



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Store 4 - Fairmont
Machine Id
JOHN DEERE 160G 1FF160GXTNF058789
Component
Hydraulic System
Fluid
HITACHI HYDRAULIC SUPER EX 46HN (56 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0047743	LEC0040416	---
Sample Date		Client Info		23 Feb 2024	01 May 2023	---
Machine Age	hrs	Client Info		989	538	---
Oil Age	hrs	Client Info		989	538	---
Filter Age	hrs	Client Info		989	538	---
Oil Changed		Client Info		Not Changd	Not Changd	---
Filter Changed		Client Info		Changed	Not Changd	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	13	13	---
Iron	ppm	ASTM D5185m	>32	3	1	---
Chromium	ppm	ASTM D5185m	>9	0	0	---
Nickel	ppm	ASTM D5185m	>5	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>9	0	0	---
Lead	ppm	ASTM D5185m	>28	<1	0	---
Copper	ppm	ASTM D5185m	>50	1	2	---
Tin	ppm	ASTM D5185m	>5	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

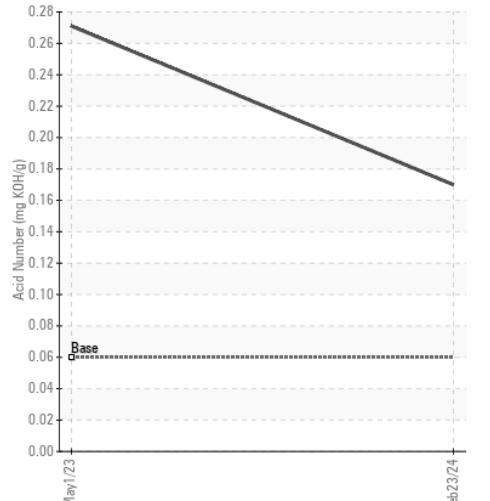
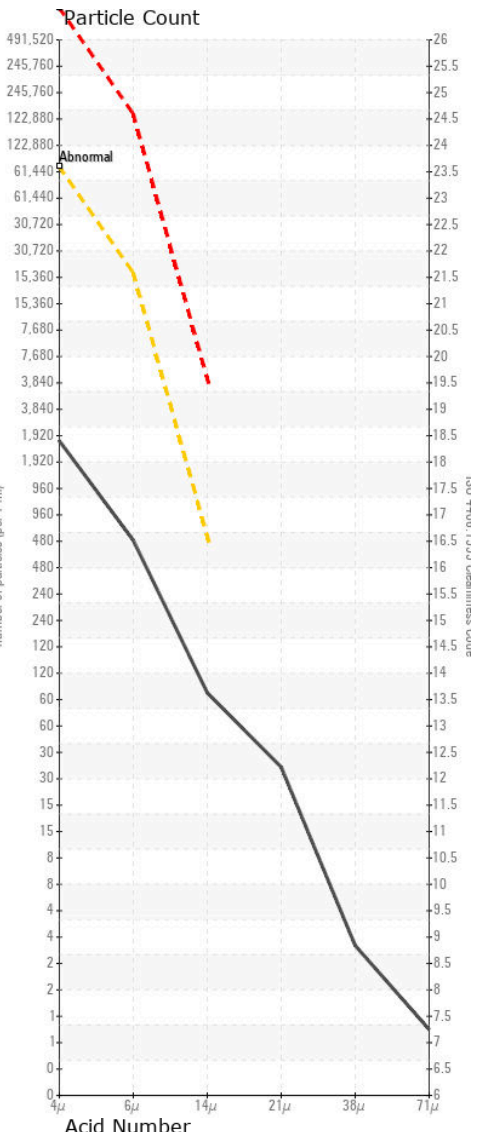
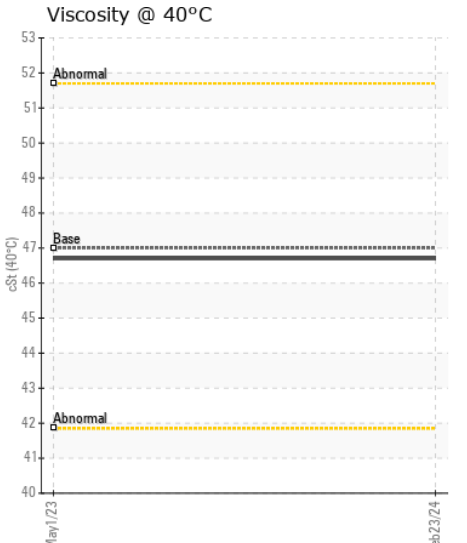
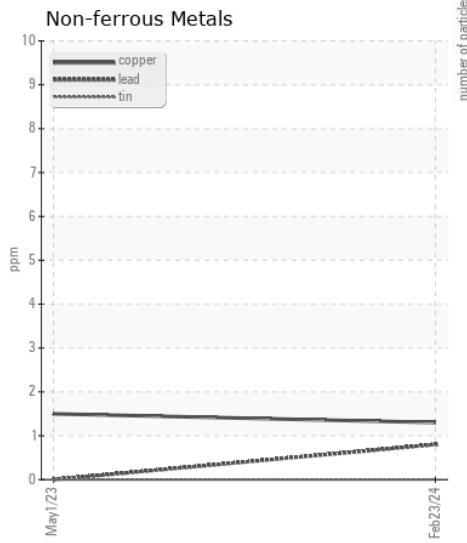
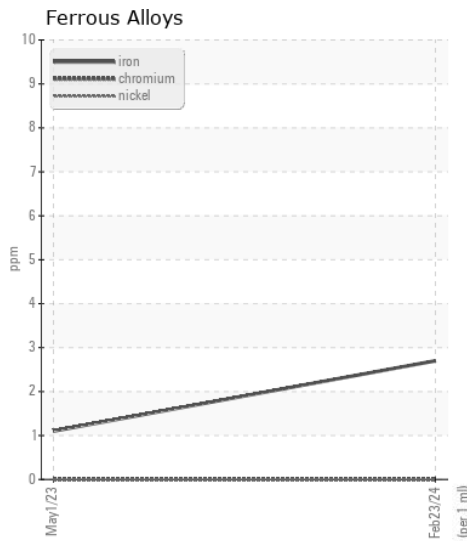
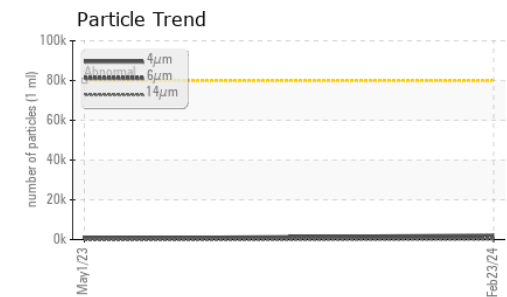
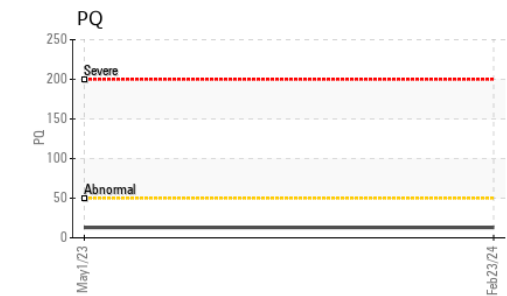
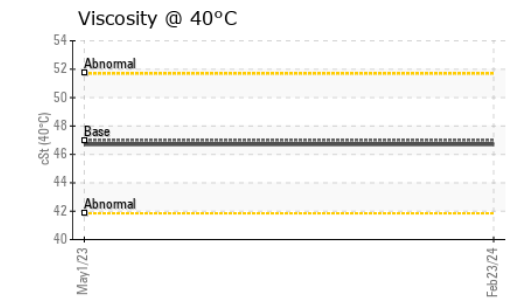
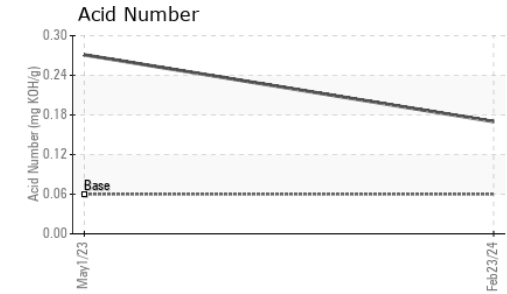
