



WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 648LII F711103
 Component
Brake
 Fluid
JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

RECOMMENDATION

The fluid change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0216558	---	---
Sample Date		Client Info		17 Jun 2024	---	---
Machine Age	hrs	Client Info		2598	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				SEVERE	---	---

WEAR

The iron level is severe.

PQ		ASTM D8184		▲ 301	---	---
Iron	ppm	ASTM D5185m	>350	▲ 1492	---	---
Chromium	ppm	ASTM D5185m	>5	1	---	---
Nickel	ppm	ASTM D5185m	>5	2	---	---
Titanium	ppm	ASTM D5185m		33	---	---
Silver	ppm	ASTM D5185m		<1	---	---
Aluminum	ppm	ASTM D5185m	>8	8	---	---
Lead	ppm	ASTM D5185m	>10	14	---	---
Copper	ppm	ASTM D5185m	>150	3	---	---
Tin	ppm	ASTM D5185m	>5	0	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

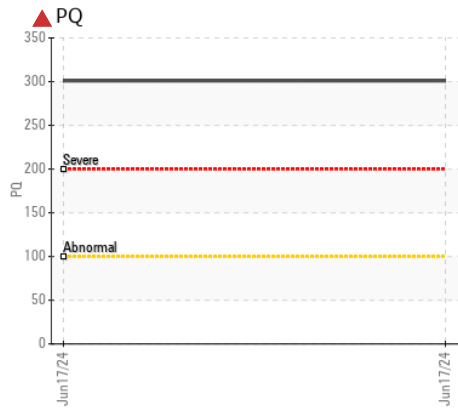
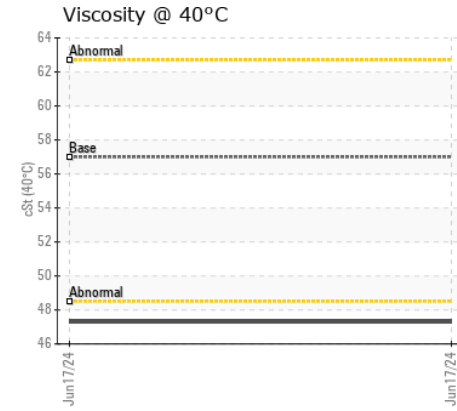
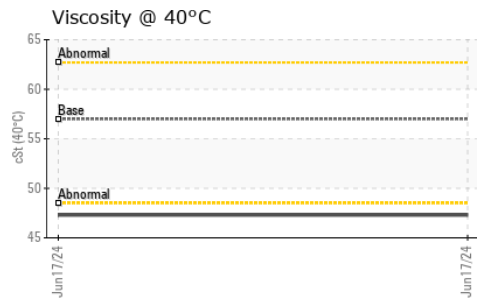
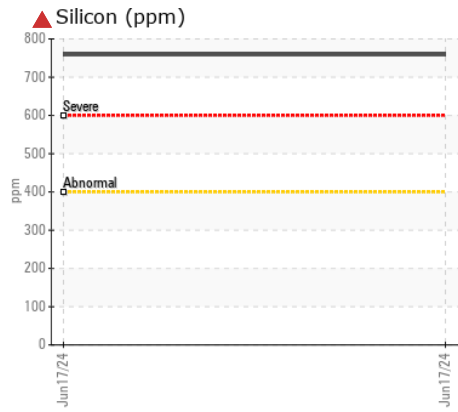
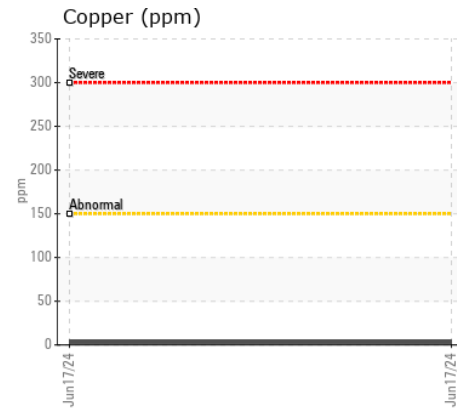
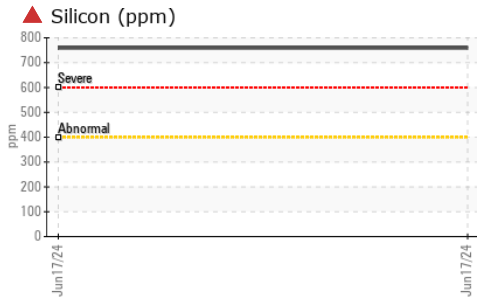
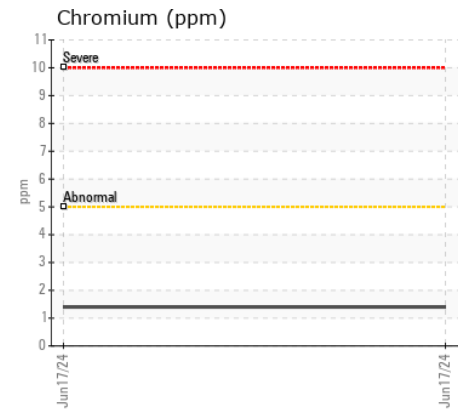
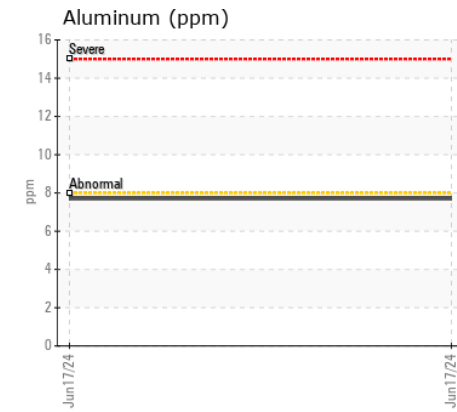
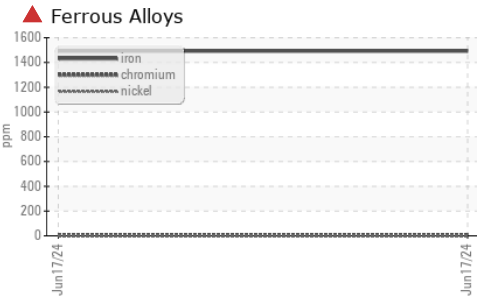
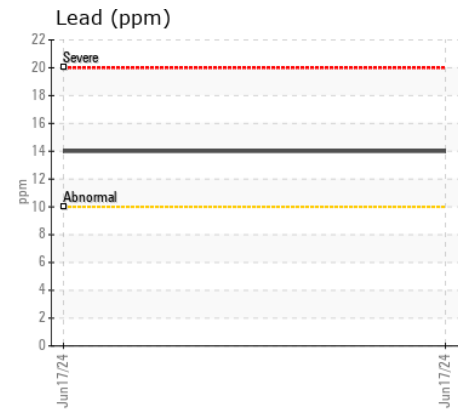
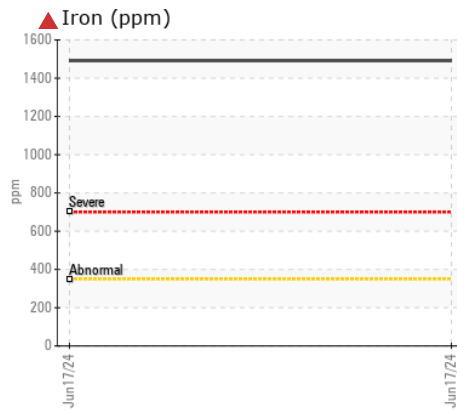
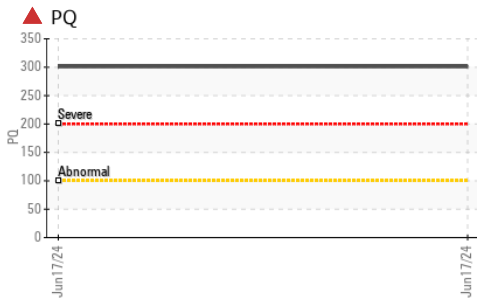
Elemental level of silicon (Si) above normal indicating ingress of seal material.

