



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		LEC0043743	LEC0027571	LEC0020077
Sample Date		Client Info		01 Aug 2023	16 Feb 2022	07 Apr 2021
Machine Age	hrs	Client Info		3330	1870	1224
Oil Age	hrs	Client Info		1460	1870	1224
Filter Age	hrs	Client Info		2106	646	1224
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	None	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

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

PQ		ASTM D8184		46	38	47
Iron	ppm	ASTM D5185m	>750	438	149	78
Chromium	ppm	ASTM D5185m	>11	1	<1	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	3
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>21	3	1	0
Lead	ppm	ASTM D5185m	>49	▲ 138	86	77
Copper	ppm	ASTM D5185m	>101	43	27	12
Tin	ppm	ASTM D5185m	>10	2	2	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

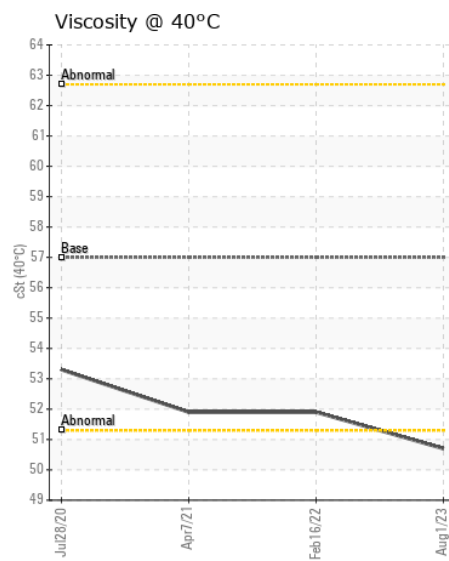
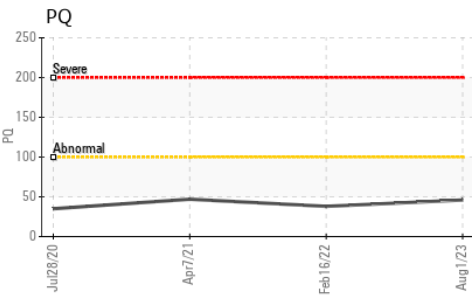
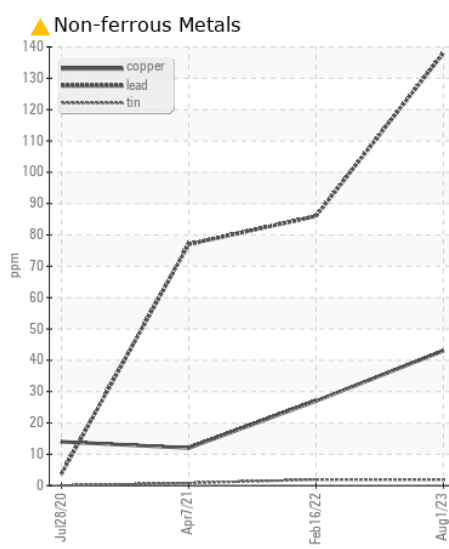
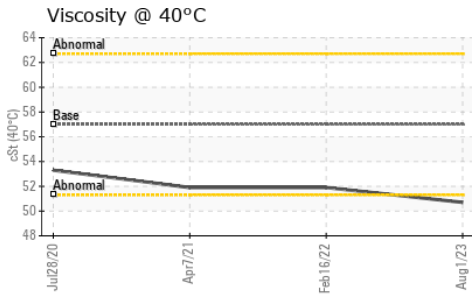
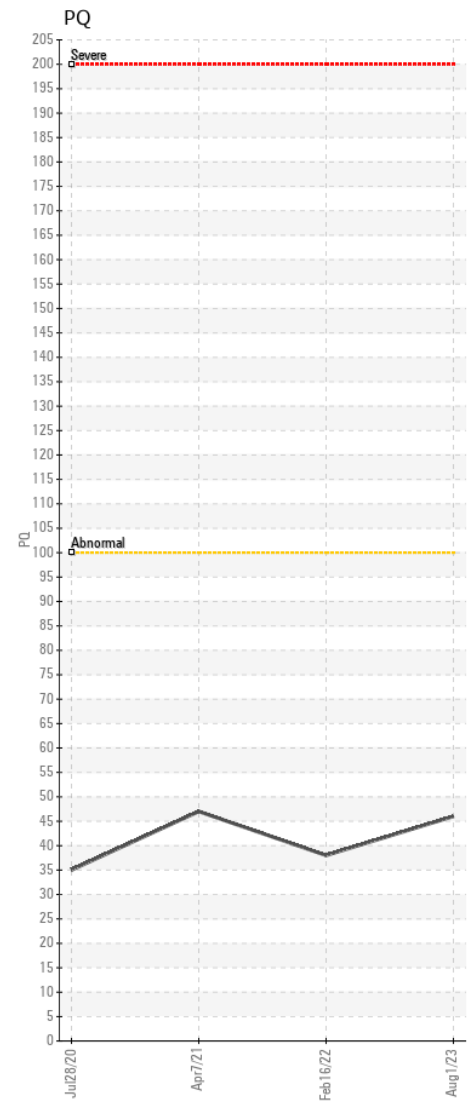
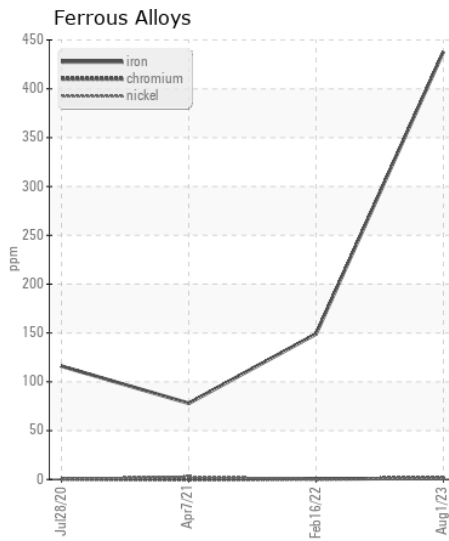
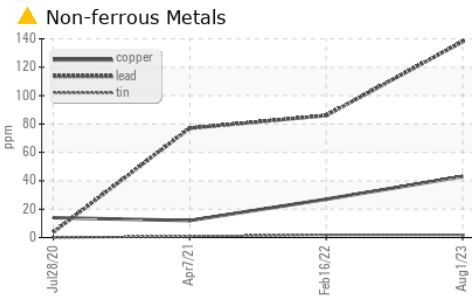
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>31	13	7	0
Potassium	ppm	ASTM D5185m	>20	2	0	7
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	▲ MODER	▲ 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	7	5	3
Boron	ppm	ASTM D5185m	6	5	5	5
Barium	ppm	ASTM D5185m	0	3	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	1	<1
Manganese	ppm	ASTM D5185m		6	3	2
Magnesium	ppm	ASTM D5185m	145	100	113	77
Calcium	ppm	ASTM D5185m	3570	3250	3712	1747
Phosphorus	ppm	ASTM D5185m	1290	958	1042	638
Zinc	ppm	ASTM D5185m	1640	1156	1239	789
Sulfur	ppm	ASTM D5185m		4119	3182	1878
Visc @ 40°C	cSt	ASTM D445	57.0	50.7	51.9	51.9



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0043743 **Received** : 03 Aug 2023
Lab Number : 05915597 **Tested** : 04 Aug 2023
Unique Number : 10587511 **Diagnosed** : 06 Aug 2023 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

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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)