



WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 644L 1DW644LZJLL706347
Component
Rear Differential
Fluid
JOHN DEERE HY-GARD HYD/TRANS (28 QTS)

RECOMMENDATION

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0226182	JR0208949	JR0200665
Sample Date		Client Info		14 Jul 2024	19 Apr 2024	09 Feb 2024
Machine Age	hrs	Client Info		7971	7471	6993
Oil Age	hrs	Client Info		6554	6054	6526
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

The lead level is abnormal. All other component wear rates are normal.

PQ		ASTM D8184		23	12	11
Iron	ppm	ASTM D5185m	>500	29	30	18
Chromium	ppm	ASTM D5185m	>10	<1	<1	0
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	>25	3	1	<1
Lead	ppm	ASTM D5185m	>25	▲ 41	▲ 28	22
Copper	ppm	ASTM D5185m	>100	19	15	8
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

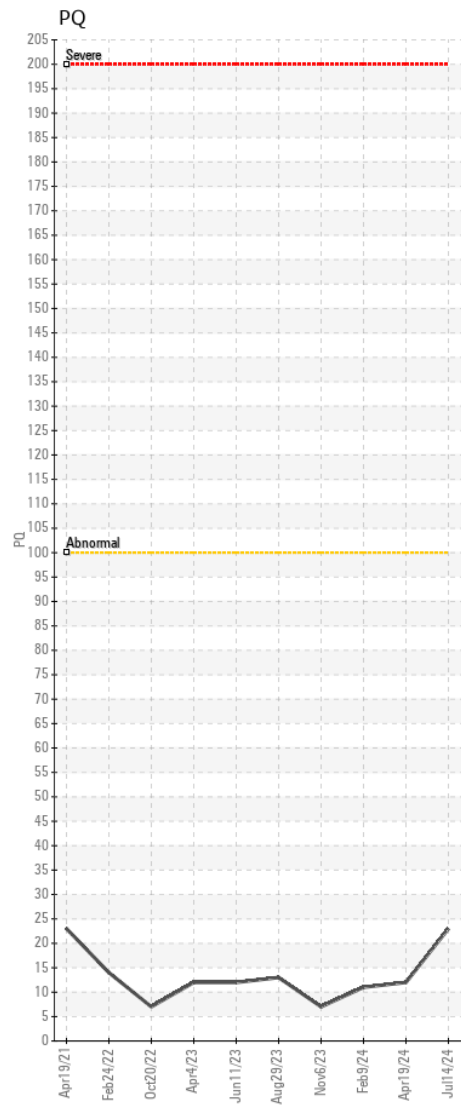
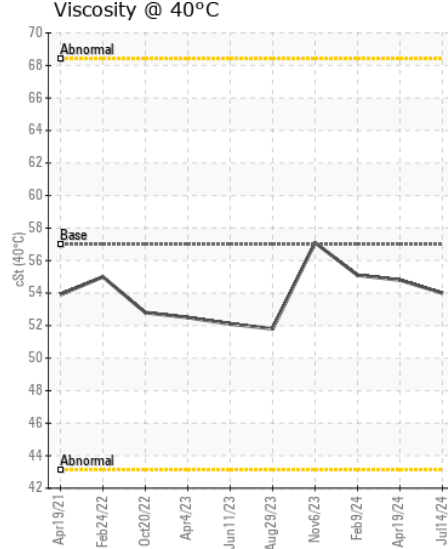
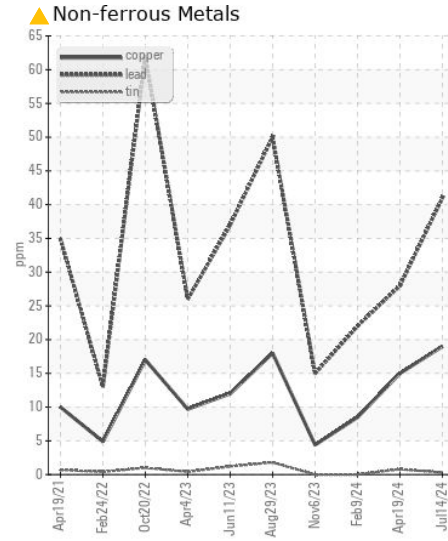
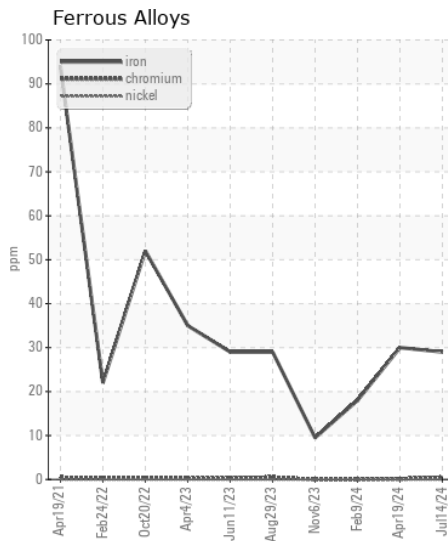
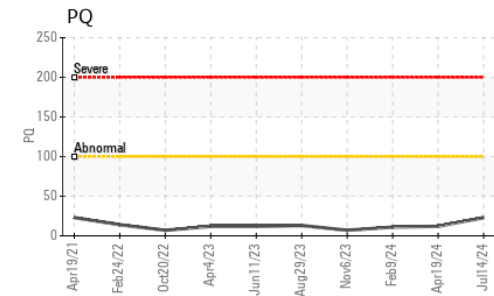
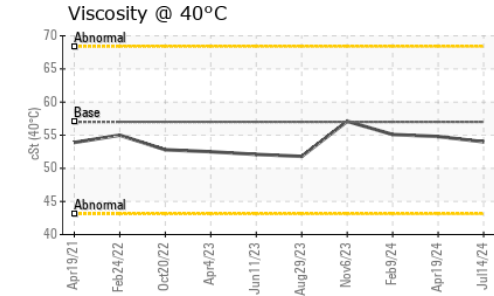
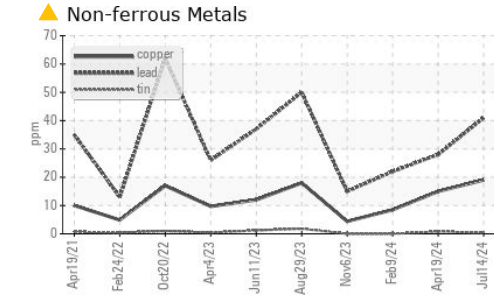
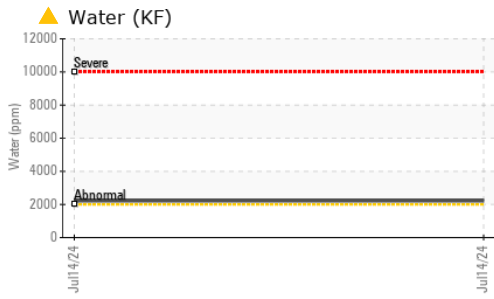
