



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 850L 1T0850LXPNF429766

Component
Hydraulic System

Fluid
JOHN DEERE HYDRAU (--- QTS)

RECOMMENDATION

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WE0006844	WE0006534	WE0005001
Sample Date		Client Info		09 May 2024	18 Dec 2023	24 Aug 2023
Machine Age	hrs	Client Info		2021	1747	1019
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				ABNORMAL	NORMAL	ATTENTION

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		11	12	17
Iron	ppm	ASTM D5185m	>20	0	3	1
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	>10	<1	2	1
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>75	0	1	1
Tin	ppm	ASTM D5185m	>10	<1	0	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

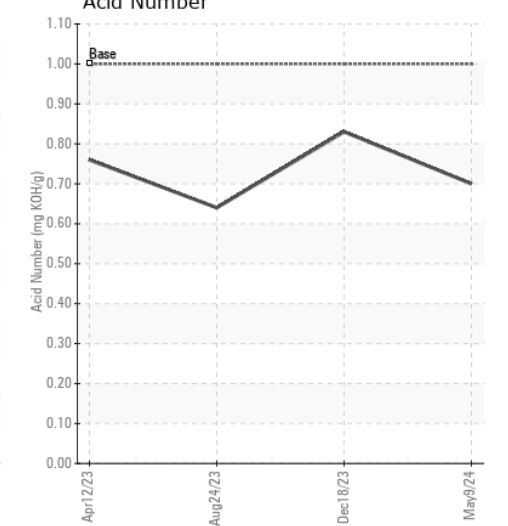
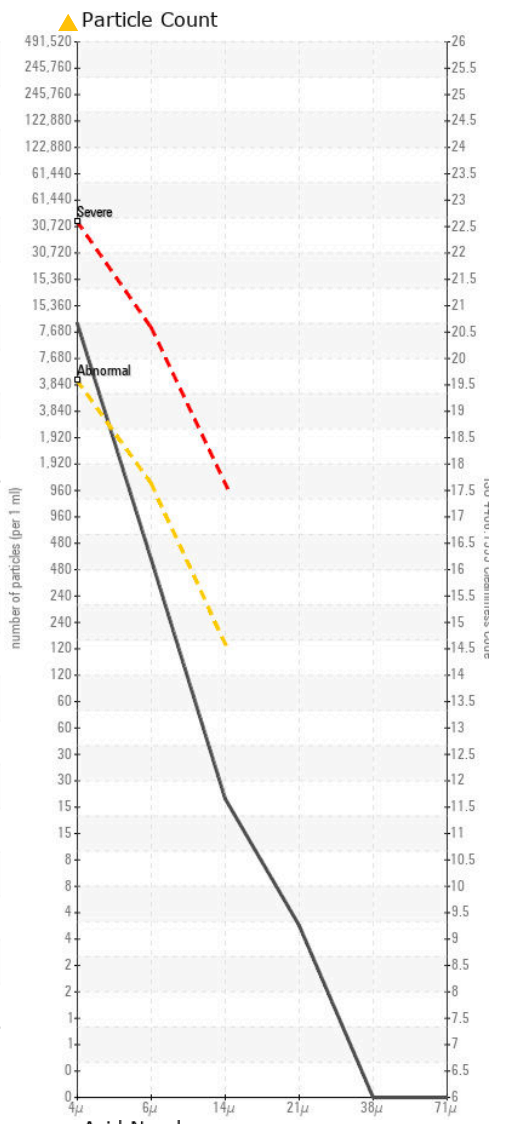
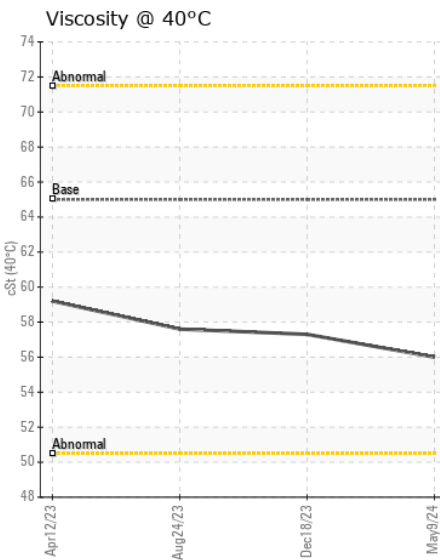
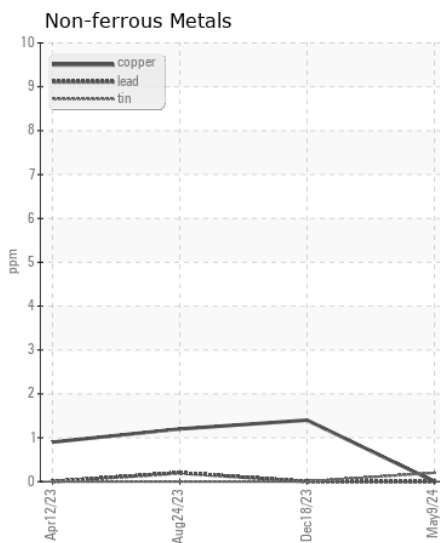
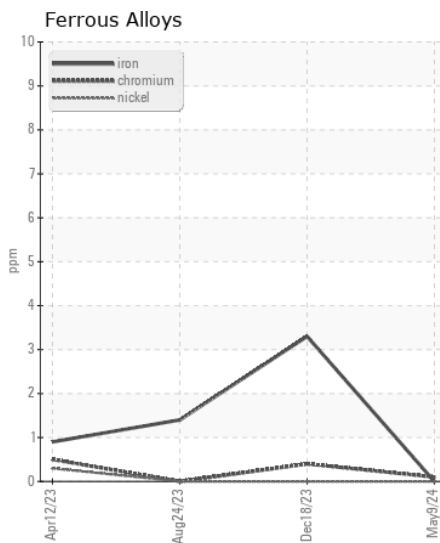
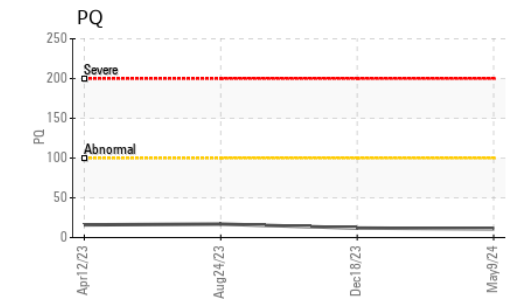
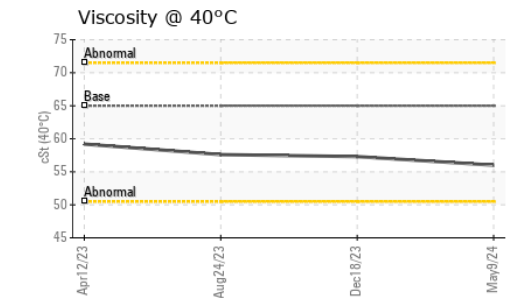
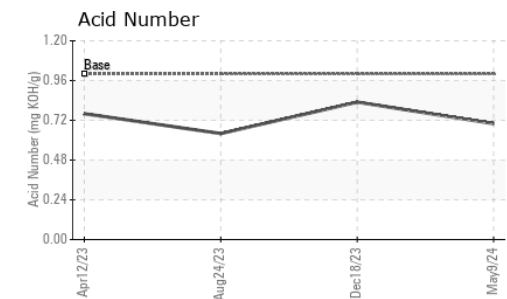
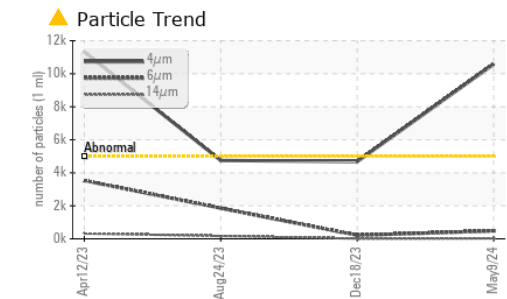
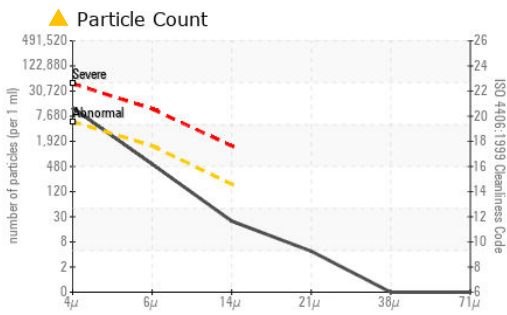
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	4	4	1
Potassium	ppm	ASTM D5185m	>20	2	4	4
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 10578	4676	4745
Particles >6µm		ASTM D7647	>1300	482	213	● 1857
Particles >14µm		ASTM D7647	>160	21	10	● 170
Particles >21µm		ASTM D7647	>40	4	3	41
Particles >38µm		ASTM D7647	>10	0	0	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 21/16/12	19/15/10	● 19/18/15
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	>0.1	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185m		<1	0	0
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		2	7	2
Molybdenum	ppm	ASTM D5185m		0	0	<1
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		12	<1	<1
Calcium	ppm	ASTM D5185m	87	420	81	90
Phosphorus	ppm	ASTM D5185m	727	748	718	654
Zinc	ppm	ASTM D5185m	900	898	884	875
Sulfur	ppm	ASTM D5185m	1500	2110	1829	1868
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.70	0.83	0.64
Visc @ 40°C	cSt	ASTM D445	65	56.0	57.3	57.6



Certificate L2367

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

Sample No. : WE0006844

Lab Number : 06178589

Unique Number : 11029915

Test Package : CONST (Additional Tests: PQ)

Received : 14 May 2024

Tested : 15 May 2024

Diagnosed : 15 May 2024 - Wes Davis

WARRIOR TRACTOR AND EQUIPMENT - NORTHPORT

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US 35476

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F:

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)