WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL



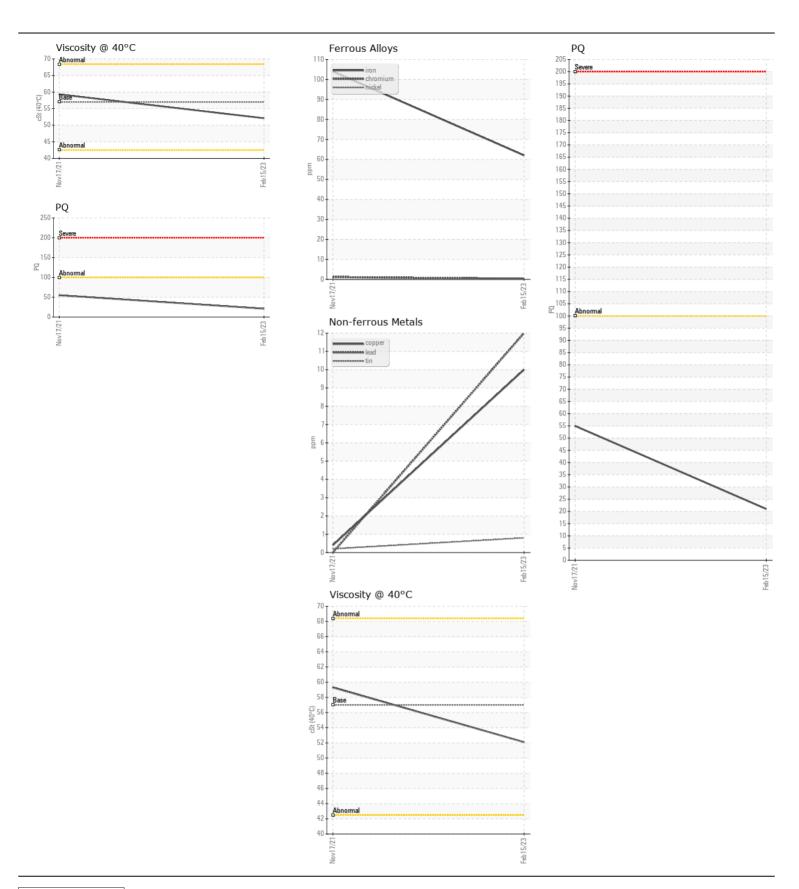
[W42138]

## **JOHN DEERE 410E 1DW410ELEMF711381**

Center Differential

JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

JOHN DEERE HY-GARD HYD/1	RANS ( G	iAL)					
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		JR0147192	JR0103036	
Resample at the next service interval to monitor.	Sample Date		Client Info		15 Feb 2023	17 Nov 2021	
	Machine Age	hrs	Client Info		1824	579	
	Oil Age	hrs	Client Info		1824	0	
	Filter Age	hrs	Client Info		1824	0	
	Oil Changed		Client Info		Changed	Not Changd	
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL	NORMAL	
WEAR	DO		ACTM DO104		04		
WEAN-	PQ		ASTM D8184	500	21	55	
All component wear rates are normal.	Iron	ppm	ASTM D5185m		62	104	
	Chromium	ppm	ASTM D5185m		<1	1	
	Nickel	ppm	ASTM D5185m	>10	0	0	
	Titanium	ppm	ASTM D5185m		0	<1	
	Silver	ppm	ASTM D5185m		0	0	
	Aluminum	ppm	ASTM D5185m		<1	5	
	Lead	ppm	ASTM D5185m		12	0	
	Copper	ppm	ASTM D5185m		10	<1	
	Tin	ppm	ASTM D5185m	>10	<1	<1	
	Vanadium	ppm	ASTM D5185m		0	0	
	White Metal	scalar	*Visual	NONE	NONE	LIGHT	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>75	5	14	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	3	3	
	Water		WC Method	>.2	NEG	NEG	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2	4	
	Boron	ppm	ASTM D5185m	6	0	6	
The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185m		<1	0	
	Molybdenum	ppm	ASTM D5185m		<1	<1	
	Manganese	ppm	ASTM D5185m	-	2	2	
	Magnesium	ppm	ASTM D5185m	145	94	111	
	Calcium	ppm	ASTM D5185m		3482	3750	
	Phosphorus	ppm	ASTM D5185m	1290	1042	1058	
	Zinc	ppm	ASTM D5185m		1239	1180	
	Sulfur	ppm	ASTM D5185m		3437	3227	
	Visc @ 40°C	cSt	ASTM D445	57.0	52.1	59.3	
Papart Id: IAMASH [WILLSCAD] 05771250 (Caparated: 07/00/2024 15:21:25) Pay: 1	1100 @ 40 0	551	. 10 1111 0 170	0			IVMVCH







Certificate L2367

Laboratory Sample No.

: JR0147192 Lab Number : 05771352 Unique Number : 10345969

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received **Tested** 

Diagnosed Test Package : CONST ( Additional Tests: PQ )

: 20 Feb 2023 : 20 Feb 2023 - Doug Bogart

: 17 Feb 2023

JRE - ASHLAND 11047 LEADBETTER RD ASHLAND, VA US 23005

Contact: DAVID ZIEG dzieg@jamesriverequipment.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.

T: (804)798-6001 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (804)798-0292