



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 644L 1DW644LZJLL706347
 Component
Front 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		JR0226179	JR0208971	JR0200667
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	NORMAL	NORMAL

WEAR

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

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		17	9	12
Iron	ppm	ASTM D5185m	>500	29	47	22
Chromium	ppm	ASTM D5185m	>10	<1	<1	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	3	4	1
Lead	ppm	ASTM D5185m	>25	▲ 36	23	19
Copper	ppm	ASTM D5185m	>100	21	16	10
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

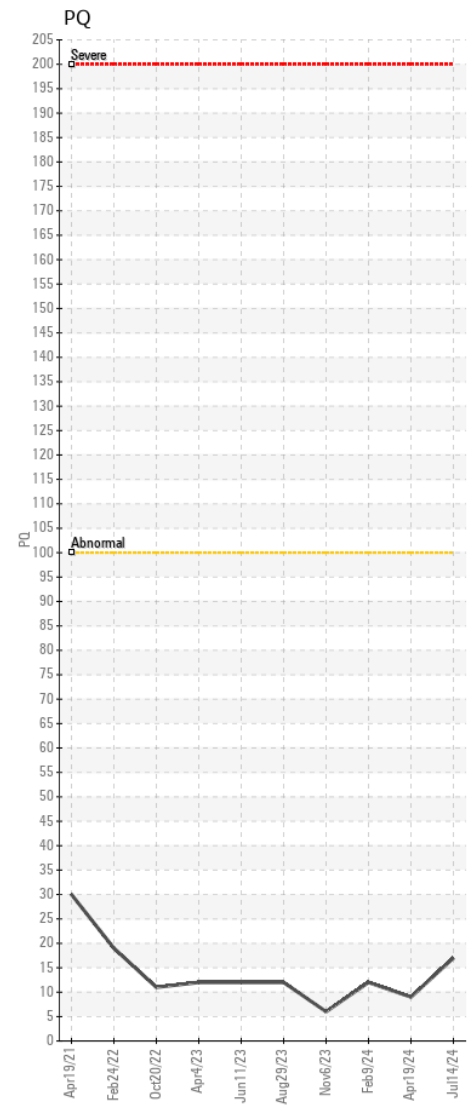
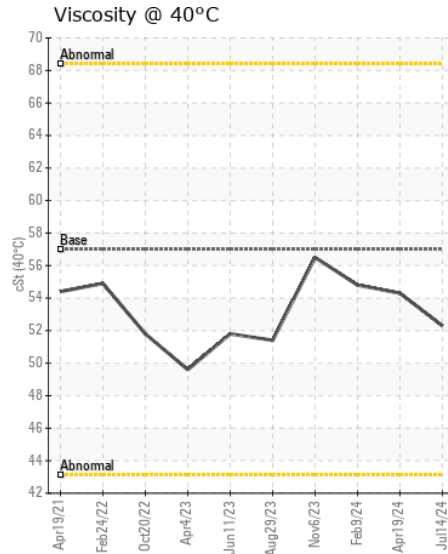
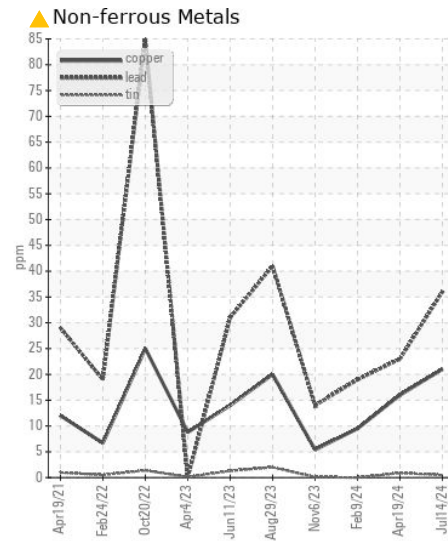
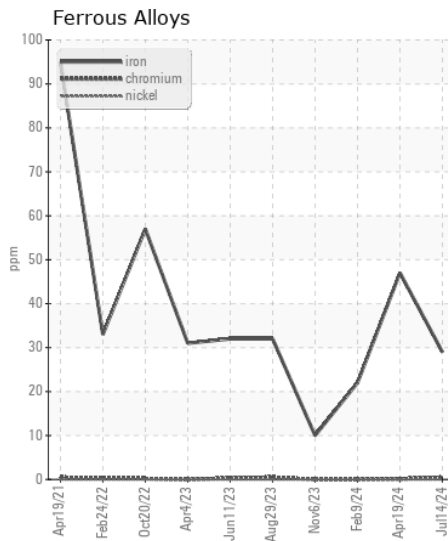
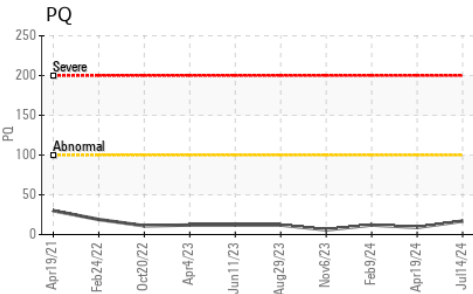
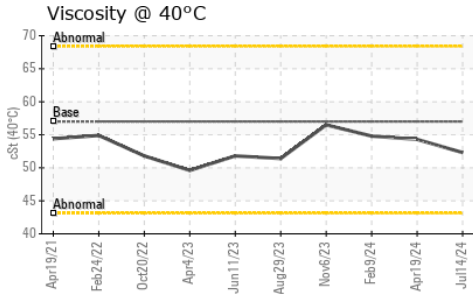
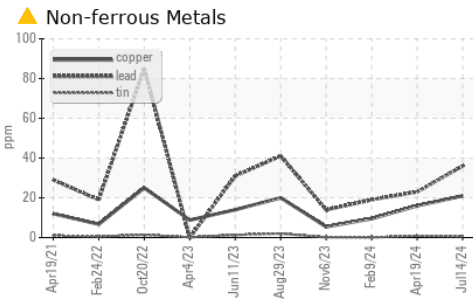
There is no indication of any contamination in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Silicon	ppm	ASTM D5185m	>75	5	19	5
Potassium	ppm	ASTM D5185m	>20	2	0	0
Water		WC Method	>.2	NEG	NEG	NEG
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	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		0	3	2
Boron	ppm	ASTM D5185m	6	29	29	29
Barium	ppm	ASTM D5185m	0	0	1	0
Molybdenum	ppm	ASTM D5185m	0	23	23	23
Manganese	ppm	ASTM D5185m		0	2	0
Magnesium	ppm	ASTM D5185m	145	156	164	156
Calcium	ppm	ASTM D5185m	3570	3211	3310	3249
Phosphorus	ppm	ASTM D5185m	1290	841	1042	968
Zinc	ppm	ASTM D5185m	1640	1197	1191	1282
Sulfur	ppm	ASTM D5185m		3193	3949	3438
Visc @ 40°C	cSt	ASTM D445	57.0	52.3	54.3	54.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0226179 **Received** : 16 Jul 2024
Lab Number : 06238133 **Tested** : 17 Jul 2024
Unique Number : 11126967 **Diagnosed** : 18 Jul 2024 - Don Baldridge
Test Package : CONST (Additional Tests: PQ)

JRE - GREENVILLE
 3604 HIGHWAY 264 E
 GREENVILLE, NC
 US 27834-5800

Contact: GREENVILLE SHOP
 christopher.martin@jamesriverequipment.com

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)