



OIL ANALYSIS REPORT

WEAR	ATTENTION
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
BLACKBURN LOGGING [A35658]
 Machine Id
JOHN DEERE 643L II 1DW643LBKPL717978
 Component
Transfer Gearbox
 Fluid
JOHN DEERE HY-GARD HYDRAULIC/RANSMISSION (2 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. Resample at the next service interval to monitor. (Customer Sample Comment: A35658)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WE0007626	---	---
Sample Date		Client Info		19 Jun 2024	---	---
Machine Age	hrs	Client Info		535	---	---
Oil Age	hrs	Client Info		535	---	---
Filter Age	hrs	Client Info		535	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		None	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

PQ		ASTM D8184		22	---	---
Iron	ppm	ASTM D5185m	>200	49	---	---
Chromium	ppm	ASTM D5185m	>10	<1	---	---
Nickel	ppm	ASTM D5185m	>10	0	---	---
Titanium	ppm	ASTM D5185m		7	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m		14	---	---
Lead	ppm	ASTM D5185m		<1	---	---
Copper	ppm	ASTM D5185m		2	---	---
Tin	ppm	ASTM D5185m		0	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

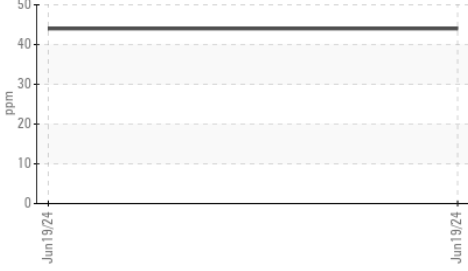
Silicon	ppm	ASTM D5185m		44	---	---
Potassium	ppm	ASTM D5185m	>20	6	---	---
Water		WC Method	>0.2	NEG	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

FLUID CONDITION

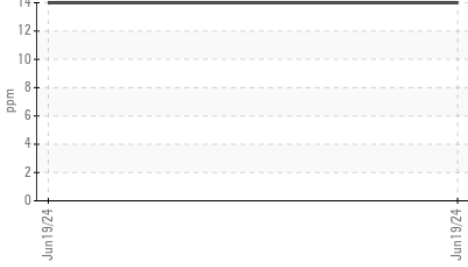
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		10	---	---
Boron	ppm	ASTM D5185m		2	---	---
Barium	ppm	ASTM D5185m		10	---	---
Molybdenum	ppm	ASTM D5185m		<1	---	---
Manganese	ppm	ASTM D5185m		3	---	---
Magnesium	ppm	ASTM D5185m		105	---	---
Calcium	ppm	ASTM D5185m		3777	---	---
Phosphorus	ppm	ASTM D5185m		1117	---	---
Zinc	ppm	ASTM D5185m		1308	---	---
Sulfur	ppm	ASTM D5185m		4326	---	---
Visc @ 40°C	cSt	ASTM D445	59	52.5	---	---

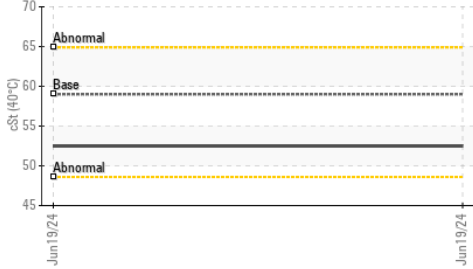
▲ Silicon (ppm)



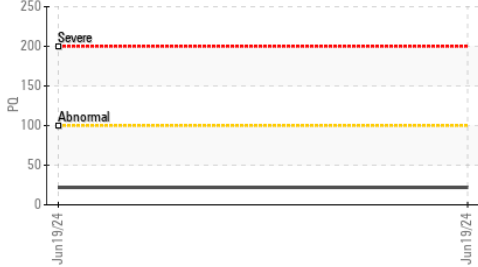
● Aluminum (ppm)



