



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[**MATTHEW JOHNSON LOGG**]

Machine Id

JOHN DEERE 643L-II 1DW643LBLNF714873

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		JR0222066	JR0164595	JR0165193
Sample Date		Client Info		26 Jun 2024	07 Dec 2023	19 Oct 2023
Machine Age	hrs	Client Info		2402	1680	1393
Oil Age	hrs	Client Info		0	1680	0
Filter Age	hrs	Client Info		0	1680	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	6	3	2
Chromium	ppm	ASTM D5185m	>10	1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	1	<1
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>75	2	2	4
Tin	ppm	ASTM D5185m	>10	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

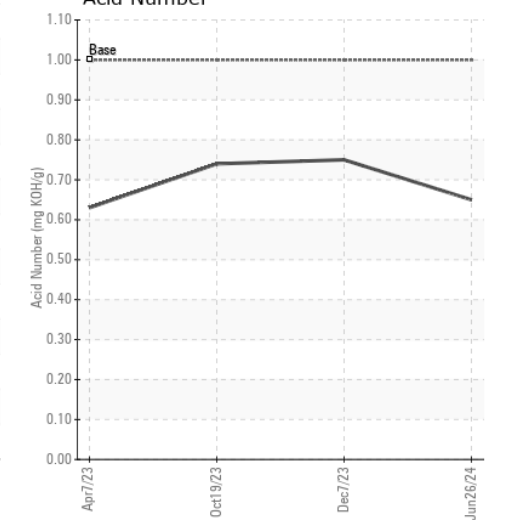
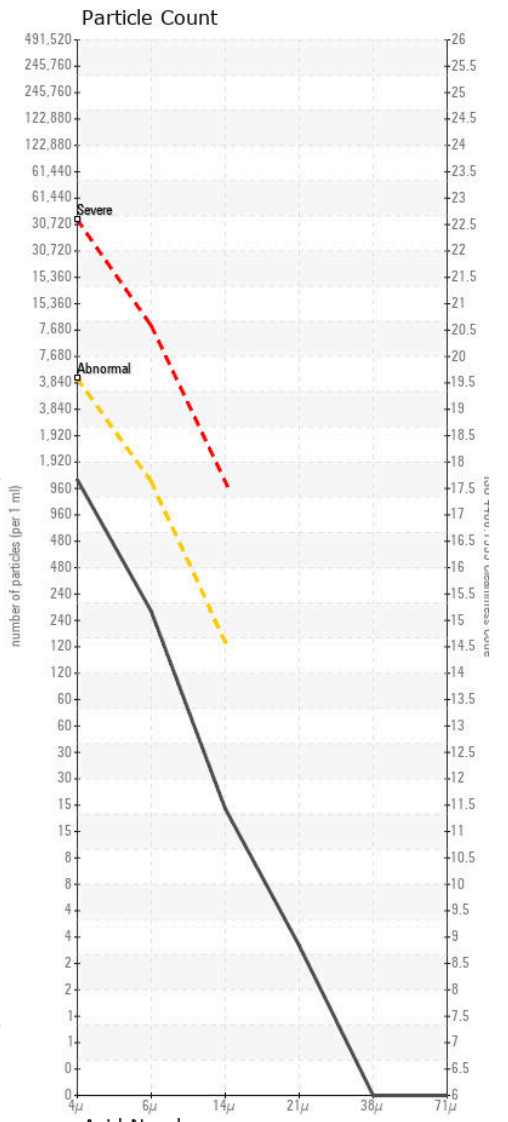
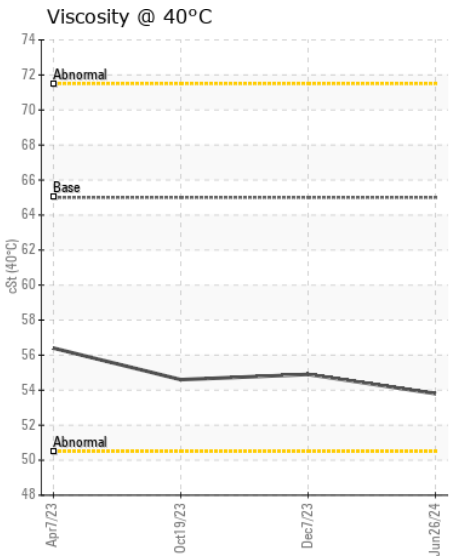
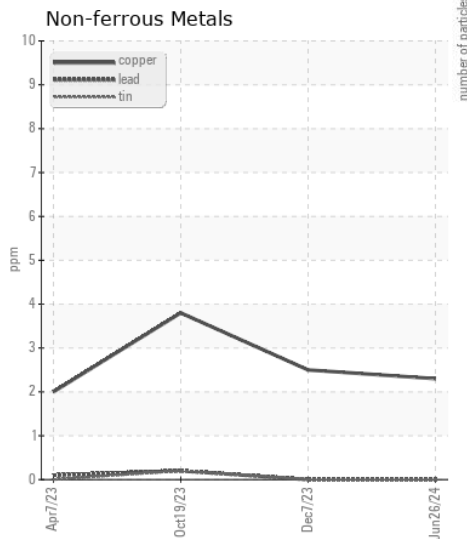
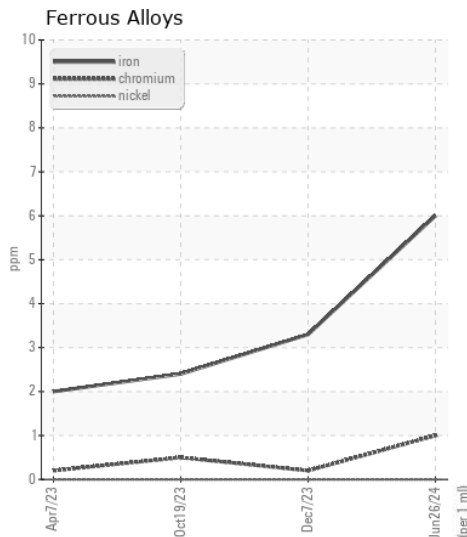
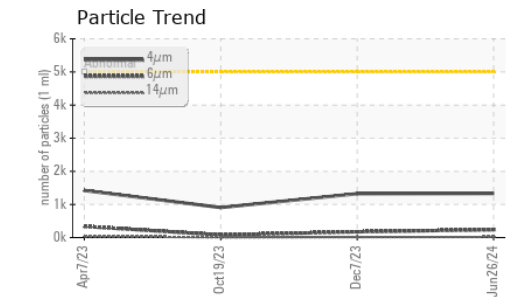
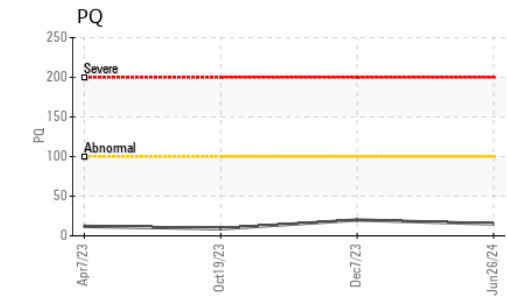
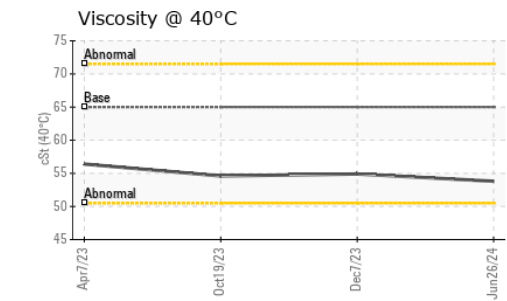
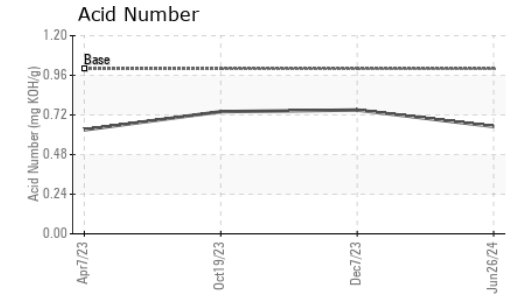
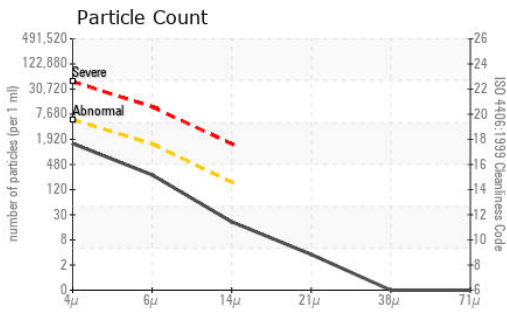
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	3	2	3
Potassium	ppm	ASTM D5185m	>20	1	3	1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	1331	1325	907
Particles >6µm		ASTM D7647	>1300	238	174	80
Particles >14µm		ASTM D7647	>160	18	14	8
Particles >21µm		ASTM D7647	>40	3	4	3
Particles >38µm		ASTM D7647	>10	0	1	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	18/15/11	18/15/11	17/13/10
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	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		1	0	2
Boron	ppm	ASTM D5185m		5	3	3
Barium	ppm	ASTM D5185m		0	4	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m		10	4	0
Calcium	ppm	ASTM D5185m	87	200	228	247
Phosphorus	ppm	ASTM D5185m	727	607	647	727
Zinc	ppm	ASTM D5185m	900	759	849	945
Sulfur	ppm	ASTM D5185m	1500	2119	2019	2085
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.65	0.75	0.74
Visc @ 40°C	cSt	ASTM D445	65	53.8	54.9	54.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0222066 **Received** : 17 Jul 2024
Lab Number : 06239036 **Tested** : 18 Jul 2024
Unique Number : 11127870 **Diagnosed** : 18 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

JRE - GARNER
 4161 AUBURN CHURCH RD
 GARNER, NC
 US 27529

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Contact: RALEIGH SHOP
 sean.betts@jamesriverequipment.com; catherine.anastasio@wearcheck.com

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

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Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)