



Area
[ENERGY ERECTORS]
 Machine Id
JOHN DEERE 310SG T0310SG960771
 Component
Front Differential
 Fluid
JOHN DEERE HY-GARD HYD/TRANS (--- QTS)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0218324	---	---
Sample Date		Client Info		16 Jun 2024	---	---
Machine Age	hrs	Client Info		4594	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

Gear wear is indicated.

PQ		ASTM D8184		516	---	---
Iron	ppm	ASTM D5185m	>500	▲ 753	---	---
Chromium	ppm	ASTM D5185m	>10	3	---	---
Nickel	ppm	ASTM D5185m	>10	0	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>25	2	---	---
Lead	ppm	ASTM D5185m	>25	0	---	---
Copper	ppm	ASTM D5185m	>100	52	---	---
Tin	ppm	ASTM D5185m	>10	0	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

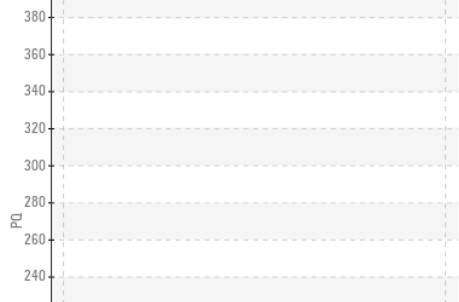
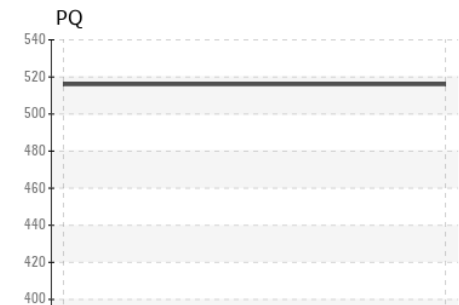
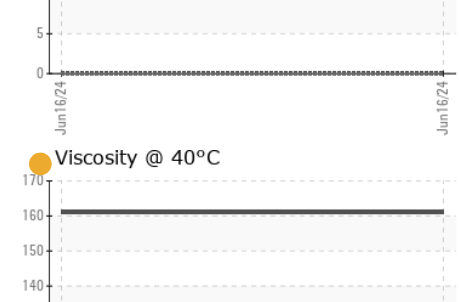
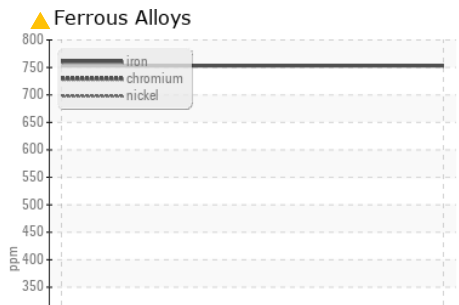
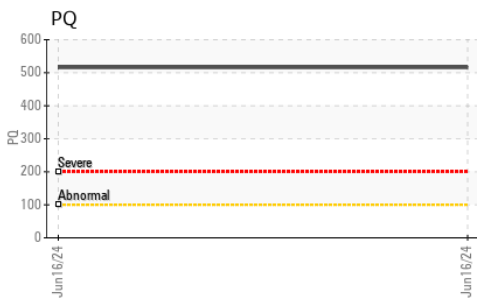
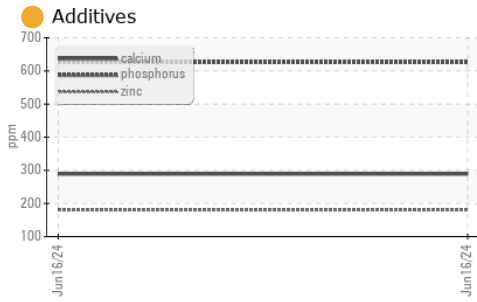
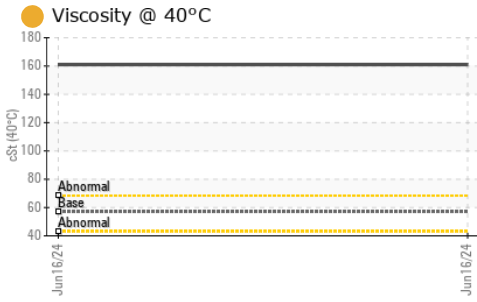
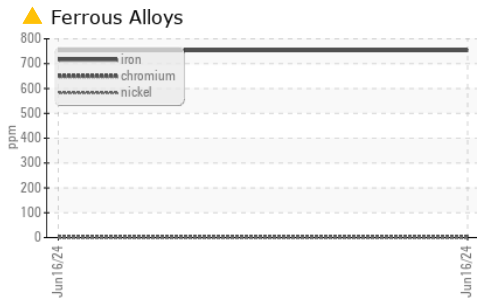
Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>75	17	---	---
Potassium	ppm	ASTM D5185m	>20	<1	---	---
Water		WC Method	>.2	NEG	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	▲ MODER	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>.2	NEG	---	---

FLUID CONDITION

The oil viscosity is higher than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		2	---	---
Boron	ppm	ASTM D5185m	6	5	---	---
Barium	ppm	ASTM D5185m	0	<1	---	---
Molybdenum	ppm	ASTM D5185m	0	● 48	---	---
Manganese	ppm	ASTM D5185m		9	---	---
Magnesium	ppm	ASTM D5185m	145	● 3	---	---
Calcium	ppm	ASTM D5185m	3570	● 289	---	---
Phosphorus	ppm	ASTM D5185m	1290	● 626	---	---
Zinc	ppm	ASTM D5185m	1640	● 180	---	---
Sulfur	ppm	ASTM D5185m		● 19138	---	---
Visc @ 40°C	cSt	ASTM D445	57.0	● 161	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0218324 **Received** : 14 Jun 2024
Lab Number : 06210950 **Tested** : 18 Jun 2024
Unique Number : 11083814 **Diagnosed** : 18 Jun 2024 - Sean Felton
Test Package : CONST (Additional Tests: PQ)

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)

JRE - MANASSAS PARK
 9107 OWENS DRIVE
 MANASSAS PARK, VA
 US 20111

Contact: DON VEST
 dvest@jamesriverequipment.com

T: (703)631-8500

F: (703)631-4715