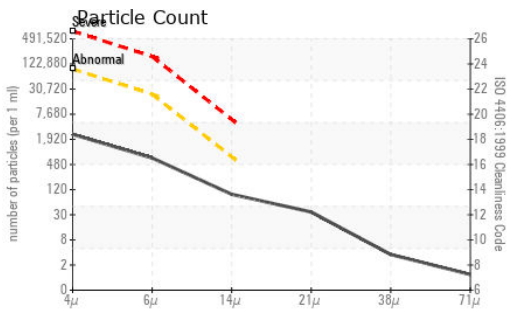
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>11	<1	<1	---
Potassium	ppm	ASTM D5185m	>20	<1	<1	---
Water		WC Method	>0.075	NEG	NEG	---
Particles >4µm		ASTM D7647	>80000	2217	657	---
Particles >6µm		ASTM D7647	>20000	603	80	---
Particles >14µm		ASTM D7647	>640	82	4	---
Particles >21µm		ASTM D7647	>160	31	1	---
Particles >38µm		ASTM D7647	>40	3	0	---
Particles >71µm		ASTM D7647	>10	1	0	---
Oil Cleanliness		ISO 4406 (c)	>23/21/16	18/16/14	17/13/9	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.075	NEG	NEG	---

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>21	2	<1	---
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		0	0	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m		<1	6	---
Calcium	ppm	ASTM D5185m		1	0	---
Phosphorus	ppm	ASTM D5185m	827	468	477	---
Zinc	ppm	ASTM D5185m	0	38	21	---
Sulfur	ppm	ASTM D5185m	13	102	0	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.17	0.271	---
Visc @ 40°C	cSt	ASTM D445	47	46.7	46.7	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0047743 **Received** : 27 Feb 2024
Lab Number : 06102406 **Tested** : 28 Feb 2024
Unique Number : 10900636 **Diagnosed** : 29 Feb 2024 - 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)