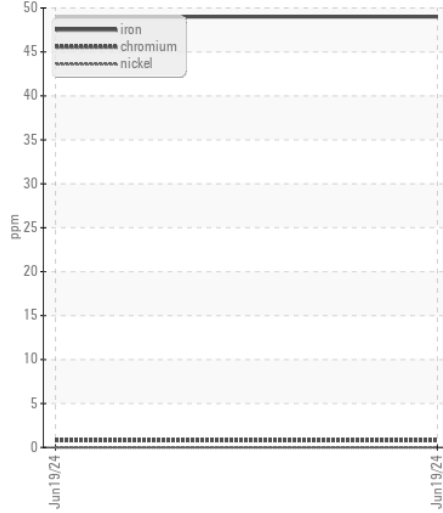
Viscosity @ 40°C



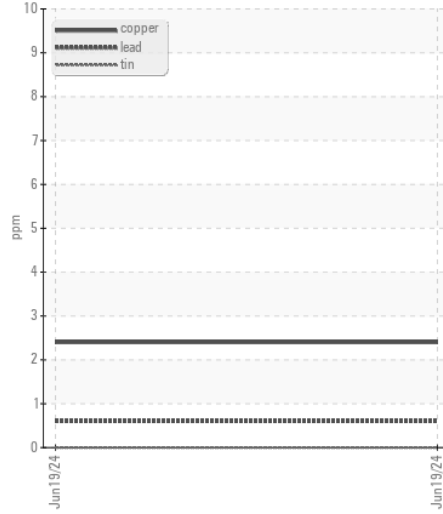
PQ



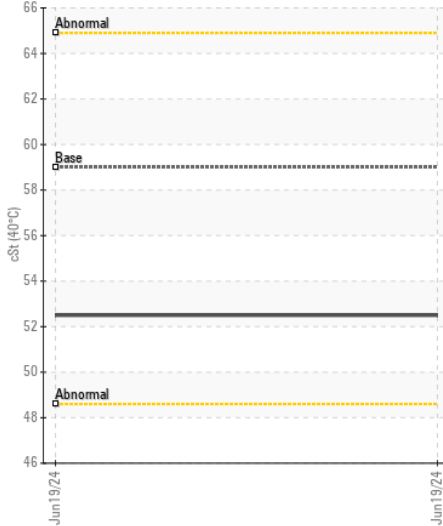
Ferrous Alloys



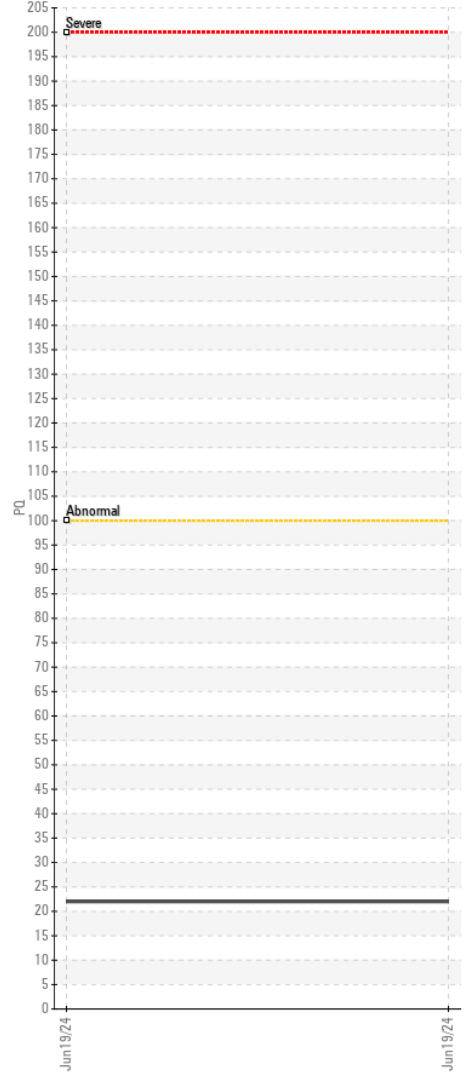
Non-ferrous Metals



Viscosity @ 40°C



PQ



Certificate L2367

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

Sample No. : WE0007626

Lab Number : 06217083

Unique Number : 11089947

Test Package : CONST (Additional Tests: PQ)

Received : 21 Jun 2024

Tested : 24 Jun 2024

Diagnosed : 24 Jun 2024 - Sean Felton

WARRIOR TRACTOR AND EQUIPMENT - HUNTSVILLE

25135 ONE AVIATION WAY SW

MADISON, AL

US 35756

Contact: BOBBY LUCKY

warriorparts033@gmail.com

T:

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)