



Machine Id
JOHN DEERE 160CLC FF160CX046366

Component
Hydraulic System

Fluid
{not provided} (--- GAL)

RECOMMENDATION

Recommend drain oil if not already done. Reduce drain interval to 2000 hours or drain and flush and use recommended zinc free oil. Oil and filter change at the time of sampling has been noted.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0185741	---	---
Sample Date		Client Info		19 Mar 2024	---	---
Machine Age	hrs	Client Info		6612	---	---
Oil Age	hrs	Client Info		2000	---	---
Filter Age	hrs	Client Info		2000	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	32	---	---
Iron	ppm	ASTM D5185m	>32	12	---	---
Chromium	ppm	ASTM D5185m	>9	<1	---	---
Nickel	ppm	ASTM D5185m	>5	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>9	0	---	---
Lead	ppm	ASTM D5185m	>28	0	---	---
Copper	ppm	ASTM D5185m	>50	8	---	---
Tin	ppm	ASTM D5185m	>5	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

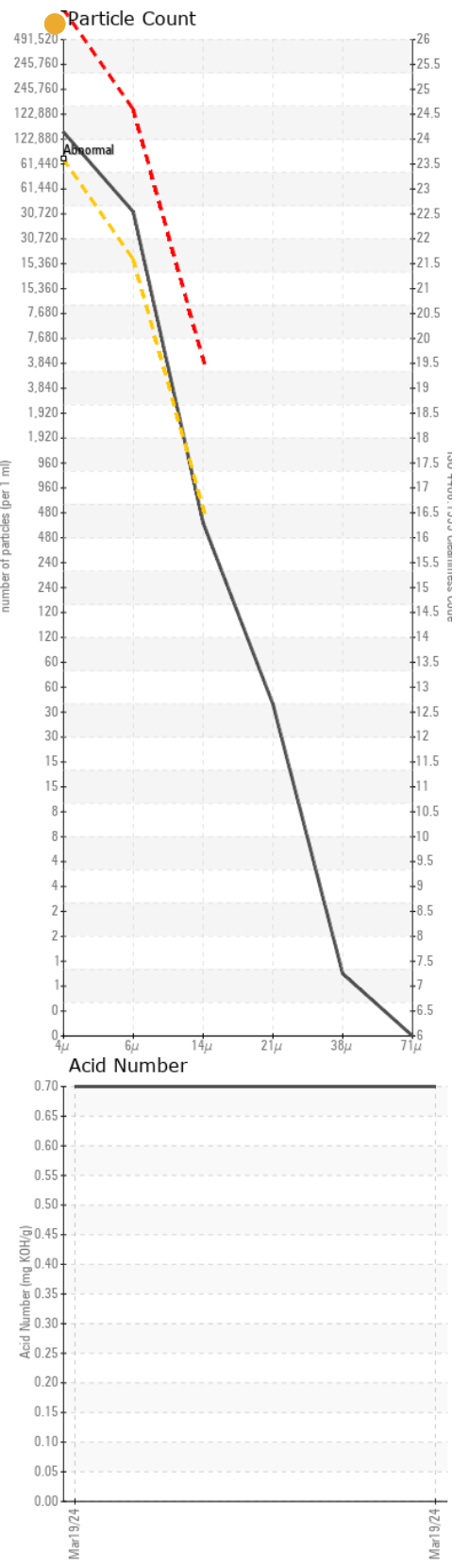
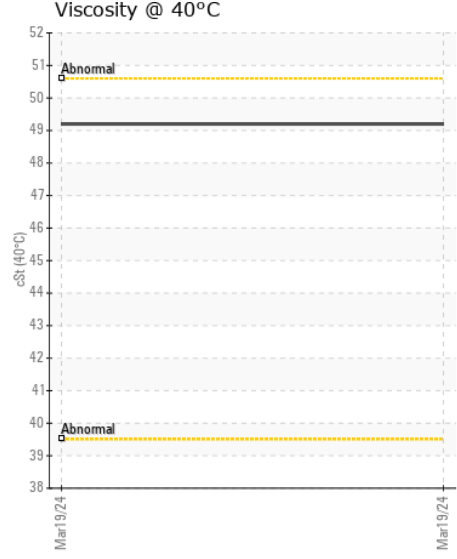
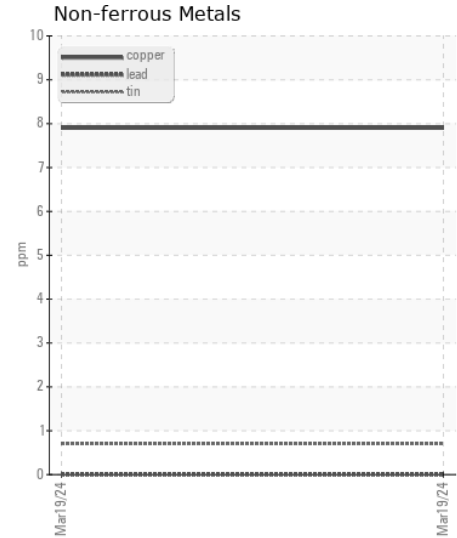
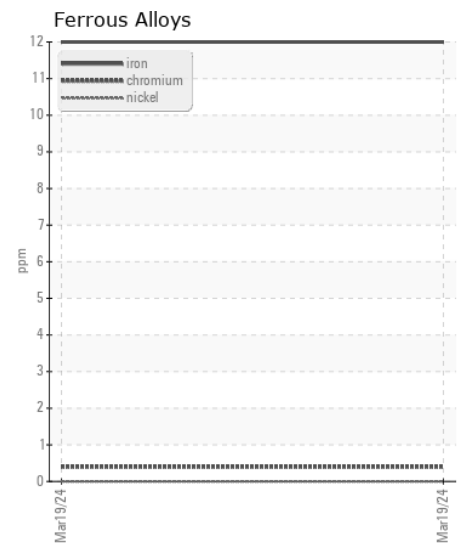
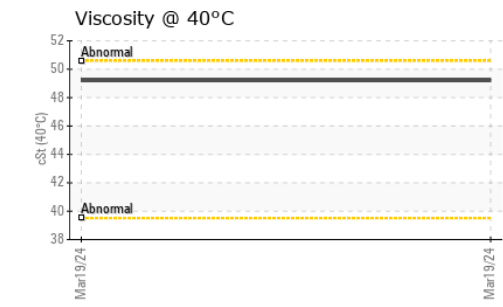
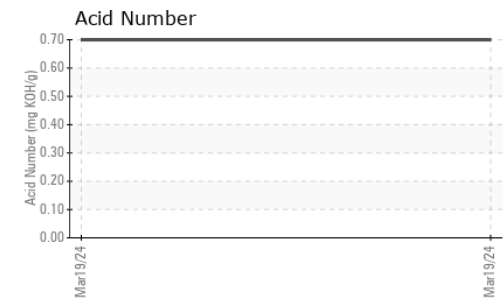
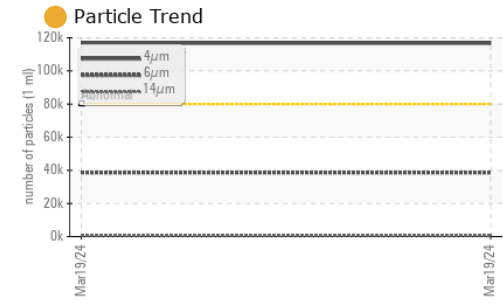
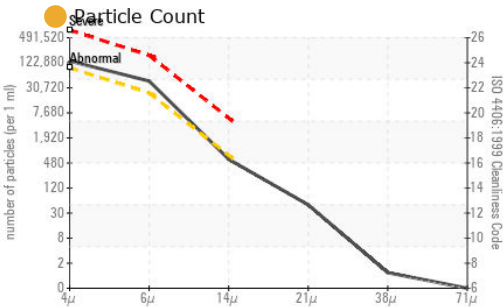
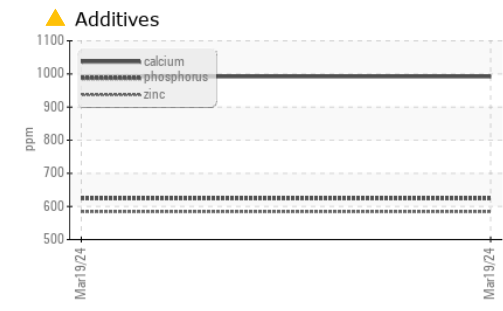
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>11	2	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---
Water		WC Method	>0.075	NEG	---	---