There is a light concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>75	6	5	4
Potassium	ppm	ASTM D5185m	>20	2	0	0
Water	%	ASTM D6304	>.2	▲ 0.222	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ 2220	---	---
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	>.2	0.2%	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		0	3	2
Boron	ppm	ASTM D5185m	6	29	32	28
Barium	ppm	ASTM D5185m	0	0	2	0
Molybdenum	ppm	ASTM D5185m	0	23	23	23
Manganese	ppm	ASTM D5185m		0	2	0
Magnesium	ppm	ASTM D5185m	145	156	162	160
Calcium	ppm	ASTM D5185m	3570	3213	3341	3300
Phosphorus	ppm	ASTM D5185m	1290	866	1058	980
Zinc	ppm	ASTM D5185m	1640	1222	1209	1285
Sulfur	ppm	ASTM D5185m		3285	4295	3424
Visc @ 40°C	cSt	ASTM D445	57.0	54.0	54.8	55.1



Certificate L2367

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

Sample No. : JR0226182

Lab Number : 06238134

Unique Number : 11126968

Test Package : CONST (Additional Tests: KF, PQ)

Received : 16 Jul 2024

Tested : 17 Jul 2024

Diagnosed : 18 Jul 2024 - Don Baldridge

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)

JRE - GREENVILLE

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