



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[W9152]

Machine Id

JOHN DEERE 644L 1DW644LZLLL705687

Component

Front Differential

Fluid

JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: W9152)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0224172	JR0212634	JR0183349
Sample Date		Client Info		09 Jul 2024	21 May 2024	09 Oct 2023
Machine Age	hrs	Client Info		4643	4643	4254
Oil Age	hrs	Client Info		4254	0	2254
Filter Age	hrs	Client Info		0	0	1200
Oil Changed		Client Info		Not Changd	Not Changd	Changed
Filter Changed		Client Info		N/A	Not Changd	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		12	16	54
Iron	ppm	ASTM D5185m	>500	91	73	▲ 389
Chromium	ppm	ASTM D5185m	>10	<1	<1	1
Nickel	ppm	ASTM D5185m	>10	<1	<1	2
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		<1	<1	0
Aluminum	ppm	ASTM D5185m	>25	2	2	▲ 13
Lead	ppm	ASTM D5185m	>25	40	41	▲ 189
Copper	ppm	ASTM D5185m	>100	37	37	▲ 55
Tin	ppm	ASTM D5185m	>10	3	3	2
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

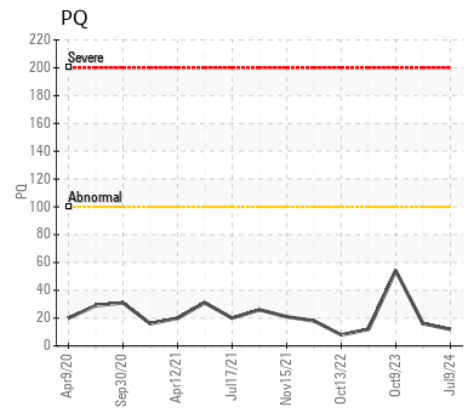
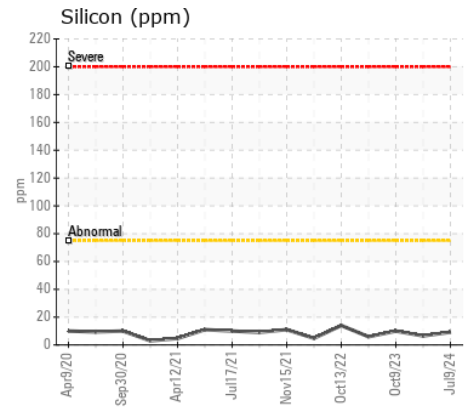
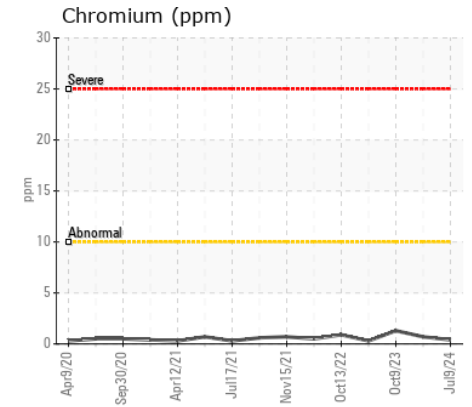
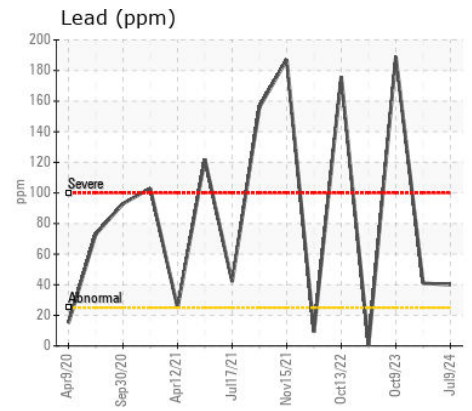
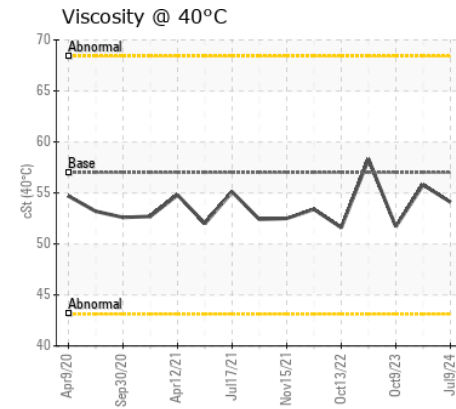
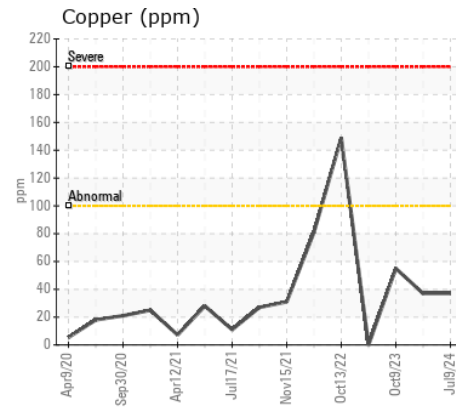
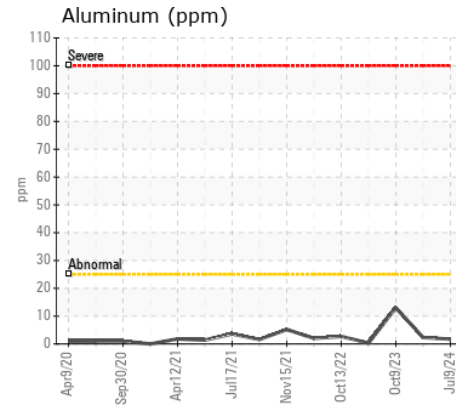
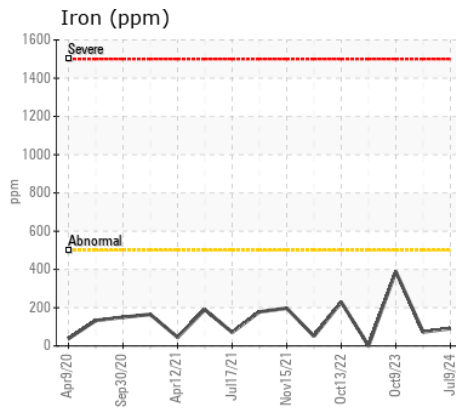
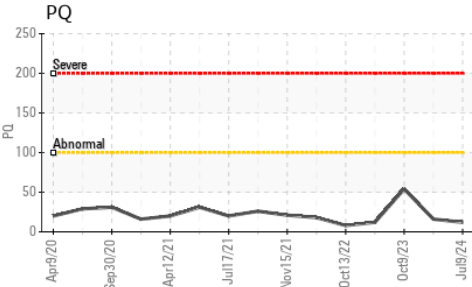
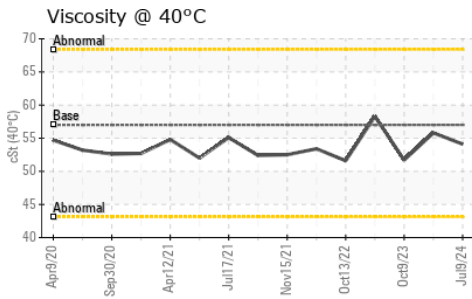
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	9	6	10
Potassium	ppm	ASTM D5185m	>20	3	3	2
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.

