



OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	ATTENTION

Area
Store 8 - Pikeville

Machine Id
JOHN DEERE 50D E-50 (S/N FF050DX270596)

Component
Right Gearbox

Fluid
GEAR OIL SAE 80W90 (--- QTS)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0044161	---	---
Sample Date		Client Info		09 Feb 2024	---	---
Machine Age	hrs	Client Info		1825	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				SEVERE	---	---

WEAR

Gear wear is indicated.

PQ		ASTM D8184		6416	---	---
Iron	ppm	ASTM D5185m	>200	13727	---	---
Chromium	ppm	ASTM D5185m	>10	148	---	---
Nickel	ppm	ASTM D5185m	>10	35	---	---
Titanium	ppm	ASTM D5185m		81	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>25	1314	---	---
Lead	ppm	ASTM D5185m	>50	3	---	---
Copper	ppm	ASTM D5185m	>200	39	---	---
Tin	ppm	ASTM D5185m	>10	4	---	---
Vanadium	ppm	ASTM D5185m		3	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

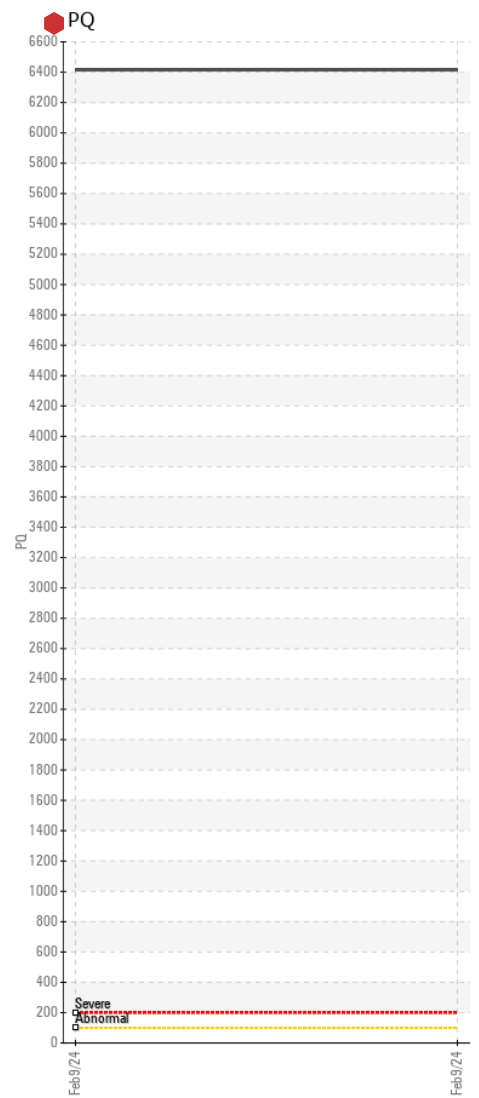
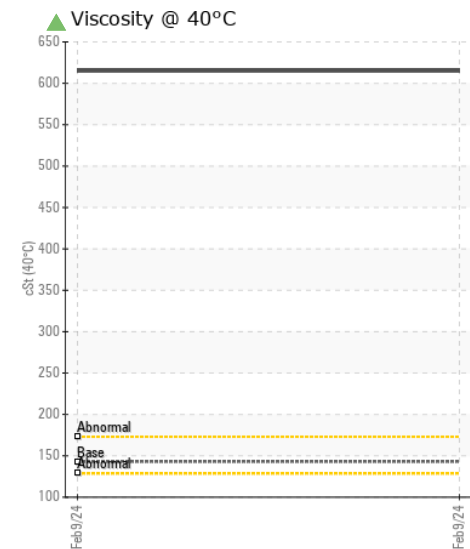
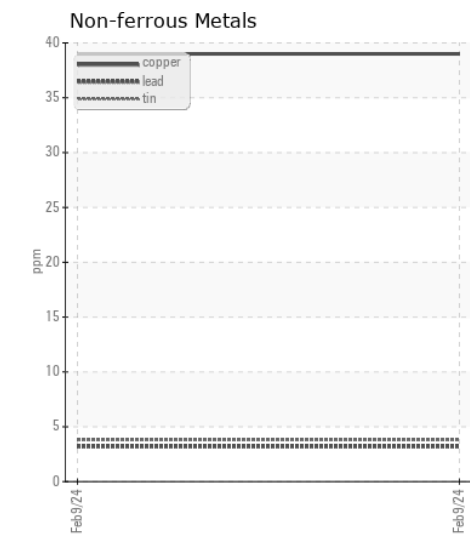
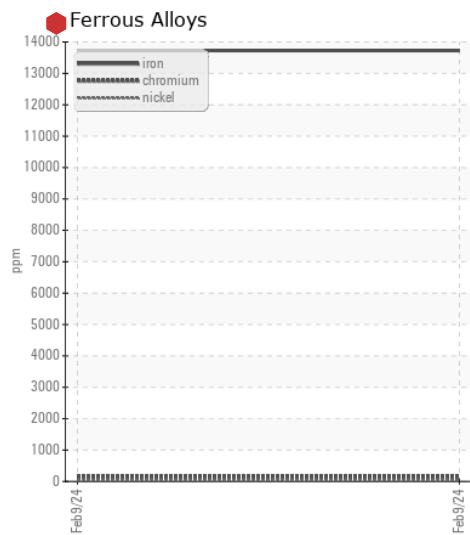
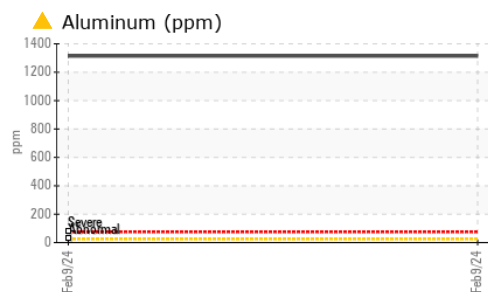
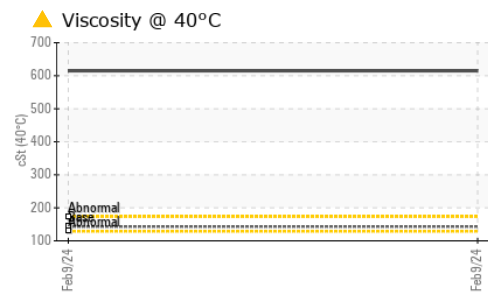
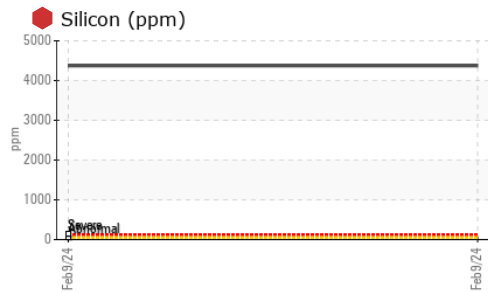
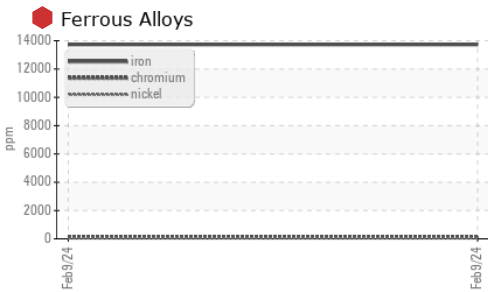
