



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
{unassigned}
Machine Id
JOHN DEERE 644K 1DW644KZJKF694571
Component
Front Axle
Fluid
JOHN DEERE HY-GARD HYD/TRANS (6 GAL)

RECOMMENDATION

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		LEC0049573	LEC0043743	LEC0027571
Sample Date		Client Info		10 Apr 2024	01 Aug 2023	16 Feb 2022
Machine Age	hrs	Client Info		4025	3330	1870
Oil Age	hrs	Client Info		4025	1460	1870
Filter Age	hrs	Client Info		695	2106	646
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Not Changed	Changed	None
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

Bearing and/or bushing wear is indicated.

PQ		ASTM D8184		47	46	38
Iron	ppm	ASTM D5185m	>750	194	438	149
Chromium	ppm	ASTM D5185m	>11	1	1	<1
Nickel	ppm	ASTM D5185m	>10	1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>21	3	3	1
Lead	ppm	ASTM D5185m	>49	▲ 162	▲ 138	86
Copper	ppm	ASTM D5185m	>101	53	43	27
Tin	ppm	ASTM D5185m	>10	3	2	2
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

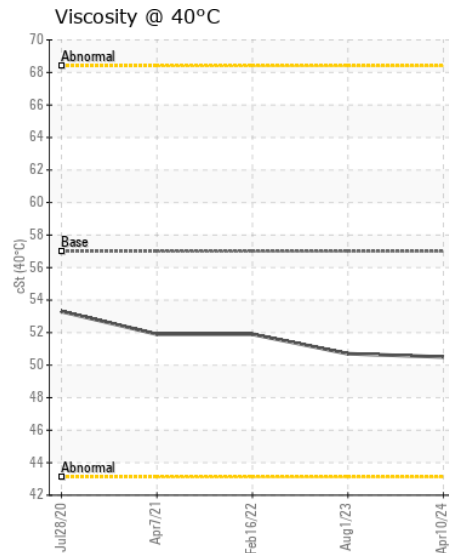
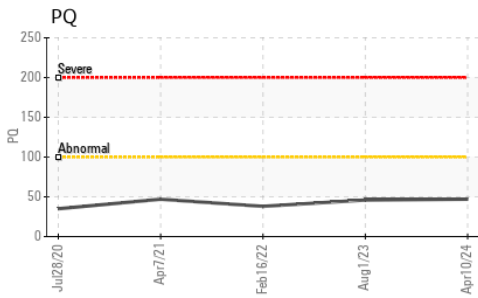
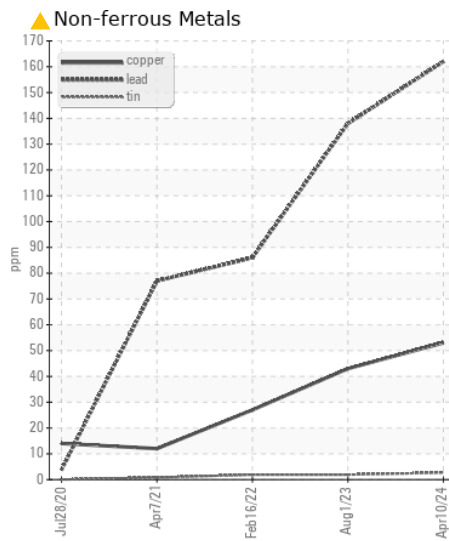
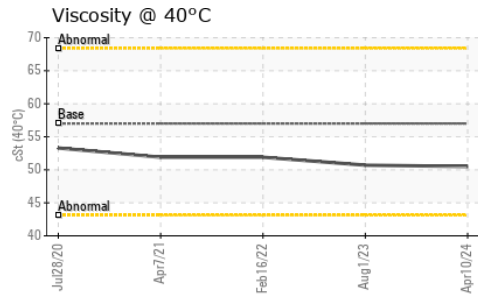