Sodium	ppm	ASTM D5185m		0	<1	5
Boron	ppm	ASTM D5185m	6	2	0	3
Barium	ppm	ASTM D5185m	0	0	0	5
Molybdenum	ppm	ASTM D5185m	0	<1	1	2
Manganese	ppm	ASTM D5185m		1	2	6
Magnesium	ppm	ASTM D5185m	145	98	107	71
Calcium	ppm	ASTM D5185m	3570	3469	3653	2421
Phosphorus	ppm	ASTM D5185m	1290	1056	1006	925
Zinc	ppm	ASTM D5185m	1640	1222	1312	954
Sulfur	ppm	ASTM D5185m		4132	3962	3573
Visc @ 40°C	cSt	ASTM D445	57.0	54.1	55.8	51.7



Certificate L2367

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

Sample No. : JR0224172

Lab Number : 06233450

Unique Number : 11116943

Test Package : MOBCE (Additional Tests: PQ)

Received : 11 Jul 2024

Tested : 12 Jul 2024

Diagnosed : 13 Jul 2024 - Don Baldridge

JRE - HOPE MILLS/FAYETTEVILLE

5039 HWY 301 SOUTH

HOPE MILLS, NC

US 28348

Contact: FAYETTEVILLE SHOP

stephen.mullis@jamesriverequipment.com;canastasio@wearcheck.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)

T:

F: