



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 644K 1DW644KZLGF674754
Component
Front Axle
Fluid
JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. (lots of metal flakes in oil).

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0208008	---	---
Sample Date		Client Info		17 Apr 2024	---	---
Machine Age	hrs	Client Info		26220	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

Bearing and/or bushing wear is indicated. No visible metal detected.

PQ		ASTM D8184		737	---	---
Iron	ppm	ASTM D5185m	>750	722	---	---
Chromium	ppm	ASTM D5185m	>11	3	---	---
Nickel	ppm	ASTM D5185m	>10	4	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>21	2	---	---
Lead	ppm	ASTM D5185m	>49	▲ 135	---	---
Copper	ppm	ASTM D5185m	>101	▲ 171	---	---
Tin	ppm	ASTM D5185m	>10	9	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

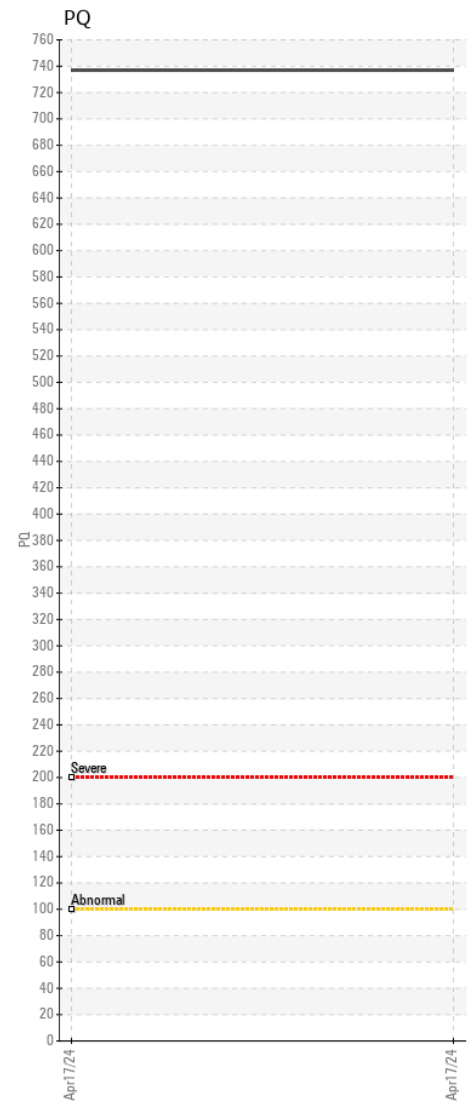
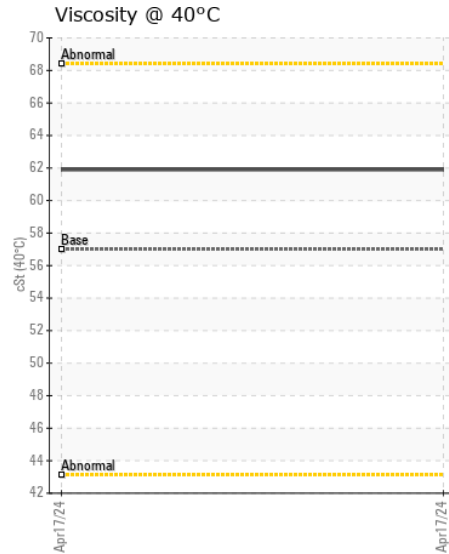
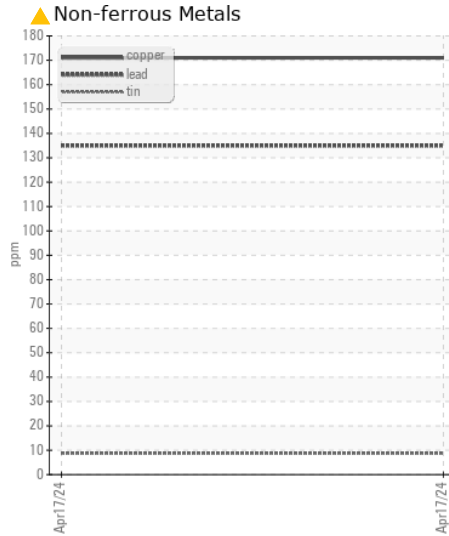
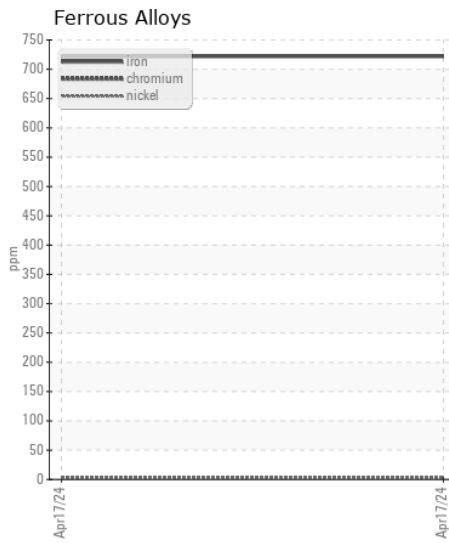
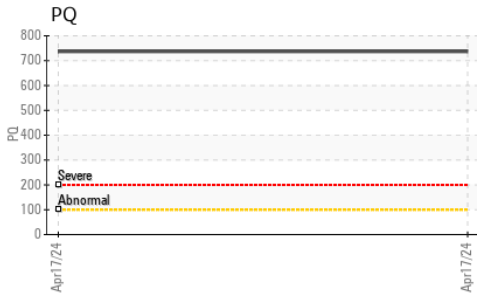
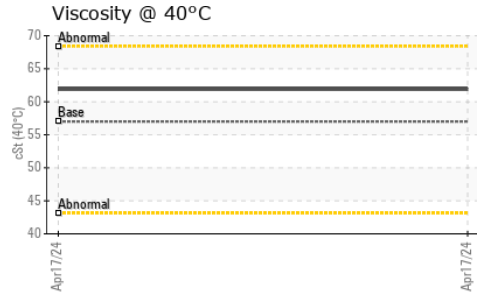
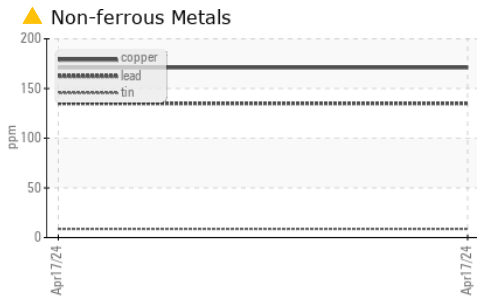
CONTAMINATION

No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>31	14	---	---
Potassium	ppm	ASTM D5185m	>20	3	---	---
Water		WC Method	>0.1	NEG	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---	---

FLUID CONDITION

Sodium	ppm	ASTM D5185m	>51	11	---	---
Boron	ppm	ASTM D5185m	6	161	---	---
Barium	ppm	ASTM D5185m	0	0	---	---
Molybdenum	ppm	ASTM D5185m	0	2	---	---
Manganese	ppm	ASTM D5185m		6	---	---
Magnesium	ppm	ASTM D5185m	145	9	---	---
Calcium	ppm	ASTM D5185m	3570	2428	---	---
Phosphorus	ppm	ASTM D5185m	1290	1049	---	---
Zinc	ppm	ASTM D5185m	1640	1111	---	---
Sulfur	ppm	ASTM D5185m		7685	---	---
Visc @ 40°C	cSt	ASTM D445	57.0	61.9	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0208008

Lab Number : 06158524

Unique Number : 10993947

Test Package : CONST (Additional Tests: PQ)

Received : 23 Apr 2024

Tested : 25 Apr 2024

Diagnosed : 25 Apr 2024 - Don Baldrige

Baxter Healthcare - Wood Boiler Biomass

2859 OLD LINVILLE RD

MARION, NC

US 28752

Contact: RICKY STYLES

ricky_styles@baxter.com

T: (828)756-4946

F:

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)