Silicon	ppm	ASTM D5185m	>400	▲ 759	---	---
Potassium	ppm	ASTM D5185m	>20	16	---	---
Water		WC Method	>0.2	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	>0.2	NEG	---	---

FLUID CONDITION

The fluid is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185m		25	---	---
Boron	ppm	ASTM D5185m	6	178	---	---
Barium	ppm	ASTM D5185m	0	2	---	---
Molybdenum	ppm	ASTM D5185m	0	72	---	---
Manganese	ppm	ASTM D5185m		13	---	---
Magnesium	ppm	ASTM D5185m	145	714	---	---
Calcium	ppm	ASTM D5185m	3570	1204	---	---
Phosphorus	ppm	ASTM D5185m	1290	708	---	---
Zinc	ppm	ASTM D5185m	1640	727	---	---
Sulfur	ppm	ASTM D5185m		3629	---	---
Visc @ 40°C	cSt	ASTM D445	57.0	47.3	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0216558 **Received** : 24 Jun 2024
Lab Number : 06218490 **Tested** : 25 Jun 2024
Unique Number : 11096687 **Diagnosed** : 26 Jun 2024 - Jonathan Hester
Test Package : MOBCE (Additional Tests: PQ)

JRE - FISHERSVILLE
 98 EXPO ROAD
 FISHERSVILLE, VA
 US 22939

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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)