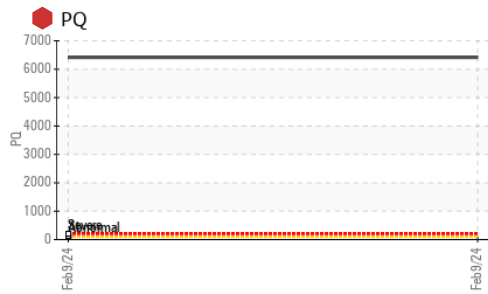
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>50	4374	---	---
Potassium	ppm	ASTM D5185m	>20	443	---	---
Water		WC Method	>0.2	NEG	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

FLUID CONDITION

The oil viscosity is higher than normal. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185m	>170	90	---	---
Boron	ppm	ASTM D5185m	400	67	---	---
Barium	ppm	ASTM D5185m	200	13	---	---
Molybdenum	ppm	ASTM D5185m	12	20	---	---
Manganese	ppm	ASTM D5185m		119	---	---
Magnesium	ppm	ASTM D5185m	12	120	---	---
Calcium	ppm	ASTM D5185m	150	345	---	---
Phosphorus	ppm	ASTM D5185m	1650	255	---	---
Zinc	ppm	ASTM D5185m	125	190	---	---
Sulfur	ppm	ASTM D5185m	22500	28806	---	---
Visc @ 40°C	cSt	ASTM D445	143	615	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0044161 **Received** : 14 Feb 2024
Lab Number : 06089060 **Tested** : 15 Feb 2024
Unique Number : 10876505 **Diagnosed** : 15 Feb 2024 - Sean Felton
Test Package : CONST (Additional Tests: PQ)

COUNTRY BOYZ METAL
 P.O. BOX 2442
 PIKEVILLE, KY
 US 41502
 Contact: DAVID ROBINSON

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)

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