WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

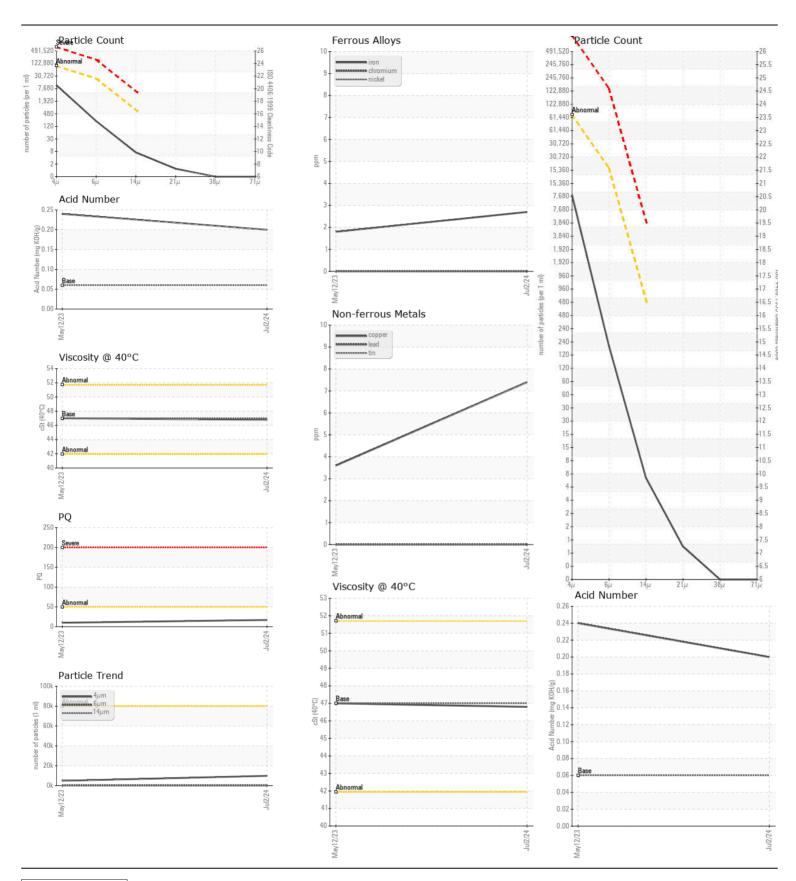
Machine Id

JOHN DEERE 160G 1FF160GXCNF058600

Hydraulic System

HITACHI HYDRAULIC SUPER EX 46HN (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
1200 mm 2 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m 2	Sample Number		Client Info		JR0218970	JR0173957	,
Resample at the next service interval to monitor. WEAR	Sample Date		Client Info		02 Jul 2024	12 May 2023	
	Machine Age	hrs	Client Info		1048	504	
	Oil Age	hrs	Client Info		1048	504	
	Filter Age	hrs	Client Info		1048	504	
	Oil Changed		Client Info		Not Changd	Not Changd	
	Filter Changed		Client Info		Changed	Not Changd	
	Sample Status				NORMAL	ABNORMAL	
	PQ		ASTM D8184	>50	17	10	
	Iron	ppm	ASTM D5185m		3	2	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		0	0	
	Nickel	ppm	ASTM D5185m		0	0	
	Titanium	ppm	ASTM D5185m	70	0	0	
	Silver	ppm	ASTM D5185m		0	0	
	Aluminum	ppm	ASTM D5185m	>9	<1	3	
	Lead	ppm	ASTM D5185m		0	0	
	Copper	ppm	ASTM D5185m		7	4	
	Tin	ppm	ASTM D5185m		0	0	
	Vanadium	ppm	ASTM D5185m	70	0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	<11	2	2	
	Potassium		ASTM D5185m		<1	<1	
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.		ppm				NEG	
	Water		WC Method		NEG		
	Particles >4µm Particles >6µm		ASTM D7647 ASTM D7647		9876	4865 385	
	Particles >0µm		ASTM D7647		189 6	14	
	Particles >21µm		ASTM D7647 ASTM D7647		1	3	
	Particles >38µm		ASTM D7647		0	0	
	Particles >30µm		ASTM D7647		0	0	
	Oil Cleanliness				-		
	Silt	analar	ISO 4406 (c) *Visual		20/15/10 NONE	19/16/11 NONE	
	Debris	scalar 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		*Visual	>0.075	NEG	NEG	
LUID CONDITION	Sodium	ppm	ASTM D5185m	>21	2	0	
The AN level is acceptable for this fluid. The condition of the oil is	Boron	ppm	ASTM D5185m		0	2	
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	
	Molybdenum	ppm	ASTM D5185m		0	0	
	Manganese	ppm	ASTM D5185m		0	<1	
	Magnesium	ppm	ASTM D5185m		<1	2	
	Calcium	ppm	ASTM D5185m		95	129	
	Phosphorus	ppm	ASTM D5185m		481	544	
	Zinc	ppm	ASTM D5185m	0	75	<u>^</u> 86	
	Sulfur	ppm	ASTM D5185m	13	530	360	
	Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.20	0.24	
	Visc @ 40°C	cSt	ASTM D445	17	46.8	47.0	





Certificate L2367

Laboratory Sample No. Lab Number Unique Number: 11113555

: JR0218970 : 06230062

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

Received : 08 Jul 2024 **Tested**

: 09 Jul 2024 : 09 Jul 2024 - Wes Davis Diagnosed

101 BRUCE DRIVE ASHEVILLE, NC US 28806 Contact: Randy Warren

Test Package : CONST (Additional Tests: PQ) To discuss this sample report, contact Customer Service at 1-800-237-1369.

randy.warren@jamesriverequipment.com T: (528)667-0176

* - 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)

F: (828)667-4865

JRE - ASHEVILLE