Particles >4µm		ASTM D7647	>80000	116748	---	---
Particles >6µm		ASTM D7647	>20000	38633	---	---
Particles >14µm		ASTM D7647	>640	519	---	---
Particles >21µm		ASTM D7647	>160	42	---	---
Particles >38µm		ASTM D7647	>40	1	---	---
Particles >71µm		ASTM D7647	>10	0	---	---
Oil Cleanliness		ISO 4406 (c)	>23/21/16	24/22/16	---	---
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	>0.075	NEG	---	---

FLUID CONDITION

Zinc level above manufacturer's recommendations. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m	>21	2	---	---
Boron	ppm	ASTM D5185m		5	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		<1	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		15	---	---
Calcium	ppm	ASTM D5185m		992	---	---
Phosphorus	ppm	ASTM D5185m		624	---	---
Zinc	ppm	ASTM D5185m		584	---	---
Sulfur	ppm	ASTM D5185m		2284	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.70	---	---
Visc @ 40°C	cSt	ASTM D445		49.2	---	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0185741 **Received** : 20 Mar 2024
Lab Number : 06123554 **Tested** : 25 Mar 2024
Unique Number : 10937705 **Diagnosed** : 25 Mar 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: PQ)

JRE - CASTLE HAYNE
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 CASTLE HAYNE, NC
 US 28429-5819
 Contact: WILMINGTON SHOP
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Certificate L2367
 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)