



Machine Id
JOHN DEERE 244J LU244JX722841
Component
Rear Right 6WD Hub
Fluid
JOHN DEERE GL-5 80W90 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil 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		JR0176725	---	---
Sample Date		Client Info		18 Oct 2023	---	---
Machine Age	hrs	Client Info		12906	---	---
Oil Age	hrs	Client Info		12906	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				SEVERE	---	---

WEAR

Gear wear is indicated.

PQ		ASTM D8184		1557	---	---
Iron	ppm	ASTM D5185m	>200	9207	---	---
Chromium	ppm	ASTM D5185m	>10	77	---	---
Nickel	ppm	ASTM D5185m	>10	19	---	---
Titanium	ppm	ASTM D5185m		39	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m		876	---	---
Lead	ppm	ASTM D5185m		2	---	---
Copper	ppm	ASTM D5185m		37	---	---
Tin	ppm	ASTM D5185m		0	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	MODER	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

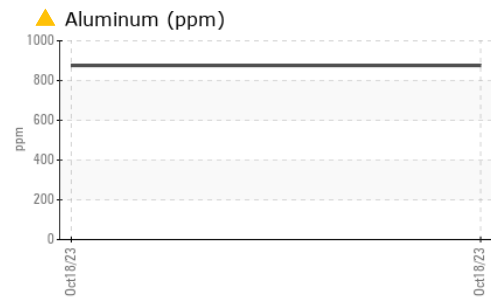
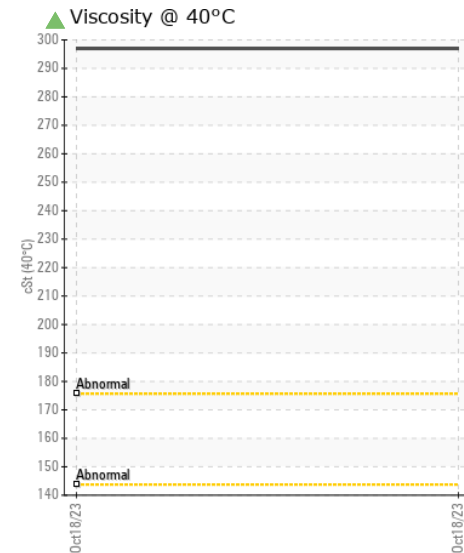
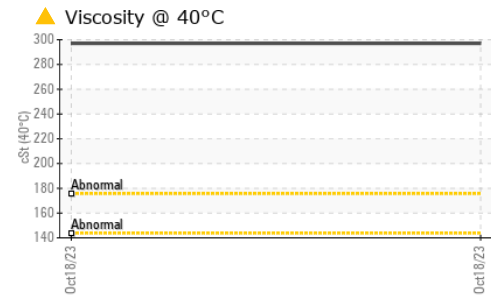
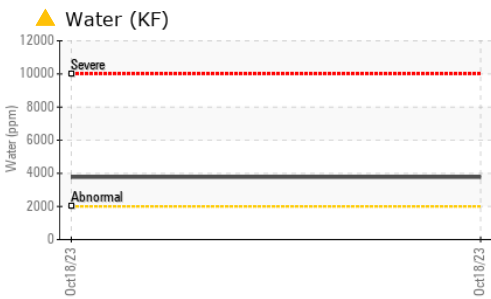
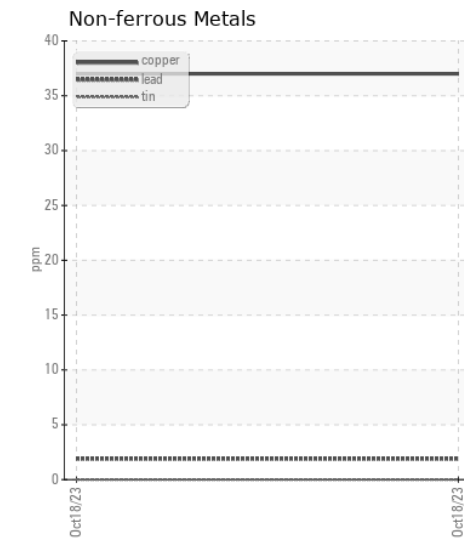
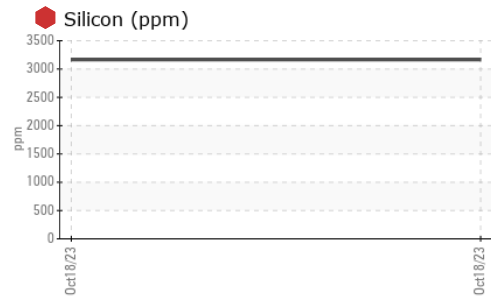
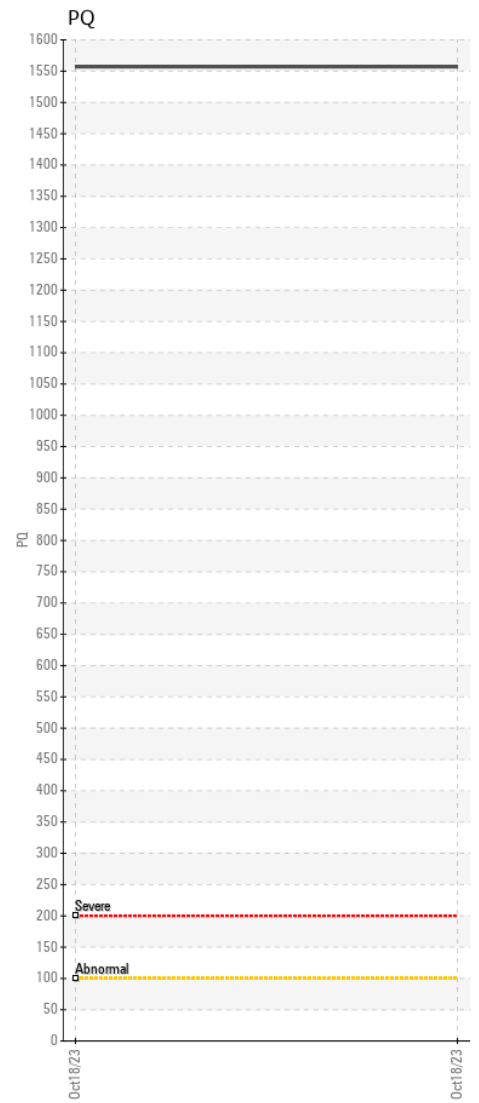
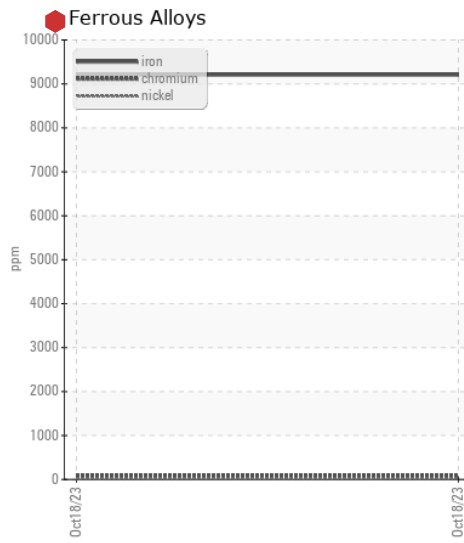
