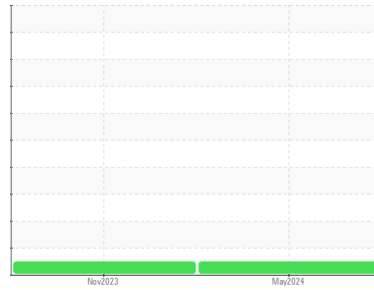


OIL ANALYSIS REPORT

Sample Rating Trend


NORMAL


Machine Id
JOHN DEERE 245P 1FF245PALNF000047
 Component
Hydraulic System
 Fluid
HITACHI HYDRAULIC SUPER EX 46HN (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			JR0212338	JR0179795	---
Sample Date	Client Info			09 May 2024	06 Nov 2023	---
Machine Age	hrs	Client Info		962	538	---
Oil Age	hrs	Client Info		962	538	---
Oil Changed	Client Info			Not Chngd	Not Chngd	---
Sample Status				NORMAL	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.075	NEG	NEG	---

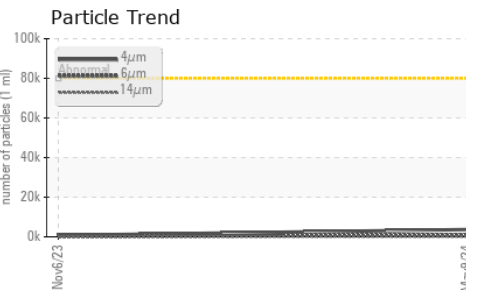
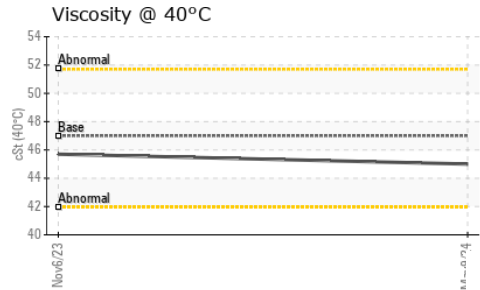
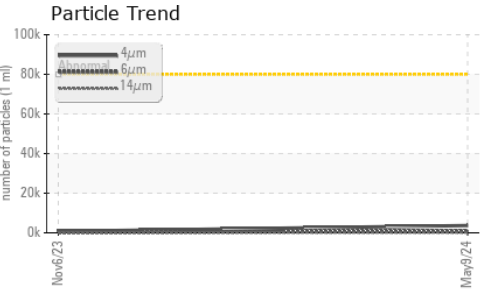
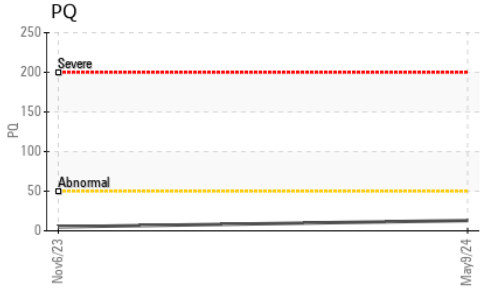
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184	>50	13	5	---
Iron	ppm	ASTM D5185m	>32	3	2	---
Chromium	ppm	ASTM D5185m	>9	<1	<1	---
Nickel	ppm	ASTM D5185m	>5	0	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>9	2	2	---
Lead	ppm	ASTM D5185m	>28	<1	<1	---
Copper	ppm	ASTM D5185m	>50	6	4	---
Tin	ppm	ASTM D5185m	>5	<1	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		<1	0	---
Manganese	ppm	ASTM D5185m		0	0	---
Magnesium	ppm	ASTM D5185m		3	<1	---
Calcium	ppm	ASTM D5185m		13	8	---
Phosphorus	ppm	ASTM D5185m	827	573	537	---
Zinc	ppm	ASTM D5185m	0	59	40	---
Sulfur	ppm	ASTM D5185m	13	178	168	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>11	2	2	---
Sodium	ppm	ASTM D5185m	>21	0	0	---
Potassium	ppm	ASTM D5185m	>20	2	2	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>80000	3691	755	---
Particles >6µm		ASTM D7647	>20000	945	155	---
Particles >14µm		ASTM D7647	>640	95	17	---
Particles >21µm		ASTM D7647	>160	26	5	---
Particles >38µm		ASTM D7647	>40	1	0	---
Particles >71µm		ASTM D7647	>10	0	0	---
Oil Cleanliness		ISO 4406 (c)	>23/21/16	19/17/14	17/14/11	---

OIL ANALYSIS REPORT

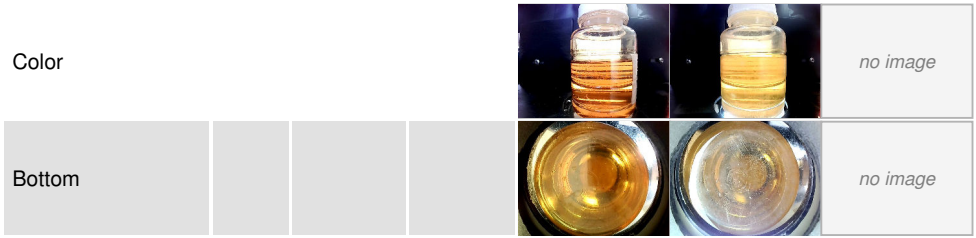


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.05	0.08	---

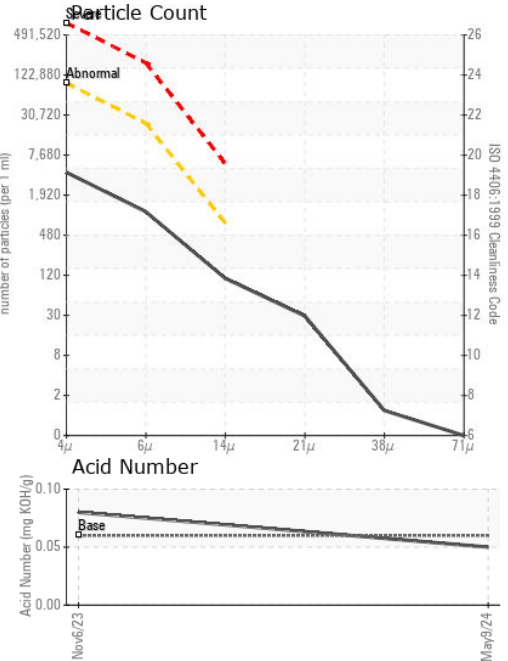
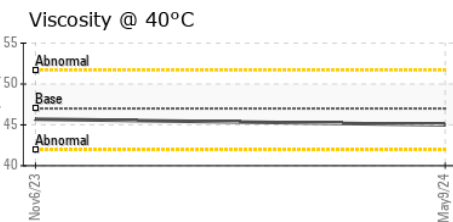
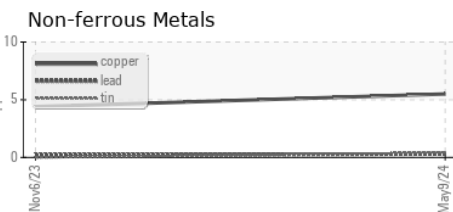
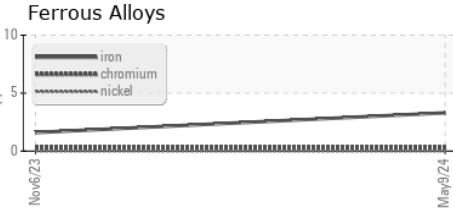
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.075	NEG	NEG	---
Free Water	scalar	*Visual		NEG	NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	47	45.0	45.7	---

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0212338
Lab Number : **06175358**
Unique Number : 11021411
Test Package : CONST (Additional Tests: PQ)
Received : 10 May 2024
Tested : 15 May 2024
Diagnosed : 15 May 2024 - Don Baldrige

JRE - ASHLAND
 11047 LEADBETTER RD
 ASHLAND, VA
 US 23005
 Contact: DAVID ZIEG
 dzieg@jamesriverequipment.com
 T: (804)798-6001
 F: (804)798-0292

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)