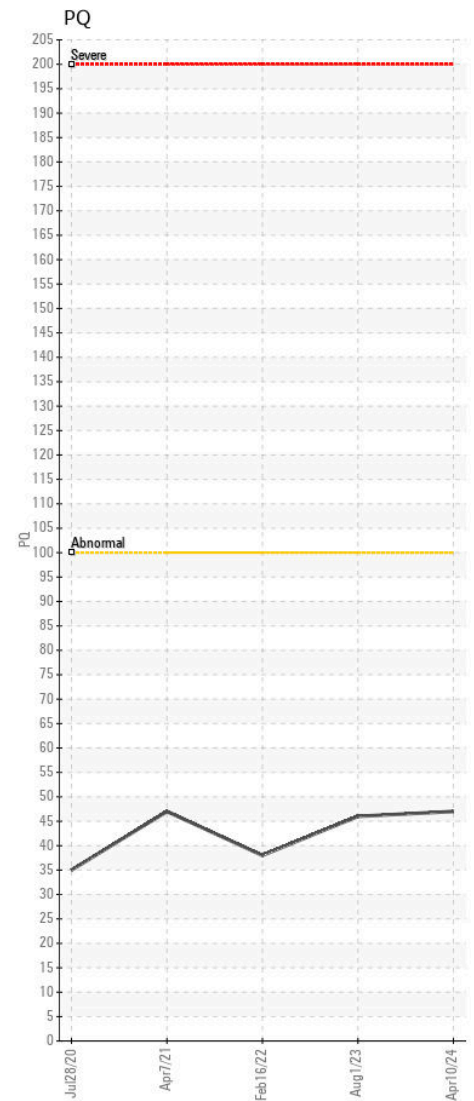
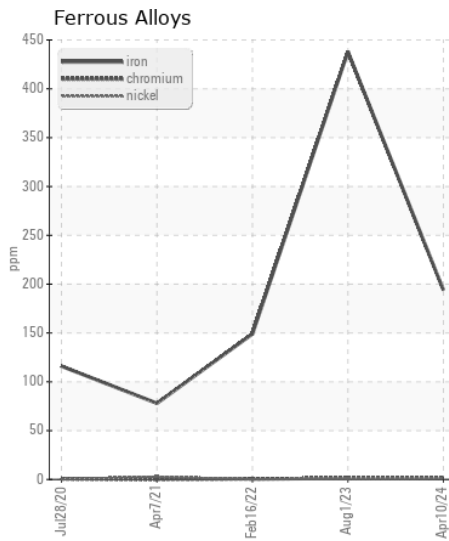
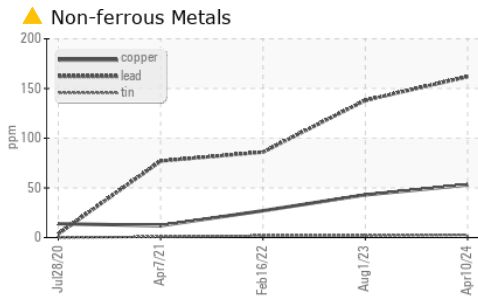
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>31	8	13	7
Potassium	ppm	ASTM D5185m	>20	3	2	0
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT	▲ MODER
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.

Sodium	ppm	ASTM D5185m	>51	6	7	5
Boron	ppm	ASTM D5185m	6	3	5	5
Barium	ppm	ASTM D5185m	0	6	3	0
Molybdenum	ppm	ASTM D5185m	0	2	<1	1
Manganese	ppm	ASTM D5185m		4	6	3
Magnesium	ppm	ASTM D5185m	145	104	100	113
Calcium	ppm	ASTM D5185m	3570	3547	3250	3712
Phosphorus	ppm	ASTM D5185m	1290	1056	958	1042
Zinc	ppm	ASTM D5185m	1640	1262	1156	1239
Sulfur	ppm	ASTM D5185m		3836	4119	3182
Visc @ 40°C	cSt	ASTM D445	57.0	50.5	50.7	51.9



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0049573 **Received** : 15 Apr 2024
Lab Number : 06149681 **Tested** : 16 Apr 2024
Unique Number : 10979759 **Diagnosed** : 18 Apr 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: PQ)

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Certificate L2367
 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)