



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 644 P 1DW644PAEMLZ11990
 Component
Hydraulic System
 Fluid
JOHN DEERE HYDRAU (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0218751	JR0185085	---
Sample Date		Client Info		11 Jun 2024	06 Oct 2023	---
Machine Age	hrs	Client Info		1985	1470	---
Oil Age	hrs	Client Info		1985	1470	---
Filter Age	hrs	Client Info		1985	1470	---
Oil Changed		Client Info		Not Chngd	Not Chngd	---
Filter Changed		Client Info		Not Chngd	Not Chngd	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	4	2	---
Chromium	ppm	ASTM D5185m	>10	7	4	---
Nickel	ppm	ASTM D5185m	>10	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>10	<1	<1	---
Lead	ppm	ASTM D5185m	>10	0	0	---
Copper	ppm	ASTM D5185m	>75	<1	1	---
Tin	ppm	ASTM D5185m	>10	0	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

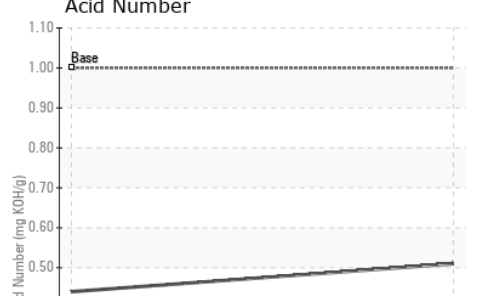
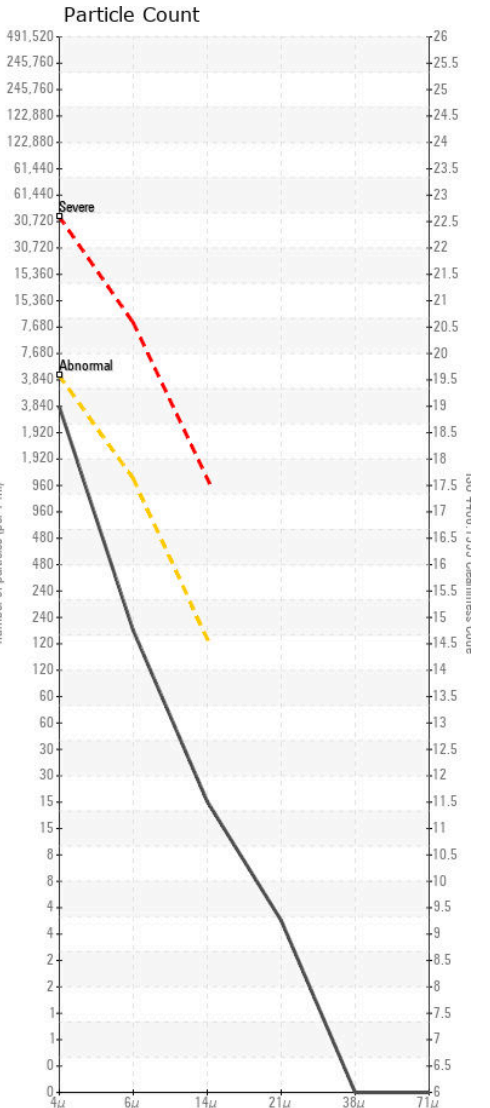
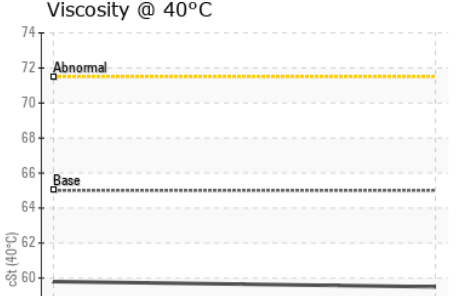
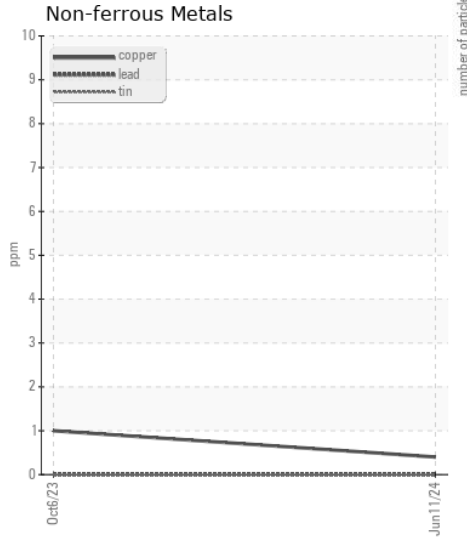
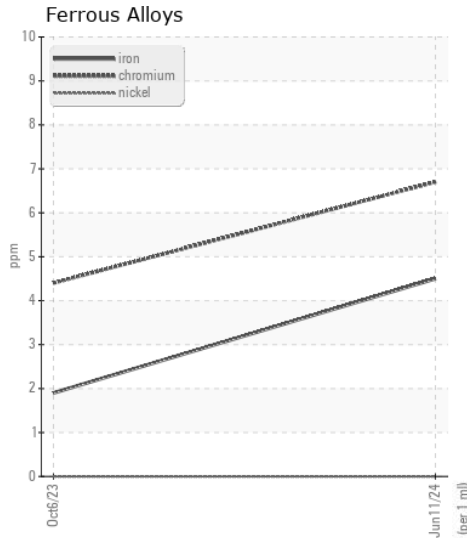
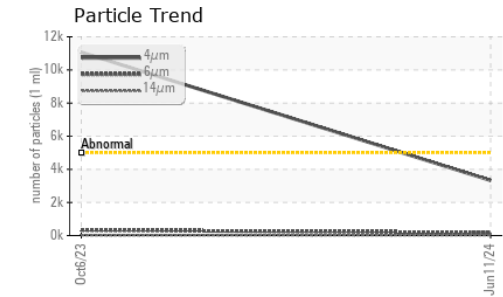
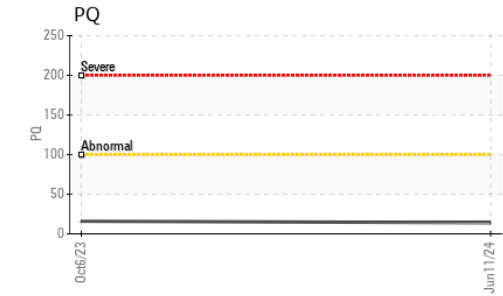
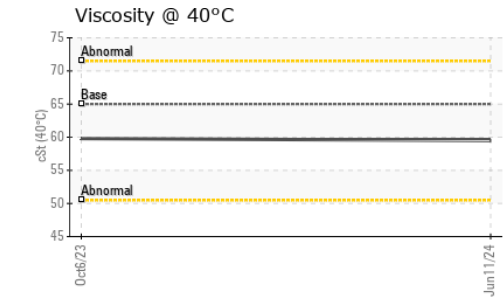
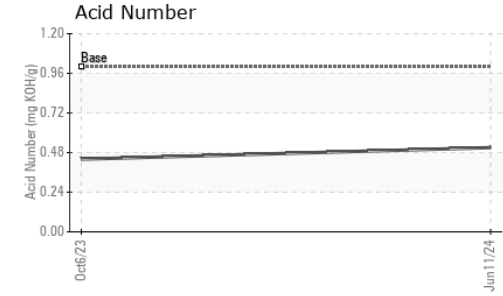
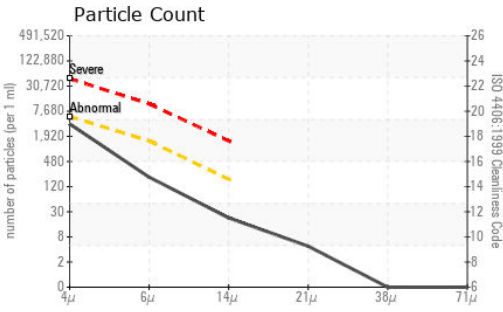
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	2	<1	---
Potassium	ppm	ASTM D5185m	>20	6	5	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>5000	3329	▲ 11068	---
Particles >6µm		ASTM D7647	>1300	178	327	---
Particles >14µm		ASTM D7647	>160	19	15	---
Particles >21µm		ASTM D7647	>40	4	4	---
Particles >38µm		ASTM D7647	>10	0	0	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/15/11	▲ 21/16/11	---
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	>0.1	NEG	NEG	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		2	3	---
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		<1	0	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m		<1	3	---
Calcium	ppm	ASTM D5185m	87	97	88	---
Phosphorus	ppm	ASTM D5185m	727	651	627	---
Zinc	ppm	ASTM D5185m	900	875	823	---
Sulfur	ppm	ASTM D5185m	1500	1965	1609	---
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.51	0.44	---
Visc @ 40°C	cSt	ASTM D445	65	59.5	59.8	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0218751 **Received** : 14 Jun 2024
Lab Number : 06209992 **Tested** : 17 Jun 2024
Unique Number : 11082856 **Diagnosed** : 17 Jun 2024 - Wes Davis
Test Package : CONST (Additional Tests: PQ)

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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)