WEAR CONTAMINATION FLUID CONDITION

NORMAL SEVERE NORMAL

JOHN DEERE 5045E 1PY5045EKNN120691

Component Hydraulic System

Inot provided} (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
TIEOOMMENDATION	Sample Number	00111	Client Info	Littleyton	JR0205693		
We advise that you check all areas where contaminants can enter the	Sample Date		Client Info		13 Mar 2024		
system. We advise that you perform a filter service, and use off-line	Machine Age	hrs	Client Info		500		
filtration to improve the cleanliness of the system fluid. The air breather	Oil Age	hrs	Client Info		500		
requires service. If unrated, we recommend that you replace with a	Filter Age	hrs	Client Info		0		
suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45	Oil Changed	1110	Client Info		Not Changd		
days to monitor this situation. Please specify the brand, type, and viscosity of the oil on your next sample.	Filter Changed		Client Info		N/A		
	Sample Status				SEVERE		
WEAR	PQ		ASTM D8184		13		
	Iron	ppm	ASTM D5185m	>20	14		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1		
	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m	>10	4		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		0		
	Tin	ppm	ASTM D5185m	>10	0		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	4		
	Potassium	ppm	ASTM D5185m	>20	0		
There is a high amount of particulates (2 to 100 microns in size) present in the oil.	Water		WC Method		NEG		
	Particles >4µm		ASTM D7647		▲ 57320		
	Particles >6µm		ASTM D7647		4 3904		
	Particles >14µm		ASTM D7647	>160	689		
	Particles >21μm		ASTM D7647	>40	266		
	Particles >38µm		ASTM D7647	>10	13		
	Particles >71µm		ASTM D7647		1		
	Oil Cleanliness		ISO 4406 (c)		23/19/17		
	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	>0.1	NEG		
ELUID CONDITION	Codium		ACTM DE10Em				
FLUID CONDITION	Sodium	ppm	ASTM D5185m		0		
The AN level is acceptable for this fluid. The oil is still serviceable	Boron Barium	ppm	ASTM D5185m		0		
provided that the contaminant(s) can be reduced to acceptable levels.		ppm	ASTM D5185m		0		
	Monganaga	ppm	ASTM D5185m		0		
	Manganese	ppm	ASTM D5185m		0		
	Magnesium	ppm	ASTM D5185m		0		
	Calcium	ppm	ASTM D5185m		0 450		
	Phosphorus	ppm	ASTM D5185m		459		
	Zinc	ppm	ASTM D5185m		8		
	Sulfur	ppm	ASTM D5185m		269		
	Acid Number (AN)	mg KOH/g	ASTM D8045		0.24		
	Visc @ 40°C	cSt	ASTM D445		46.5		





Certificate L2367

Laboratory Sample No. Unique Number: 10936395

: JR0205693 Lab Number : 06122244

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

: 19 Mar 2024 : 20 Mar 2024 Diagnosed Test Package : CONST (Additional Tests: PQ)

: 20 Mar 2024 - Wes Davis

JRE - CHARLOTTE 9550 STATESVILLE ROAD CHARLOTTE, NC US 28269

Contact: CHARLOTTE SHOP myoung@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.

F: (704)596-6198 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T: (704)597-0211