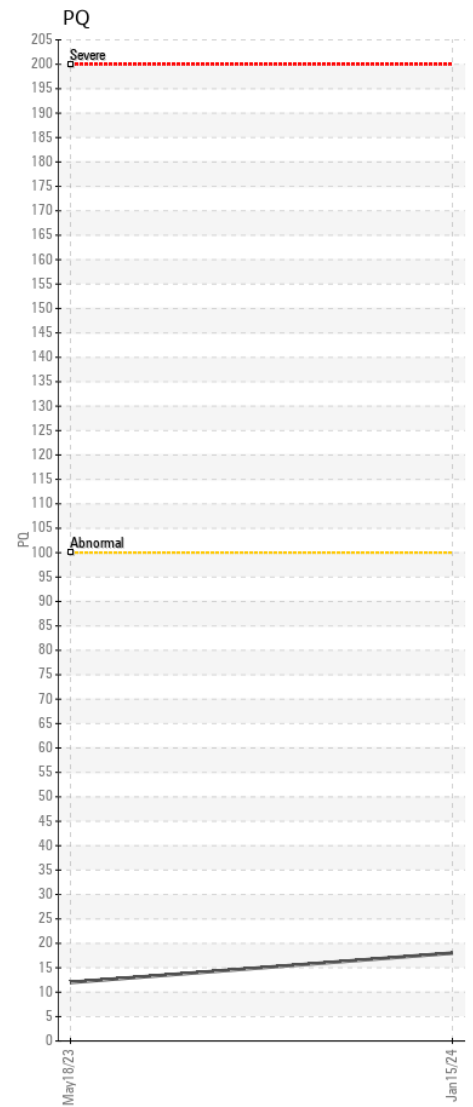
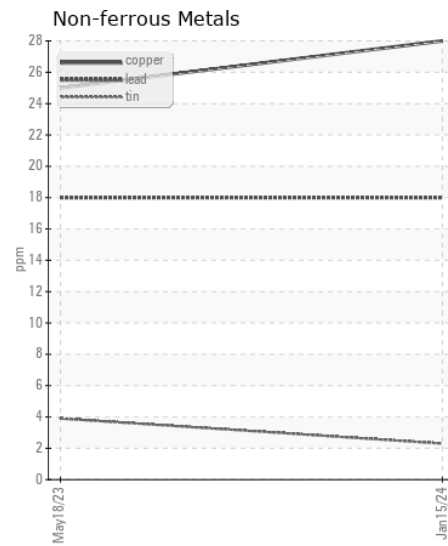
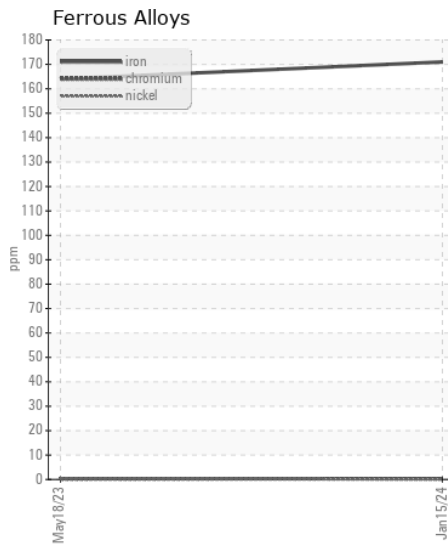
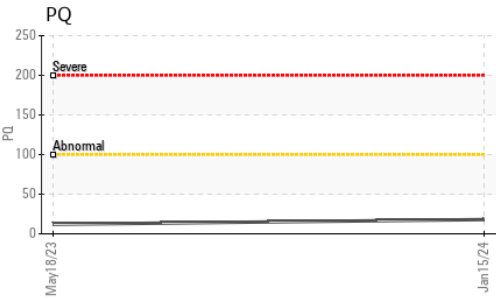
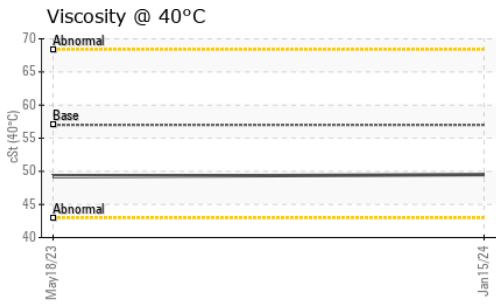
There is no indication of any contamination in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Silicon	ppm	ASTM D5185m	>31	9	9	---
Potassium	ppm	ASTM D5185m	>20	<1	<1	---
Water		WC Method	>0.1	NEG	NEG	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	---

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sodium	ppm	ASTM D5185m	>51	6	5	---
Boron	ppm	ASTM D5185m	6	11	4	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	0	2	2	---
Manganese	ppm	ASTM D5185m		1	2	---
Magnesium	ppm	ASTM D5185m	145	91	99	---
Calcium	ppm	ASTM D5185m	3570	2948	3256	---
Phosphorus	ppm	ASTM D5185m	1290	1069	1034	---
Zinc	ppm	ASTM D5185m	1640	1196	1304	---
Sulfur	ppm	ASTM D5185m		4099	4474	---
Visc @ 40°C	cSt	ASTM D445	57.0	49.5	49.2	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0197513 **Received** : 17 Jan 2024
Lab Number : 06063043 **Diagnosed** : 18 Jan 2024
Unique Number : 10834425 **Diagnostician** : Sean Felton
Test Package : CONST (Additional Tests: PQ)

JRE - GARNER
 4161 AUBURN CHURCH RD
 GARNER, NC
 US 27529

Contact: RALEIGH SHOP
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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)

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