



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 644L 1DW644LHTML709320
 Component
Front Axle
 Fluid
JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0218522	JR0199059	JR0187425
Sample Date		Client Info		09 Jul 2024	04 Jan 2024	25 Sep 2023
Machine Age	hrs	Client Info		5869	5374	4916
Oil Age	hrs	Client Info		4948	4911	463
Filter Age	hrs	Client Info		4948	0	463
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		45	40	32
Iron	ppm	ASTM D5185m	>750	211	129	86
Chromium	ppm	ASTM D5185m	>11	<1	<1	0
Nickel	ppm	ASTM D5185m	>10	1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>21	2	2	4
Lead	ppm	ASTM D5185m	>49	<1	<1	<1
Copper	ppm	ASTM D5185m	>101	10	6	4
Tin	ppm	ASTM D5185m	>10	<1	<1	1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

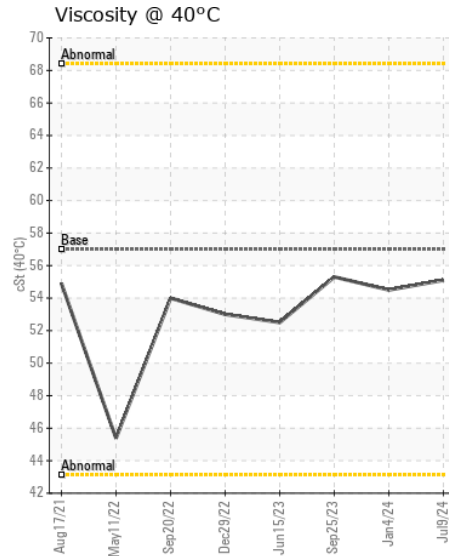
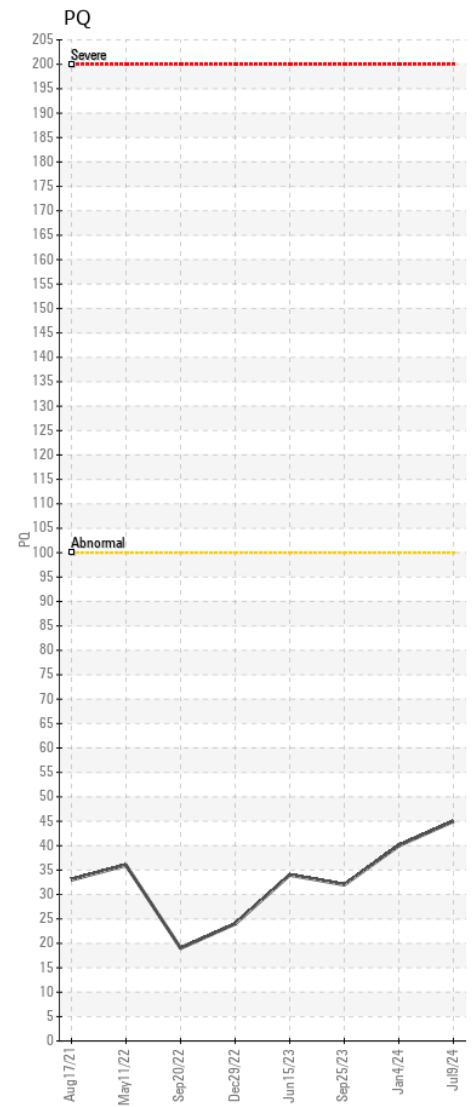
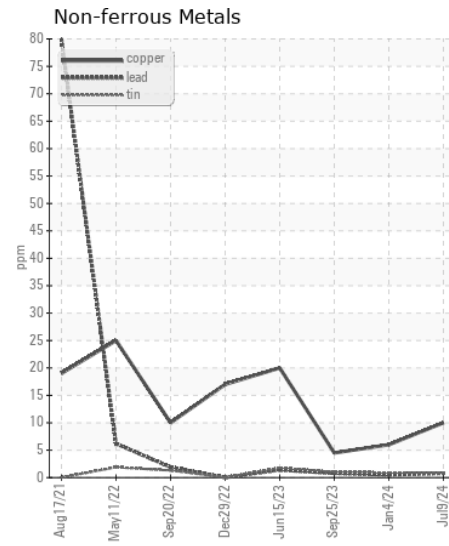
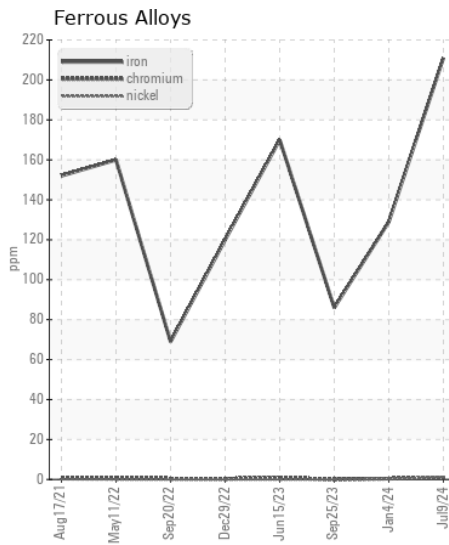
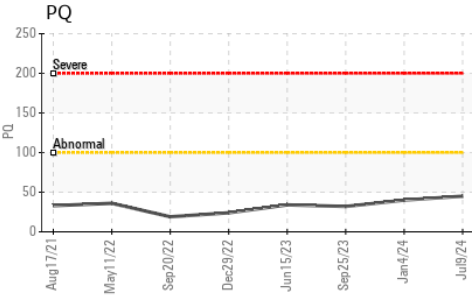
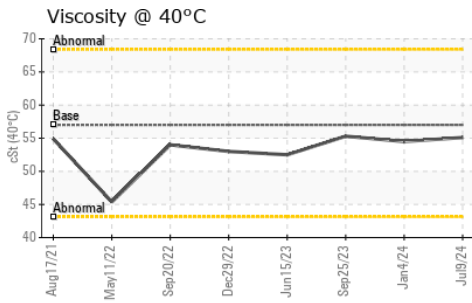
There is no indication of any contamination in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Silicon	ppm	ASTM D5185m	>31	26	20	16
Potassium	ppm	ASTM D5185m	>20	3	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	LIGHT
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 condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sodium	ppm	ASTM D5185m	>51	0	1	<1
Boron	ppm	ASTM D5185m	6	7	8	5
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	8	7	7
Manganese	ppm	ASTM D5185m		2	2	1
Magnesium	ppm	ASTM D5185m	145	113	116	117
Calcium	ppm	ASTM D5185m	3570	3413	3185	3208
Phosphorus	ppm	ASTM D5185m	1290	1036	1032	1005
Zinc	ppm	ASTM D5185m	1640	1248	1201	1234
Sulfur	ppm	ASTM D5185m		3688	3668	3574
Visc @ 40°C	cSt	ASTM D445	57.0	55.1	54.5	55.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0218522 **Received** : 11 Jul 2024
Lab Number : 06233536 **Tested** : 12 Jul 2024
Unique Number : 11117029 **Diagnosed** : 12 Jul 2024 - Wes Davis
Test Package : CONST (Additional Tests: PQ)

JRE - MANASSAS PARK
 9107 OWENS DRIVE
 MANASSAS PARK, VA
 US 20111
 Contact: DON VEST
 dvest@jamesriverequipment.com
 T: (703)631-8500
 F: (703)631-4715

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)