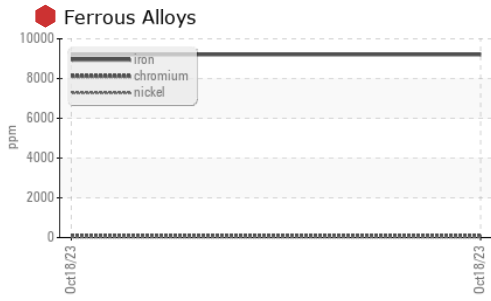
There is a light concentration of water present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m		3165	---	---
Potassium	ppm	ASTM D5185m	>20	359	---	---
Water	%	ASTM D6304	>0.2	0.377	---	---
ppm Water	ppm	ASTM D6304	>2000	3770	---	---
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	0.2%	---	---

FLUID CONDITION

The oil viscosity is higher than normal. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		336	---	---
Boron	ppm	ASTM D5185m		12	---	---
Barium	ppm	ASTM D5185m		7	---	---
Molybdenum	ppm	ASTM D5185m		6	---	---
Manganese	ppm	ASTM D5185m		72	---	---
Magnesium	ppm	ASTM D5185m		74	---	---
Calcium	ppm	ASTM D5185m		183	---	---
Phosphorus	ppm	ASTM D5185m		2096	---	---
Zinc	ppm	ASTM D5185m		80	---	---
Sulfur	ppm	ASTM D5185m		32915	---	---
Visc @ 40°C	cSt	ASTM D445		297	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0176725 **Received** : 20 Oct 2023
Lab Number : 05985786 **Tested** : 24 Oct 2023
Unique Number : 10708448 **Diagnosed** : 24 Oct 2023 - Don Baldrige
Test Package : CONST (Additional Tests: KF, PQ)

GARNER - MARTIN MARIETTA
 1111 E GARNER RD
 GARNER, NC
 US 27529
 Contact: JASON GILMORE
 jason.gilmore@martinmarietta.com

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)

T:
F: